

education & government and advanced technologies & applied materials industries. We work with customers across these sophisticated, science-driven industries that require innovation and adherence to the most demanding technical and regulatory requirements. The following charts present the approximate mix of net sales for each of these groups during 2024:2Products and servicesOur portfolio includes a comprehensive range of products and services that allows us to create customized and integrated solutions for our customers. These products and services enable our customers to achieve precise analytical results in their research, diagnostic, and quality assurance and quality control activities. We also provide mission-critical, high-purity materials and solutions to customers that support the development and production of their life-changing treatments. More than 86% of our net sales were from product and service offerings that we consider to be recurring in nature. Our products and services are as follows:Materials & consumables include ultra-high purity chemicals and reagents, lab products and supplies, highly specialized formulated silicone materials, customized excipients, customized single-use assemblies, process chromatography resins and columns, analytical sample prep kits and education and microbiology and clinical trial kits, and fluid handling tips. Some of these are proprietary products that we make while others are produced by third parties;Equipment & instrumentation include filtration systems, virus inactivation systems, incubators, analytical instruments, evaporators, ultra-low-temperature freezers, peristaltic pumps, biological safety cabinets and critical environment supplies; andServices & specialty procurement include onsite lab and production, equipment, procurement and sourcing and biopharmaceutical material scale-up and development services.In aggregate, we provide millions of SKUs, including high value specialty products developed to exacting purity and performance specifications. Our proprietary brands have been specified and trusted for decades. Our e-commerce platform makes it easy for customers to do business with us and enables digital marketing efforts that position us to capture new demand. All of our capabilities are underpinned by our Avantor Business System which drives execution and continuous improvement. We manufacture products that meet or exceed the demanding requirements of our customers across a number of highly regulated industries. Our high-purity and ultra-high purity products, such as our J.T.Baker brand chemicals, are trusted by life sciences and electronic materials customers around the world and can be manufactured at purity levels as stringent as one part-per-trillion. Similarly, our NuSil brand of high-purity, customized silicones has been trusted for more than 30 years by leading medical device manufacturers and aerospace companies.Our services organization of over 2,500 colleagues work side-by-side with our customers to support their workflows. Our traditional service offerings focus on the needs of laboratory scientists and include procurement, logistics, inventory and stock room management, chemical and equipment tracking and glassware autoclaving. In addition, we offer more complex and value-added scientific research support and production services such as DNA extraction, media preparation, bioreactor servicing and compound management, and cleanroom control, monitoring, maintenance and sanitization. CustomersWe benefit from longstanding customer relationships, and approximately 40% of our 2024 net sales came from customers that have had relationships with us for 15 years or more. We also have a diverse customer base with no single end customer comprising more than 5% of net sales.3SuppliersWe sell proprietary products we make and third-party products sourced from a wide variety of product suppliers located across the globe. Many of our supplier relationships are based on contracts that vary in geographic scope, duration, product and service type, and some include exclusivity provisions. Those relationships may include distribution, sales and marketing support as well as servicing of instruments and equipment. Many of our supplier relationships have been in place for more than twenty years.Sales channelsWe reach our customers throughout the Americas, Europe and AMEA via a well-trained global sales force, comprehensive websites and targeted catalogs. Our sales force is comprised of approximately 3,500 sales and sales support professionals, including over 200 sales specialists selected for their in-depth industry and product knowledge. Our sales professionals include native speakers for each of the countries in which we operate, allowing us to have high impact interactions with our customers across the globe.Our e-commerce platform plays a vital role in how we conduct business with our customers. In 2024, approximately 76% of our transactions came from our digital channels. Our websites utilize search analytics and feature personalized search tools, customer specific web solutions and enhanced data that optimize our customers' online purchasing experience with rich content and AI-based recommendations and better integrate our customers' processes with our own. Our websites are designed to integrate acquisitions, drive geographical expansion and serve segmented market needs with ease. In addition, we have introduced digital services and solutions that streamline lab procurement and operations and have become embedded into many customers' laboratories, such as Avantor's Inventory Manager InfrastructureWe have more than 200 facilities strategically located throughout the globe that include manufacturing, distribution, service and research & technology. We operate over 40 global manufacturing facilities, including 12 facilities that are cGMP compliant and have been registered with the FDA or comparable foreign regulatory authorities. Our facilities are strategically located in North America, Europe and the AMEA region to facilitate supply chain efficiency and proximity to customers. Our manufacturing capabilities include: (i) an ability to quickly change specifications depending on customer needs; (ii) our flexible unit operations, which allow for production scalability, from laboratory pre-clinical development to large-volume commercialization; (iii) proprietary purification technologies designed to ensure lot-to-lot consistency through ultra-low impurity levels; (iv) rigorous analytical quality control testing; and (v) robust regulatory and quality control procedures. Our global network of distribution centers gives our customers security of supply and real-time flexibility. We also have 14 innovation centers that enable extensive collaboration and customization, critical elements for serving highly regulated, specification-driven applications.Information technologyWe have a highly automated suite of ERP systems that promote standardization and provide business insight. Our global web infrastructure provides seamless integration with our customers and suppliers. These ERP platforms support rapid development and deployment of enhancements so that we may quickly adapt to meet the technology needs of our customers and seamlessly integrate new acquisitions. We have made significant investments to implement common ERP and online platforms that enhance the customer experience and employ network and data security architecture.4CompetitionWe operate in a highly competitive environment with a diverse and fragmented base of competitors, many of whom focus on specific regions, customers, and/or segments. We focus on service and delivery, breadth of product line, customization capabilities, price, customer support, online capabilities and the ability to meet the special and local needs of our customers.Competition is driven not only by the product quality and purity across industries we serve, but also by the adaptability of the supplier as a developmental and commercial partner. We rely on our scale, expertise, deep customer access, depth of product and value-added service offerings, marketing strategies and sales force, acquisition strategy, financial profile and management team to deliver superior solutions to our customers and provide extensive market channel access to our suppliers.SustainabilityOur Science for Goodness sustainability platform enhances our framework for creating long-term value by embedding sound environmental, social and governance practices into our business strategy. The platform also enables us to continually measure and report progress against four key commitment pillars, which are aligned with several of the United Nations Sustainable Development Goals. Our approach to sustainability is reflected in our people, the products we create, the transformative services we provide, and the integrity with which we serve our stockholders, business partners, suppliers, customers, associates, and communities. Our efforts to build a more sustainable future include programs to monitor, measure, and set strategies to reduce greenhouse gas emissions, efficiently manage resource use, and reduce end of life impact of products. We directly engage our supply chain on these efforts through Avantor's Responsible Supplier Program. The program enables collaboration with supplier partners to identify sustainability challenges and solutions focused on four priority topic areas: climate change, human rights, resource circularity, and natural resource conservation. As our program matures and we continue to address the evolving expectations of stakeholders, we completed a double materiality assessment in 2024, and will use this information to refine our strategy and goal setting.In 2024, Avantor received several important accolades for our efforts: Avantor received a Bronze Medal from EcoVadis, a leader in sustainability ratings, for a second year in a row; and achieved a score of 100 on the Human Rights Campaign Foundation's 2025 Corporate Equality Index (CEI) for the second year in a row; and was recognized as a "Best Place to Work for Disability Inclusion" from Disability:In for the first time. Employees and human capital resourcesOur success depends on our ability to attract, retain and motivate highly qualified and diverse talent. As of December 31, 2024, we had approximately 13,500 employees located in over 30 different countries in a variety of roles. Approximately 5,300 of our associates were employed in the U.S. We believe that our relations with our employees are good. As of December 31, 2024, approximately 5% of our employees in North America were represented by unions, and a majority of our employees in Europe were represented by workers' councils or unions. We compete in the highly competitive life sciences industry. Attracting, developing and retaining talented people in technical, marketing, sales, research and other positions is crucial to executing our strategy and our ability to compete effectively. Our ability to recruit and retain such talent depends on a number of factors, including a positive and inclusive work environment and culture, compensation and benefits, talent development and career growth and opportunities, and protecting the health, safety and well-being of our associates. To that end, we invest in our associates in order to be an employer of choice. Our associates reflect the communities in which we live and work, the customers we serve, and possess a broad range of thought and experiences that have helped Avantor achieve our goal of setting science in motion to create a better world. People & cultureEnhancing our Associate Experience is a strategic priority for Avantor. Our values give our associates a foundation for how we want to work together. Innovation, Customer-centricity, Accountability, Respect, and Excellence are the building blocks of our inclusive company culture and send a strong message to our associates, customers, suppliers, stockholders and communities: ICARE. In addition, our executive leaders serve as sponsors of our Associate-Centric Teams (ACTs) in support of our diversity and inclusion initiatives. ACTs are employee resource groups that foster an inclusive work environment, build connections, create community, and promote career opportunities. Based on common interests, backgrounds or characteristics, ACTs are open to all associates. Additionally, Avantor's Talent Philosophy is a part of commitment to our associates and guides our managers in their role in supporting our people and our culture. Compensation and benefitsWe are committed to rewarding, supporting and developing the associates who make it possible to deliver on our strategy. To that end, we offer a comprehensive total rewards program aimed at the varying health, home-life and financial needs of our diverse and global associates. Our total rewards package includes market-competitive pay, broad-based stock grants and bonuses, healthcare benefits, retirement savings plans, an employee stock purchase plan, paid time off and family leave, flexible work schedules, access to wellness programs, free physicals and flu vaccinations, and an Employee Assistance Program and other mental health services.Growth and developmentWe invest significant resources to develop talent with the right capabilities to deliver the growth and innovation needed to support our strategy. We offer associates and their managers numerous tools to help in their personal and professional development, including our Avantor Career Hub which enables associates to highlight their skills, capture development plans, make connections and find new opportunities inside Avantor. We have a robust portfolio of learning solutions that can be accessed in multiple formats and available to our global associates across various professional, personal and leadership development areas. Each year, we host a Learning & Career week program which is available to associates at all levels globally, and includes a diverse slate of learning opportunities, live sessions and on-demand resources designed to support the personal and professional growth and success of associates. In 2023, we hosted our first Avantor Leadership Experience for individuals at the Director, Vice President and Senior Vice President level. In addition, we provide programs on the Avantor Business System, which drives excellence in people, processes and problem solving. These consistent lean leadership practices empower associates to continuously improve and add value to our operations and customer solutions. We have aligned our performance management system through which 100% of our associates receive annual performance reviews, to support our culture of feedback to increase the focus on continuous learning and development. Our Career Accelerator programs are focused on providing management skills training to high-performing individual contributors and early career associates in underrepresented ethnicities. Health, safety and well-beingWe are committed to protecting the health, safety and well-being of our associates. Our approach involves environment, health and safety professionals and process engineers who identify risks and implement behavioral solutions to prevent accidents before they occur. A robust auditing program is in place at every facility to ensure that we measure performance and drive continuous improvement. Our primary focus is to keep associates safe and free from injury. We do this through compliance with regulatory and international requirements, active monitoring of regulatory agencies for changing requirements, partnering with operational leaders to meet Environment, Health & Safety, Security & Sustainability (EHSS) requirements, and promoting effective communication throughout the organization. Intellectual propertyWe rely on intellectual property rights, nondisclosure and other contractual provisions and technical measures to protect our offerings, services and intangible assets. Much of our intellectual property is know-how and asset configurations that we treat as trade secrets. These proprietary rights are important to our ongoing operations. In some instances, we may license our technology to third parties or may elect to license intellectual property from others. We have applied in the United States and certain foreign countries for registration of a number of trademarks, service marks and patents, some of which have been registered and issued. We also hold common law rights in various trademarks and service marks. Other than our Avantor, VWR, J.T.Baker, NuSil and Masterflex trademarks, we do not consider any particular patent, trademark, license, franchise or concession to be material to our overall business. Government contracts We conduct business with various government agencies and government contractors. As such, we are subject to certain laws and regulations applicable to companies doing business with the government, as well as with those concerning government contracts. Failure to address or comply with these laws and regulations could harm our business by leading to a renegotiation of profits or termination of the contract at the election of the government agency. For a discussion of risks related to government contracting requirements, refer to Part I, Item 1A, "Risk factors." No government contract is of such a magnitude as to have a material adverse effect on our financial results. Government regulationOur facilities that engage in the manufacturing, packaging, distribution of material used in biopharmaceutical and biomaterials production, as well as many of our products themselves, are subject to extensive ongoing regulation by U.S. governmental authorities, the EMA and other global regulatory authorities. Certain of our subsidiaries are required to register with these agencies, or to apply for permits and/or licenses with, and must comply with the operating, cGMP, quality and security standards of applicable domestic and foreign regulators, including the FDA, the DEA, the Bureau of Alcohol, Tobacco, Firearms and Explosives, DHHS, the equivalent agencies of EU member states, and comparable foreign, state and local agencies, as well as various accrediting bodies, each depending upon the type of operation and the locations of storage or sale of the products manufactured or services provided by those subsidiaries in the event of noncompliance. In order to maintain certain certifications of quality and safety standards for our manufacturing facilities and operations, we must comply with numerous regulatory systems, standards, guidance and other requirements, as appropriate, including, but not limited to, ICH Q7, the guidelines of the International Pharmaceutical Excipients Council, European in vitro diagnostic medical device directives, U.S. Pharmacopeia / National Formulary, as well as the European, British, Japanese, Indian and Chinese Pharmacopeia, the Food Chemicals Codex and controlled substances regulations.7In addition, our operations, and some of the products we offer, are subject to a number of complex and stringent laws and regulations governing the production, handling, transportation and distribution of chemicals, drugs and other similar products. We are subject to various federal, state, local, foreign and transnational laws, regulations and recommendations, both in the U.S. and abroad, relating to safe working conditions, good laboratory and distribution practices, and the safe and proper use, transportation and disposal of hazardous or potentially hazardous substances. In addition, U.S. and international import and export laws and regulations, including those enforced by the U.S. Departments of Commerce, State and Treasury, OFAC and BIS, require us to abide by certain standards relating to the cross-border transit of finished goods, raw materials and supplies and the handling of related information. Our logistics activities must comply with the rules and regulations of the U.S. Department of Transportation, Department of Homeland Security, Department of Commerce, Department of Defense, and the Federal Aviation Administration and similar foreign agencies. We are also subject to various other laws and regulations concerning the conduct of our foreign operations, including the FCPA and other anti-bribery laws as well as laws pertaining to the accuracy of our internal books and records. The costs associated with complying with the various applicable federal, state, local, foreign and transnational regulations could be significant, and the failure to comply with such legal requirements could have an adverse effect on our reputation, results of operations and financial condition. See Part I, Item 1A, "Risk factors." Risks related to regulation.8 We are subject to audits by the FDA and other similar foreign regulatory bodies. To date, we have had no instances of noncompliance that have had a material impact on our operations. In addition to the regulations described above, as part of our aerospace and military offerings, we are registered with the DODTC as a manufacturer and exporter of goods controlled by ITAR, and we are subject to strict export control and prior approval requirements related to these goods. In connection with our NuSil brand products, we have one ITAR site registration and one ITAR product registration, and we maintain control systems which enable ITAR compliance. With respect to our electronic materials products, we adhere to applicable industry guidelines which set stringent quality criteria for our products, and we are subject to import and export regulations and other restrictions regarding the safe use of these products as well. We are also subject to various federal, state and international laws and regulations related to privacy and data protection, including the EU's GDPR as well as the California Consumer Privacy Act of 2018, which became effective on January 1, 2020 (as amended by the California Privacy Rights Act, which took effect on January 1, 2023, the "CPRA"). The interpretation and application of data privacy, cross-border data transfers and data protection laws and regulations are often uncertain and are evolving in the U.S. and internationally, such as in the EU, China and other jurisdictions. We monitor pending and proposed legislation and regulatory initiatives to ascertain their relevance to, and potential impact on, our business and develop strategies to address regulatory trends and developments,

including any required changes to our privacy and data protection compliance programs and policies. Globally, we see a growing trend toward data protection laws and regulations increasing in complexity and number, and we anticipate that our obligations will expand commensurately. Environmental mattersWe are subject to various laws and governmental regulations concerning environmental, safety and health matters, including employee safety and health, in the U.S. and other countries. U.S. federal environmental legislation that affects us includes the Toxic Substances Control Act, the Resource Conservation and Recovery Act, the Clean Air Act, the Clean Water Act, the Safe Drinking Water Act, and CERCLA. These laws and regulations govern, among other things, air emissions, wastewater discharges, the use, handling and disposal of hazardous substances and wastes, soil and groundwater contamination and the general health and safety of our associates and the communities in which we operate. We are also subject to regulation by OSHA concerning employee safety and health matters. The EPA, OSHA, and other federal and foreign or local agencies have the authority to promulgate regulations that may impact our operations. Under CERCLA, and analogous statutes in local and foreign jurisdictions, current and former owners and operators of contaminated land are strictly liable for the investigation and remediation of the land and for natural resource damages that may result from releases of hazardous substances at or from the property. Liability under CERCLA and analogous laws is strict, unlimited, joint, several, retroactive, may be imposed regardless of fault and may relate to historical activities or contamination not caused by the current owner or operator. It is possible that facilities that we acquire or have acquired may expose us to environmental liabilities associated with historical site conditions that have not yet been discovered. In addition to the federal environmental laws that govern our operations, various states have been delegated certain authority under the aforementioned federal statutes as well as having authority over these matters under state laws. Many state and local governments have adopted environmental and employee safety and health laws and regulations, some of which are similar to federal requirements. A number of our operations involve, in varying degrees, the handling, manufacturing, use or sale of substances that are or could be classified as toxic or hazardous materials within the meaning of applicable laws. Consequently, some risk of environmental harm is inherent in our operations and products, as it is with other companies engaged in similar businesses. For additional information about environmental matters, see note 13 to our consolidated financial statements beginning on page F-1 of this report. Available informationWe file or furnish annual, quarterly and current reports, proxy statements and other documents with or to the SEC. The public can obtain any documents that we file with or furnish to the SEC at www.sec.gov. You may also access our press releases, financial information and reports filed with or furnished to the SEC through our own website at www.avantorsciences.com. Copies of any documents on our website may be obtained free of charge, and reports filed with or furnished to the SEC will be available as soon as reasonably practicable after they are filed with or furnished to the SEC. The information found on our website is not part of this or any other report filed with or furnished to the SEC. Item 1A. Risk factorsRisks related to our business and our industrySignificant interruptions in our operations could harm our business, financial condition and results of operations. Any significant disruptions to the operations of our manufacturing or distribution centers or logistics providers for any reason, including labor relations issues, power interruptions, severe weather, destruction or damage or other circumstances beyond our control could have a significant impact on our operating results, including an increase to our operating expenses without coverage or compensation, or seriously harm our ability to fulfill our customers' orders or deliver products on a timely basis, or both. We must also maintain sufficient production capacity to meet anticipated customer demand, which carries fixed costs that we may not be able to offset if orders slow, which would adversely affect our operating margins. If we are unable to manufacture our products consistently, in sufficient quantities, and on a timely basis, our net sales, gross margins and our other operating results will be materially and adversely affected. In addition, we have experienced problems with, or delays in, our production, shipping and logistics capabilities that have resulted in delays in our ability to ship finished products, and there can be no assurance that we will not encounter such problems in the future. Significant delays in our manufacturing, shipping or logistics processes could damage our customer relationships, cause disruption to our customers and adversely affect our business, financial condition and operating results. We have been impacted by supply chain constraints and inflationary pressures. We have experienced challenges in sourcing certain products and raw materials as a result of global supply chain disruptions and have experienced inflationary pressures across all of our cost categories. While we have implemented pricing and productivity measures to combat these pressures, they may continue to adversely impact our results. We compete in highly competitive markets. Failure to compete successfully could adversely affect our business, financial condition and results of operations. We face competition across our products and the markets in which we operate, both domestically and internationally. Competition is driven by proprietary technologies and know-how, capabilities, consistency of operational performance, quality, supply chain control, price, value and speed. Our competitors range from regional companies, which may be able to more quickly respond to customers' needs because of geographic proximity, to large multinational companies, which may have greater financial, marketing, operational and research and development resources than we do, allowing for a more rapid response with new, alternative or emerging technologies. In addition, consolidation trends in the biopharma and healthcare industries have served to create fewer customer accounts and to concentrate purchasing decisions for some customers, resulting in increased pricing pressures. New competitors in low-cost manufacturing locations, particularly developing markets, may create increased pricing and competitive pressures and impede our goal to grow in those markets. Failure to anticipate and respond to competitors' actions may adversely affect our results of operations and financial condition. It may be difficult for us to implement our strategies for improving growth and optimizing costs. Effective January 1, 2024, we transitioned to a new operating model consisting of two complementary business segments, the Laboratory Solutions segment and the Bioscience Production segment. In conjunction with our new operating model, we launched a multi-year cost transformation initiative, with the objective to deliver approximately \$300 million in annual gross run-rate savings by the end of 2026. We have also committed to certain significant restructuring activities in connection with the initiative. The initiative and restructuring activities are subject to a variety of known and unknown risks and uncertainties, including the potential that we may not be able to successfully execute on the initiative or achieve the anticipated benefits and cost-saving opportunities, or that achieving such benefits and opportunities may take longer to realize than expected. If we are unable to achieve the expected benefits from the initiative and manage the effects of the restructuring activities, this could have an adverse effect on our business, results of operations and financial condition. As we refine our business model, we may also pursue divestitures in line with our new operating model. For example, in October 2024, we divested our Clinical Services business, a component of our Laboratory Solutions reportable segment. We also plan to continue expanding our commercial sales operations and scope and complexity of our business both domestically and internationally, while maintaining our commercial operations and administrative activities. Our ability to manage our business and conduct our global operations while also pursuing our strategies for improving growth and optimizing costs requires considerable management attention and resources and is subject to the challenges of supporting a rapidly growing business in an environment of multiple languages, cultures and customs, legal and regulatory systems, alternative dispute systems and commercial markets. Our failure to implement these strategies in a cost-effective and timely manner could have an adverse effect on our business, results of operations and financial condition. Part of our growth strategy is to pursue strategic acquisitions, which will subject us to a variety of risks that could harm our business. As part of our business strategy, we intend to continue to review, pursue and complete selective acquisition opportunities. There can be no assurances that we will be able to complete suitable acquisitions for a variety of reasons, including the identification of, and competition for, acquisition targets, the need for regulatory approvals, the inability of the parties to agree to the structure or purchase price of the transaction and the inability to finance the transaction on commercially acceptable terms. In addition, any completed acquisition will subject us to a variety of other risks, including: (i) potential adverse effects on our business relationships with existing or future suppliers and other business partners (in particular, to the extent we consummate acquisitions that vertically integrate portions of our business); (ii) the assumption of substantial actual or contingent liabilities, known or unknown, including environmental liabilities; (iii) failure to meet expectations of future financial performance; (iv) delays or reductions in realizing expected synergies; (v) substantial unanticipated costs or other problems associated with acquired businesses or devoting time and capital to investigate a potential acquisition that is not completed; (vi) failure to achieve intended objectives for a transaction; (vii) failure to retain key personnel, customers and suppliers of the acquired business; and (viii) adverse impacts resulting from impairment charges on goodwill, other intangible assets and tangible assets. These factors related to our acquisition strategy, among others, could have an adverse effect on our business, financial condition and results of operations. The customers we serve have experienced, and will continue to experience, significant industry-related changes that could adversely affect our business. Many of the customers we serve have experienced, and are expected to continue to experience, significant industry-related changes, including reductions in governmental payments for biopharmaceutical products, expirations of significant patents, adverse changes in legislation or regulations regarding the delivery or pricing of general healthcare services or mandated benefits, and increased requirements on quality. General industry changes include: (a) development of large and sophisticated group purchasing organizations and on-line auction sites that increase competition for, and reduce spending on, laboratory products; (b) consolidation of biopharmaceutical companies resulting in a rationalization of research expenditures; (c) increased regulatory scrutiny over drug production requiring safer raw materials; (d) customers' purchasing the products that we supply directly from our suppliers; and (e) significant reductions in development and production activities. Some of our customers have implemented, or may in the future implement, certain measures described above in an effort to control and reduce costs. The ability of our customers to develop new products to replace sales decreases attributable to expirations of significant patents, along with the impact of other past or potential future changes in the industries we serve, may result in our customers significantly reducing their purchases of products from us or the prices they are willing to pay for those products. While we believe we will be able to adapt our business to maintain existing customer relationships and develop new customer relationships, if we are unsuccessful or untimely in these efforts, our results of operations may suffer. Our offerings are highly complex, and, if our products do not satisfy applicable quality criteria, specifications and performance standards, we could experience lost sales, delayed or reduced market acceptance of our products, increased costs and damage to our reputation. The high-purity materials and customized solutions we offer are highly exacting and complex due to demanding customer specifications and stringent regulatory and industry requirements. Our operating results depend on our ability to execute and, when necessary, improve our global quality control systems, including our ability to effectively train and maintain our employees with respect to quality control. A failure of our global quality control systems could result in problems with facility operations or preparation or provision of defective or non-compliant products. Nearly all of our products are subsequently incorporated into products sold to end users by our customers, and we have no control over the manufacture and production of such products. Our success depends on our customers' confidence that we can provide reliable, high-quality products. We believe that customers in our target markets are likely to be particularly sensitive to product defects and errors. Our reputation and the public image of our products and technologies may be impaired if our products fail to perform as expected or fail to meet applicable quality criteria, specifications or performance standards. If our products experience, or are perceived to experience, a material defect or error, this could result in loss or delay of net sales, damaged reputation, diversion of development resources, and increased insurance or warranty costs, any of which could harm our business. The loss of a significant number of customers or a significant reduction in customer orders could reduce our net sales and harm our operating results. Our operating results could be negatively affected by the loss of revenue from a significant number of our customers, including direct distributors and end users. Though we often include pricing and volume incentives in our contracts, our customers are generally not obligated to purchase any fixed quantities of products, and they may stop placing orders with us at any time. If we experience a significant reduction in customer orders, increased order deferrals, our sales could decline, and our operating results may not meet our expectations. In addition, if customers order our products, but fail to pay on time or at all, our liquidity and operating results could be adversely affected. Our contracts generally do not contain minimum purchase requirements, and we sell primarily on a purchase order basis. Therefore, our sales are subject to changes in demand from our customers, and these changes have been material in the past. The level and timing of orders placed by our customers vary for a number of reasons, including individual customer strategies, the introduction of new technologies, the desire of our clients to reduce their exposure to any single supplier and general economic conditions. If we are unable to anticipate and respond to the demands of our customers, we may lose customers because we have an inadequate supply of raw materials with which to manufacture our products or insufficient capacity in our sites. Alternatively, we may have excess inventory or excess capacity. Either of these factors may have a material adverse effect on our business, financial position and operating results. We are subject to risks associated with doing business globally, which may harm our business. We have global operations and derive a substantial portion of our net sales from customers outside of the United States. Accordingly, our international operations or those of our international customers could be substantially affected by a number of risks arising from operating an international business, including: (i) limitations on repatriation of earnings; (ii) taxes on imports; (iii) the possibility that unfriendly nations or groups could boycott our products; (iv) general economic and political conditions in the markets where we operate, including changes in inflation and interest rates, instability in the global banking industry, rising energy prices, potential energy shortages and actual or anticipated military or political conflicts, such as the ongoing Ukraine/Russia or Israel/Hamas conflicts; (v) foreign currency exchange rate fluctuations; (vi) potential changes in diplomatic and trade relationships, including potential changes under the second Trump administration and political and trade uncertainty in China; (vii) a global health crisis; (viii) potential increased costs associated with overlapping tax structures; (ix) potential increased reliance on third parties within less developed markets; (x) potential changes in trade restrictions, tariffs and exchange controls, such as tariffs that may be proposed by the second Trump administration and potential retaliatory tariffs by other countries; (xi) more limited protection for intellectual property rights in some countries; (xii) difficulties and costs associated with staffing and managing foreign operations; (xiii) difficulties in complying with a wide variety of foreign laws and regulations and unexpected changes thereto; (xiv) expanded enforcement of laws related to data protection and personal privacy; (xv) the risk that certain governments may adopt regulations or take other actions that would have a direct adverse impact on our business and market opportunities, including nationalization of private enterprise; (xvi) violations of anti-bribery and anti-corruption laws, such as the FCPA; (xvii) violations of economic sanctions laws, such as the regulations enforced by OFAC; (xviii) longer accounts receivable cycles in certain foreign countries, whether due to cultural differences, exchange rate fluctuation or other factors; (xix) the credit risk of local customers and distributors; (xx) limitations on our ability to enforce legal rights and remedies with third parties or partners outside of the United States; (xxi) import and export licensing requirements and other restrictions, such as those imposed by OFAC, BIS, DDTTC and comparable regulatory agencies and policies of foreign governments; and (xxii) changes to our distribution networks. Changes in exchange rates can adversely affect our financial condition, results of operations and cash flows. A substantial amount of our revenues is derived from international operations, and we anticipate that a significant portion of our sales will continue to come from outside of the United States in the future. Our consolidated results of operations are comprised of many different functional currencies that translate into our U.S. dollar reporting currency. The movement of the U.S. dollar against those functional currencies, particularly the Euro, has caused significant variability in our results in the past and may continue to do so in the future. The revenues we report with respect to our operations outside of the United States have been in the past and may be adversely affected by fluctuations in foreign currency exchange rates. Further, we have a substantial amount of Euro denominated indebtedness, as well as intercompany loans and short-term intercompany balances between entities with the Euro as their functional currency. Fluctuations in the exchange rate between U.S. dollars and Euros may have a material adverse effect on our ability to repay such indebtedness. See Part I, Item 7A, "Quantitative and qualitative disclosures about market risk." Our business depends on our ability to use and access information systems, and any failure to successfully maintain these systems or implement new systems to handle our changing needs could materially harm our operations. Our businesses rely on sophisticated information systems: (i) to obtain, rapidly process, analyze, and manage data to facilitate the purchase and distribution of thousands of inventory items from numerous distribution centers; (ii) to receive, process, and ship orders on a timely basis; (iii) to account for other product and service transactions with customers; (iv) to manage the accurate billing and collections for thousands of customers; and (v) to process payments to suppliers. We continue to make substantial investments in data centers and information systems. To the extent our information systems are not successfully implemented or fail, or there are data center interruptions or outages, our business and results of operations may be adversely affected. Our business and results of operations may also be adversely affected if a third-party service provider does not perform satisfactorily, or if the information systems are interrupted or damaged by unforeseen events, including due to the actions or inactions of third parties. While we have implemented cybersecurity and data protection measures, our efforts to minimize the risks and impacts of cyberattacks and protect our information systems may be insufficient and we may experience significant breaches or other failures or disruptions that could compromise our systems and data and, ultimately, affect our business operations and our financial position or results of operations. New technology that could result in greater operational efficiency, such as the development and adoption of AI and machine learning technology, may further expose our systems and businesses to the risk of cyberattacks. Like other companies, the systems and networks we maintain and third-party systems and networks we use have in the past been, and will likely in the future be, subject to or targets of unauthorized or fraudulent access, including physical or electronic break-ins or unauthorized tampering, as well as attempted cyber and other security threats and other attacks such as denial of service, attacks, phishing, untargeted but

sophisticated and automated attacks, ransomware, and other disruptive software. For example, as AI continues to evolve, cyber-attackers could also use AI to develop malicious code and sophisticated phishing attempts. We are also exposed to similar risks resulting from cyber-attacks that are experienced by our third-party service providers. For example, we and many of the third-party service providers we rely on use generative AI, which increases the risk that our confidential or proprietary information or personal data could be inadvertently or maliciously exposed. Security breaches can also occur as a result of intentional or inadvertent actions by our employees, third-party service providers or their personnel or other parties. A failure, interruption, or breach of our systems, or those of our third-party service providers, as a result of cyber-attacks or information security breaches, could disrupt our business, result in the disclosure or misuse of confidential or proprietary information or personal data, damage our reputation, cause loss of customers or revenue, increase our costs, result in litigation and/or regulatory action, and/or cause other losses, any of which may have a material adverse impact on our business operations and our financial position or results of operations. Although we believe that we have robust information security procedures, controls and other safeguards in place, as cyber threats continue to evolve, we will be required to expend additional resources to continue to enhance our information security measures and/or to investigate and remediate information security vulnerabilities. Our actual or perceived failure to adequately protect personal data could adversely affect our business. Given the nature of our business, we collect and store confidential information that customers provide in order to, among other things, purchase products and services and register on our website.¹⁴ We are required to comply with increasingly complex and changing data privacy regulations both in the United States and beyond that regulate the collection, use, sharing, and transfer of personal data. Many of these regulations also grant rights to individuals. Many foreign data privacy regulations (including GDPR in the EU) and certain state laws and regulations (including California's CPRA) impose requirements beyond those enacted under federal law including, in some instances, private rights of action. For example, the EU GDPR imposes more stringent data protection requirements, including a broader scope of protected data, restrictions on cross-border transfers of personal data and more onerous breach reporting requirements, and greater penalties for non-compliance than the federal data protection laws. Other states and countries continue to enact similar legislation. We are also required to comply with expanding and increasingly complex privacy and data protection regulations in the United States and abroad with respect to reporting adverse events and additional requirements for avoiding or responding to an adverse event. We also have contractual obligations to our customers related to the protection of personal data and compliance with privacy laws. While we have taken various measures and made significant efforts and investment and designed our policies, processes and systems to be robust, a failure, or perceived failure, by us to comply with any applicable regulatory requirements or orders, including but not limited to privacy, data protection, information security, or consumer protection-related privacy laws and regulations, in one or more jurisdictions within the United States, the EU or elsewhere, could result in proceedings or actions against us by governmental entities or individuals; subject us to significant fines, penalties, and/or judgments; require us to change our business practices; limit access to our products and services in certain countries, incur substantial costs (even if we ultimately prevail) or otherwise adversely affect our business. Our inability to protect our intellectual property could adversely affect our business. In addition, third parties may claim that we infringe their intellectual property, and we could suffer significant litigation or licensing expenses as a result. We rely on a variety of intellectual property rights, including patents, trademarks, copyrights and trade secrets, to protect our proprietary technology and products. We place considerable emphasis on obtaining patent or maintaining trade secret protection for significant new technologies, products and processes because of the length of time and expense associated with bringing new products and processes through development and to the market. We may need to spend significant resources monitoring and enforcing our intellectual property rights and we may not be able to prove infringement by third parties. Our competitive position may be harmed if we cannot enforce our intellectual property rights. In some circumstances, we may choose to not pursue enforcement for business reasons. In addition, competitors might avoid infringement by designing around our intellectual property rights or by developing non-infringing competing technologies. Intellectual property rights and our ability to enforce them may be unavailable or limited in some countries, which could make it easier for competitors to capture market share and could result in lost revenues. Our trademarks are valuable assets and if we are unable to protect them from infringement, our business prospects may be harmed. Our brands, particularly our J.T.Baker, NuSil, VWR and Masterflex brands, are valuable assets. Therefore, we actively manage our trademark portfolio, including by maintaining registrations for long-standing trademarks and applying to obtain trademark registrations for new brands. We also police our trademark portfolio against infringement. Our efforts to protect and defend our trademarks may fall short or be unsuccessful against competitors or other third parties for a variety of reasons. To the extent that third parties or distributors sell products that are counterfeit versions of our branded products, our customers could inadvertently purchase products that are inferior. This could cause our customers to 15refrain from purchasing our brands in the future and in turn could impair our brand equity and adversely affect our sales. We are subject to product liability and other claims in the ordinary course of business. Our business involves risk of product liability, intellectual property claims and other claims in the ordinary course of business arising from the products that we source from various manufacturers or produce ourselves. Furthermore, there may be product liability risks that are unknown or which become known in the future. Substantial, complex or extended litigation on any claim could cause us to incur significant costs and distract our management. We maintain insurance policies and in some cases, our suppliers, customers and predecessors of acquired companies have indemnified us against certain claims. We cannot assure you that our insurance coverage or indemnification agreements will be available in all pending or any future cases brought against us. Accordingly, we could be subject to uninsured and unindemnified future liabilities requiring us to provide additional reserves to address such liabilities. An unfavorable result in a case for which adequate insurance or indemnification is not available could adversely affect our business, financial condition and results of operations. We must develop new products, adapt to rapid and significant technological change and respond to introductions of new products by competitors to remain competitive. We sell our products in industries that are characterized by significant technological changes, frequent new product and technology introductions and enhancements and evolving industry standards. As a result, our customers' needs are rapidly evolving. If we do not appropriately innovate and invest in new technologies, our offerings may become less desirable in the markets we serve, and our customers could move to new technologies offered by our competitors or make products themselves. Without the timely introduction of new products, services and enhancements, our offerings will likely become less competitive over time, in which case, our competitive position, net sales and operating results could suffer. To the extent we fail to timely introduce new and innovative products or services, adequately predict our customers' needs or fail to obtain desired levels of market acceptance, our business may suffer. Accordingly, we focus significant efforts and resources on the development and identification of new technologies, products and services that are attractive to, and gain acceptance, in the markets we serve and further broaden our offerings. We have been and expect to continue to utilize AI and machine learning in certain of our products and services. As with many technological innovations, there are significant risks and challenges involved in maintaining and deploying these technologies, including risks related to cybersecurity, privacy and data use practices as well as related to accuracy issues, and there can be no assurance that the use of such technologies will enhance our products or services or be beneficial to our business. Further, the regulatory landscape surrounding AI is evolving and may impose restrictions that limit the usability or effectiveness of AI in our products and services and expose us to an increased risk of regulatory enforcement and litigation. We depend upon the availability of raw materials. Our operations depend upon our ability to obtain high-quality raw materials meeting our specifications and other requirements at reasonable prices, including various active pharmaceutical ingredients, components, compounds, excipients and other raw materials, many of which are sole-sourced due to market or customer demands. Our ability to maintain an adequate supply of such materials and 16components could be impacted by the availability and price of those raw materials and maintaining relationships with key suppliers. Moreover, we are dependent upon the ability of our suppliers to provide materials and components that meet our specifications, quality standards, other applicable criteria, and delivery schedules. Our suppliers' failure to provide expected raw materials or components that meet such criteria could adversely affect production schedules and contract profitability and negatively impact our results of operations. We depend upon maintaining our relationships with suppliers. We offer products from a wide range of suppliers. While there is generally more than one source of supply for most of the categories of third-party materials & consumables and equipment & instrumentation that we sell, we currently do not manufacture the majority of our products and are dependent on these suppliers for access to those products. Our ability to sustain our gross margins has been, and will continue to be, dependent in part upon our ability to obtain favorable terms from our suppliers. These terms may change from time to time, and such changes could adversely affect our gross margins over time. In addition, our results of operations and cash flows could be adversely impacted by the acceleration of payment terms to our suppliers and/or the imposition of more restrictive credit terms and other contractual requirements. Our use of chemicals and chemical processes is subject to inherent risk. We use chemical ingredients in the manufacture of certain of our products. Due to the nature of the manufacturing process itself, there is a risk of incurring liability for damages caused by or during the storage or manufacture of both the chemical ingredients and the finished products. The processes used in certain of our facilities typically involve large volumes of solvents and chemicals, creating the potential for fires, spills and other safety or environmental impacts. If any of these risks materialize, it could result in significant remediation and other costs, potential adverse regulatory actions and liabilities, any of which could have an adverse effect on our business, results of operations and financial condition. In addition, the manufacturing, use, storage, and distribution of chemicals are subject to threats including terrorism. We have several high-risk chemical facilities that contain materials that could be stolen and used to make weapons. We could also be subject to an attack on our high-risk facilities that could cause a significant number of deaths and injuries. Such an occurrence could also harm the environment, our reputation and disrupt our operations. Climate change, and the legal or regulatory response thereto, may have a long-term impact on our business, financial condition and results of operations. We continue to focus on strategies and systems, such as reducing greenhouse gas emissions and packaging waste, to address climate change. However, we face climate and environmental risks and the occurrence of one or more unexpected events, including fires, tornadoes, tsunamis, hurricanes, earthquakes, drought, storms, sea level rise, floods, and other severe hazards or accidents in the United States, the United Kingdom, the EU or in other countries or regions in which we operate could adversely affect our operations and financial performance. Extreme weather, natural disasters, power outages, or other unexpected events could result in physical damage to, and complete or partial closure of, one or more of our manufacturing or distribution centers; temporary or long-term disruption in the supply of products; and/or disruption of our ability to deliver products to customers. Increasing concern over climate change also may result in additional legal or regulatory requirements designed to reduce or mitigate the effects of carbon dioxide and other greenhouse gas emissions on the environment. The 17effects of climate change and legal or regulatory initiatives to address climate change could have a long-term adverse impact on our business, financial condition and results of operations. We also monitor rules and regulations related to environmental, social and governance disclosure obligations, which may expose us to increased costs associated with additional reporting obligations. In addition, we have established and publicly announced goals and commitments to reduce our carbon footprint, including targets to reduce greenhouse gas emissions (scope 1, scope 2 and scope 3). We have a broad range of stakeholders, including our stockholders, employees and customers, some of whom increasingly focus on environmental, social and governance matters. If we are unable to achieve, or improperly report on our progress toward, our carbon footprint reduction goals and commitments, this may result in litigation and/or regulatory action as well as negative publicity, which could lead to the loss of business, adverse reputational impacts, diluted market valuations and challenges in attracting and retaining customers and talented employees. We are highly dependent on our senior management and key employees. Our success depends on our ability to attract, motivate and retain highly qualified individuals. Competition for senior management and other key personnel in our industry is intense, and the pool of suitable candidates is limited. The failure to attract, retain and properly motivate members of our senior management team and other key employees, or to find suitable replacements for them in the event of death, illness or their desire to pursue other professional opportunities, could have a negative effect on our operating results. The indemnification provisions of acquisition agreements by which we have acquired companies may not fully protect us and as a result, we may face unexpected liabilities. Certain of the acquisition agreements by which we have acquired companies require the former owners to indemnify us against certain liabilities related to the operation of the company before we acquired it. In most of these agreements, however, the liability of the former owners is limited and certain former owners may be unable to meet their indemnification responsibilities. We cannot assure you that these indemnification provisions will protect us fully or at all, and as a result, we may face unexpected liabilities that adversely affect our financial statements. We face risks related to health epidemics and pandemics. We face risks related to health epidemics and pandemics, including risks related to any responses thereto by the federal, state or foreign governments, as well as customers and suppliers. A pandemic has in the past and could in the future adversely affect our operations, supply chains and distribution network, and we could experience and expect prolonged unpredictable reductions in supply and demand for certain of our offerings similar to those experienced during the COVID-19 pandemic, as well as unpredictable increases in demand for certain of our offerings similar to those experienced during the COVID-19 pandemic. Further, it is possible that disruptions or delays in shipments of certain raw materials used in the products we manufacture and in the finished goods that we sell globally could be similar to those experienced during the COVID-19 pandemic. The implementation of any government-mandated vaccination or testing mandates may impact our ability to retain current employees and attract new employees. Any extended disruption in our ability to service our customers could have a negative effect on our operating results. Changes in tax law relating to multinational corporations could adversely affect our tax position. The U.S. Congress, foreign governments, and their agencies in non-U.S. jurisdictions where we and our affiliates do business, and the Organization for Economic Cooperation and Development (the "OECD"), 18continue to focus on issues related to the taxation of multinational corporations. As part of this focus, the OECD has introduced a framework to implement a 15% global minimum corporate tax rate. While it is uncertain whether the U.S. will enact legislation to adopt the minimum tax directive, certain countries in which we operate have adopted legislation and other countries are in the process of introducing legislation to implement the minimum tax directive. While we do not currently expect the minimum tax directive to have a material impact on our effective tax rate, our analysis is ongoing as the OECD continues to release additional guidance. There can be no assurance that these changes, and any further contemplated changes when finalized and adopted by countries, will not have an adverse impact on our provision for income taxes. Due to the potential for changes to tax laws and regulations or changes to the interpretation thereof, the ambiguity of tax laws and regulations, the subjectivity of factual interpretations, the complexity of our intercompany arrangements, uncertainties regarding the geographic mix of earnings in any particular period, and other factors, our estimates of effective tax rate and income tax assets and liabilities may be incorrect and our financial statements could be adversely affected. The impact of the factors referenced in the first sentence of this paragraph may be substantially different from period-to-period. Certain of our businesses rely on relationships with collaborative partners and other third parties for development, supply and marketing of certain products and potential products, and such collaborative partners or other third parties could fail to perform sufficiently. We believe that for certain of our businesses, success in penetrating target markets depends in part on their ability to develop and maintain collaborative relationships with other companies. Relying on collaborative relationships is risky because, among other things, our collaborative partners may (i) not devote sufficient resources to the success of our collaborations; (ii) fail to obtain regulatory approvals necessary to continue the collaborations in a timely manner; (iii) be acquired by other companies and terminate our collaborative partnership or become insolvent; (iv) compete with us; (v) disagree with us on key details of the collaborative relationship; (vi) have insufficient capital resources; and (vii) decline to renew existing collaborations on acceptable terms. Because these and other factors may be beyond our control, the development or commercialization of our products involved in collaborative partnerships may be delayed or otherwise adversely affected. If we or any of our collaborative partners terminate a collaborative arrangement, we may be required to devote additional resources to product development and commercialization or we may need to cancel some development programs, which could adversely affect our business and financial statements. Risks related to regulation. We are required to comply with a wide variety of laws and regulations, and are subject to regulation by various federal, state and foreign agencies, and our failure to comply with existing and future regulatory requirements could adversely affect our results of operations and financial condition. We compete in markets in which we and our customers are subject to federal, state, local, international and transnational laws and regulations, including the operating, quality and security standards of the FDA, various state health departments, the DHHS, similar bodies of the EU and its member states and other comparable agencies around the world, and, in the future, any changes to such laws and regulations could adversely affect us. We develop, configure and market our products to meet customer needs driven by those regulations. Among other rules affecting us, we are subject to laws and regulations concerning cGMP and product safety. Our subsidiaries may be required to register for permits and/or licenses with, and may be required to comply with, the laws and regulations of the FDA, the DHHS, the DEA, foreign agencies including the EMA, and other various state health departments and/or comparable state and 19foreign agencies as well as certain accrediting bodies depending upon the types of operations and locations of distribution and sale of the products manufactured or services provided by those subsidiaries. Any significant change in regulations could reduce demand for our products or increase our expenses. For example, many of our products are marketed to the biopharma industry for use in discovering, developing

and manufacturing drugs, or are sold as raw materials or components to drug device manufacturers or for use in the manufacture of implantable devices. Changes in the domestic or foreign regulation of drug discovery, development or manufacturing processes or medical device manufacturing processes, or adverse findings concerning any health effects associated with these products, could have an adverse effect on the demand for these products and could also result in legal liability and claims. We are also registered with the DDTC, as a manufacturer and exporter of goods controlled by ITAR, and we are subject to strict export control and prior approval requirements related to these goods. Our failure to comply with ITAR and other export control laws and regulations, as well as economic sanctions, could result in penalties, loss, or suspension of contracts or other consequences. Any of these could adversely affect our operations and financial condition. Failure by us or by our customers to meet one or more of these various regulatory obligations could have adverse consequences in the event of material non-compliance. Compliance with relevant sanctions and export control laws could restrict our access to, and increase the cost of obtaining, certain products and at times could interrupt our supply of imported inventory or our ability to service certain customers. Conversely, compliance with these regulatory obligations may require us to incur significant expenses. In addition, certain of our facilities are certified to ISO, including ISO 13485, ISO 9001, AS9100, ISO 22000 and/or ISO 14001. These standards are voluntary quality management system standards, the maintenance of which indicates to customers certain quality and operational norms. Customers may rely on contractual assurances that we make with respect to ISO certificates to transact business. Failure to comply with these ISO standards can lead to observations of non-compliance or even suspension of ISO or Aerospace Standard (AS) certifications or European Community (EC) Declarations of Conformity Certificates by the registrar. If we were to lose ISO or AS certifications or EC Declarations of Conformity, we could lose sales and customers to competitors or other suppliers. We are also subject to periodic inspections or audits by our customers. If these audits or inspections identify issues or the customer perceives there are issues, the customer may decide to cease purchasing products from us which could adversely affect our business. Our reputation, ability to do business and financial statements may be impaired by improper conduct by any of our employees, agents or business partners. We cannot provide assurance that our internal controls and compliance systems will always protect us from acts committed by employees, agents or business partners of ours (or of businesses we acquire or partner with) that would violate U.S. and/or non-U.S. laws, including the laws governing payments to government officials, bribery, fraud, kickbacks and false claims, pricing, sales and marketing practices, conflicts of interest, competition, export and import compliance, money laundering and data privacy. In particular, the FCPA, the U.K. Bribery Act and similar anti-bribery laws in other jurisdictions generally prohibit companies and their intermediaries from making improper payments for the purpose of obtaining or retaining business, and we operate in many parts of the world that have experienced corruption to some degree. Any such improper actions or allegations of such acts could damage our reputation and subject us to civil or criminal investigations in the United States and in other jurisdictions and related stockholder lawsuits, could lead to substantial civil and criminal, monetary and non-monetary penalties and could cause us to incur significant legal and investigatory fees. In addition, the government in relevant jurisdictions may seek to hold us liable as a successor for violations committed by companies in which we invest or that we acquire. We also rely on our suppliers to adhere to our supplier standards of conduct. 20 and material violations of such standards of conduct could occur that could have a material effect on our business, reputation and financial statements. We are subject to laws and regulations governing government contracts, and failure to address these laws and regulations or comply with government contracts could harm our business by leading to a reduction in sales to these customers or penalties. We sell products to government entities and, as a result, we are subject to various statutes and regulations that apply to companies doing business with the government. The laws governing government contracts differ from the laws governing private contracts and government contracts may contain pricing terms and conditions that are not applicable to private contracts. We are also subject to investigation for compliance with the regulations governing government contracts. A failure to comply with these regulations could result in suspension of these contracts, criminal, civil and administrative penalties or debarment. We are subject to environmental, health and safety laws and regulations, and costs to comply with such laws and regulations, or any liability or obligation imposed under such laws or regulations, could negatively impact our business, financial condition and results of operations. We are subject to a broad range of foreign, federal, state and local environmental, health and safety laws and regulations, including those of the EPA, OSHA and equivalent local, state, and foreign regulatory agencies in each of the jurisdictions in which we operate, and we may be fined or penalized for non-compliance. In addition, contamination resulting from our current or past operations or from past uses of land that we own or operate may trigger investigation or remediation obligations, which may have an adverse effect on our business, financial condition and results of operations. We cannot be certain that identification of presently unidentified environmental, health and safety conditions, new regulations, more vigorous enforcement by regulatory authorities or other unanticipated events will not arise in the future and give rise to additional environmental liabilities, business interruptions, compliance costs or penalties, which could have an adverse effect on our business, financial condition and results of operations. We currently incur costs and may incur additional costs related to remediation of alleged environmental damage associated with past or current waste disposal practices or other hazardous materials handling at property that we currently own or operate, or formerly owned or operated, or facilities to which we arranged for the disposal of hazardous substances. Our liabilities arising from past or future releases of, or exposures to, hazardous substances may exceed our estimates or adversely affect our financial statements and reputation and we may be subject to additional claims for cleanup or other environmental claims in the future based on our past, present or future business activities, and we may not be able to recover any costs under any of our indemnifications that we have. For additional information regarding environmental matters, see note 13 to our consolidated financial statements beginning on page F-1 of this report. Changes in corporate governance and public disclosure requirements and expectations could impact compliance costs and the risks of noncompliance. We are subject to the rules and regulations promulgated by a number of governmental and self-regulatory organizations, including the SEC and NYSE, as well as evolving investor expectations around environmental, social and governance practices and disclosures. These rules and regulations continue to evolve in scope and complexity, and many new requirements have been created in response to laws and directives enacted by federal, state, local and foreign governments, making compliance more difficult and uncertain. The increasing complexity and costs to comply with such evolving expectations, rules and regulations, as well as any risk of noncompliance, could adversely affect our business. 21 Risks related to our indebtedness Our indebtedness could adversely affect our financial condition and prevent us from fulfilling our debt or contractual obligations. We now have and expect to continue to have a significant amount of debt. Our indebtedness could have important consequences to us including the following: (i) making it more difficult for us to satisfy our debt or contractual obligations; (ii) exposing us to the risk of increased interest rates as certain of our borrowings, including borrowings under our senior secured credit facilities, are at variable rates of interest; (iii) restricting us from making strategic acquisitions or causing us to make non-strategic divestitures; (iv) requiring us to dedicate a substantial portion of our cash flow from operations to payments on our indebtedness, which would reduce the funds available for working capital, capital expenditures, investments, acquisitions and other general corporate purposes; (v) limiting our flexibility in planning for, or reacting to, changes in our business, future business opportunities and the industry in which we operate; (vi) placing us at a competitive disadvantage compared to any of our less leveraged competitors; (vii) increasing our vulnerability to a downturn in our business and both general and industry-specific adverse economic conditions; and (viii) limiting our ability to obtain additional financing. Our credit facilities contain financial and other restrictive covenants that could limit our ability to engage in activities that may be in our long-term best interests. Our failure to comply with those covenants could result in an event of default which, if not cured or waived, could result in the acceleration of all of our debt, which could adversely affect our business, earnings and financial condition. Despite our current level of indebtedness, we and our subsidiaries may still be able to incur substantially more debt. We and our subsidiaries may be able to incur significant additional indebtedness in the future. Although our credit agreement and indentures contain restrictions on the incurrence of additional indebtedness, these restrictions are subject to a number of qualifications and exceptions, and the additional indebtedness incurred in compliance with these restrictions could be substantial. If new debt is added to our current debt levels, the related risks that we now face could intensify. 22 Risks related to ownership of our stock Because we have no current plans to pay cash dividends on our common stock, you may not receive any return on investment unless you sell your common stock for a price greater than that which you paid for it. We have no current plans to pay cash dividends on our common stock. The declaration, amount and payment of any future dividends on our common stock will be at the sole discretion of our Board of Directors. Our Board of Directors may take into account general and economic conditions, our financial condition and results of operations, our available cash and current and anticipated cash needs, capital requirements, contractual, legal, tax and regulatory restrictions and implications on the payment of dividends by us to our stockholders or by our subsidiaries to us, including restrictions under our credit agreement and other indebtedness we may incur, and such other factors as our Board of Directors may deem relevant. As a result, you may not receive any return on an investment in our common stock unless you sell our common stock for a price greater than your purchase price. If we fail to maintain an effective system of internal controls, we may not be able to accurately report our financial results. Effective internal controls are necessary for us to provide reliable and accurate financial statements and to effectively prevent fraud. We devote significant resources and time to comply with the internal control over financial reporting requirements of the Sarbanes Oxley Act of 2002 and continue to enhance our controls. However, we cannot be certain that we will be able to prevent future significant deficiencies or material weaknesses. Inadequate internal controls could cause investors to lose confidence in our reported financial information, which could have a negative effect on investor confidence in our financial statements, the trading price of our stock and our access to capital. Our amended and restated certificate of incorporation provides, subject to limited exceptions, that state and federal courts (as appropriate) located within the State of Delaware will be the sole and exclusive forum for certain stockholder litigation matters, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers, employees or stockholders. Our amended and restated certificate of incorporation provides that unless we consent to the selection of an alternative forum, the state or federal courts (as appropriate) located within the State of Delaware shall, to the fullest extent permitted by law, be the sole and exclusive forum for any (i) derivative action or proceeding brought on behalf of our company, (ii) action asserting a claim of breach of a fiduciary duty owed by any director, officer, or other employee or stockholder of our company to us or our stockholders, creditors or other constituents, (iii) action against us or any of our directors or officers involving a claim or defense arising pursuant to any provision of the Delaware General Corporation Law or our amended and restated certificate of incorporation or our amended and restated bylaws, (iv) action against us or any director or officer of the Company involving a claim or defense implicating the internal affairs doctrine, or (v) action against us or any of our directors or officers involving a claim or defense arising pursuant to the Exchange Act or the Securities Act. It is possible that these exclusive forum provisions may be challenged in court and may be deemed unenforceable in whole or in part. Our exclusive forum provision shall not relieve the company of its duties to comply with the federal securities laws and the rules and regulations thereunder, and our stockholders will not be deemed to have waived our compliance with these laws, rules and regulations. Any person or entity purchasing or otherwise acquiring any interest in shares of our capital stock shall be deemed to have notice of and consented to the forum provisions in our amended and restated certificate of incorporation. This choice of forum provision may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or any of our directors, officers, other employees or stockholders which may discourage lawsuits with respect to such claims. Alternatively, if a court were to find the choice of forum provision contained in our amended and restated certificate of incorporation to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving such action in other jurisdictions, which could harm our business, operating results and financial condition. Item 1B. A. A. A. Unresolved staff comments. None. Item 1C. A. A. A. Cybersecurity Risk Management and Strategy. We rely on sophisticated information systems to obtain, rapidly process, analyze, and manage data in order to effectively operate our business. We are committed to protecting our business information, intellectual property, customer, supplier and employee data and information systems from cybersecurity risks and maintain an active cybersecurity risk management and strategy program, which is integrated in our enterprise risk management program. We maintain enterprise-wide information security policies, processes and standards that set the requirements around acceptable use of information systems and data, risk assessment and management, identity and access management, data security, security operations, security incident response and threat and vulnerability management. We also perform formal risk assessment activities annually, aligned to the National Institute of Standards and Technology (NIST) 800-171 and Cybersecurity Framework, as its program controls are designed to protect and maintain confidentiality, integrity, and continued availability of our data and information systems. Our team of information security professionals monitors our information systems for cybersecurity threats, breaches, intrusions and other weaknesses, responds to cybersecurity incidents, develops and implements plans to mitigate cybersecurity threats and facilitates training for our employees. We also engage consultants and other third-party advisors to conduct independent assessments of our cybersecurity readiness and control effectiveness. In collaboration with external cybersecurity firms, we seek to gain insights into emerging threats and vulnerabilities, industry trends, and leading practices to inform our cybersecurity response, risk remediation and resilience capabilities, including by working with an external retained incident response team, receiving third-party threat intelligence, participating in incident tabletops, and performing assessments and controls testing on our enterprise environment. Our program includes procedures to oversee and identify cybersecurity risks and threats of our third-party service providers, which include third-party evaluations performed by our team of information security professionals, review of independent assessment documentation, and continuous monitoring of third-party independent posture scoring. We also include security and data protection provisions in our contractual arrangements with third-party service providers where applicable. Additionally, we have purchased a cybersecurity risk insurance policy that would reduce the costs associated with a covered cybersecurity incident if it occurred. 24 Although no cybersecurity incident during the year ended December 31, 2024 resulted in an interruption of our operations, known losses of critical data, or otherwise had a material impact on Avantor's strategy, financial condition or results of operations, the scope and impact of any future incident cannot be predicted. See Item 1A. Risk Factors for more information on how material cybersecurity attacks may impact our business. Governance Management plays a critical role in assessing and managing material risks from cybersecurity threats. Our Vice President of Information Security & Risk Management and Chief Information Security Officer (CISO), in coordination with our Chief Information Officer, leads a team of information security professionals and manages our cybersecurity risk management program and activities. This involves monitoring our information systems for cybersecurity threats, reviewing cybersecurity incidents, analyzing emerging threats, and the development and implementation of risk mitigation strategies. Our CISO has over 25 years of experience working in the information technology and services industry who is a subject matter expert in a variety of areas including information security, and IT risk. Our CISO reports to our executive leadership team composed of our Chief Executive Officer, Chief Financial Officer, and Chief Information Officer on cybersecurity matters, providing the leadership team with updates on enterprise risks, cybersecurity incidents, the status of ongoing initiatives, key metrics, and additional cybersecurity topics. Our information technology leaders also meet regularly to discuss the progress of ongoing program initiatives, cybersecurity priorities, identified risks and metrics. We have also developed a cross functional disclosure working group to assess elevated cybersecurity incidents and, as appropriate, report on such events to Avantor's standing Disclosure Committee to conclude on the materiality of the incident and any need for regulatory reporting. The Board of Directors exercises direct oversight of strategic risks to the Company. The Board has delegated the responsibility for cybersecurity oversight to the Audit and Finance Committee. The Audit and Finance Committee's responsibilities include reviewing and discussing with management the strategies, process and controls pertaining to the management of Avantor's information technology operations, including cybersecurity risks and information security. The CISO and Chief Information Officer report to the Audit and Finance Committee annually and more frequently, as needed, on cybersecurity matters, including the cybersecurity threat landscape, key metrics demonstrating the overall management of our cybersecurity risk and risk management program, related key initiatives, enterprise program framework alignment, annual risk mitigation strategy, and review of cybersecurity incidents. Our Board is committed to maintaining a well-informed and cybersecurity-aware posture, regularly engaging through regular and requested updates on our strategy and evolving threat landscape. Item 2. A. A. Properties. As of December 31, 2024, the Company had facilities in over 30 countries, including approximately 200 significant administrative, sales, research and development, manufacturing and distribution facilities. Approximately 60 of these facilities are located in the United States across 20 states. Approximately 140 of these facilities are located outside the United States, primarily in Europe and to a lesser extent in AMEA. Refer to the Consolidated Financial Statements included in this Annual Report for additional information with respect to the Company's lease commitments. Item 3. A. A. Legal proceedings. For information regarding legal proceedings and matters, see note 13 to our consolidated financial statements beginning on page F-1 of this report, which information is incorporated into this item by reference. 25 Item 4. A. A. Mine safety disclosures. Not applicable. 26 Information about our Executive Officers. The following table sets forth certain information regarding our executive officers at February 3, 2025. A. A. Age. Position. Michael Stubblefield, 52, Director, President and Chief Executive Officer. R. Brent Jones, 55, Executive Vice President and Chief Financial Officer. Benoit Gourdier, 54, Executive Vice President, Bioscience Production. Christophe Couturier, 59, Executive Vice President, AMEA. Brittany Hankamer, 44, Executive Vice President and Chief Human Resources Officer. Claudius Sokenu, 57, Executive Vice President, Chief Legal and

of financial statements in conformity with GAAP requires us to make estimates and assumptions that affect the amounts reported throughout the financial statements. Those estimates and assumptions are based on our best estimates and judgment. We evaluate our estimates and assumptions on an ongoing basis using historical experience and known facts and circumstances. We adjust our estimates and assumptions when we believe the facts and circumstances warrant an adjustment. As future events and their effects cannot be determined with precision, actual results could differ significantly from those estimates.⁴⁴ We consider the policies and estimates discussed below to be critical to an understanding of our financial statements because their application places the most significant demands on our judgment. Specific risks for these critical accounting policies are described in the following sections. For all of these policies, we caution that future events rarely develop exactly as forecasted, and such estimates naturally require adjustment. Our discussion of critical accounting policies and estimates is intended to supplement, not duplicate, our summary of significant accounting policies so that readers will have greater insight into the uncertainties involved in these areas. For a summary of all of our significant accounting policies, see note 2 to our consolidated financial statements beginning on page F-1 of this report. Testing goodwill and other intangible assets for impairment We carry significant amounts of goodwill and other intangible assets on our consolidated balance sheet. At December⁴⁴ 31, 2024, the combined carrying value of goodwill and other intangible assets, net of accumulated amortization and impairment charges, was \$8,899.4 million or 73% of our total assets. Required annual assessment On October 1 of each year, we perform annual impairment testing of our goodwill and indefinite-lived intangible assets, or more frequently if an event or change in circumstance occurs that would require reassessment of the recoverability of those assets. The impairment analysis for goodwill and indefinite-lived intangible assets consists of an optional qualitative test potentially followed by a quantitative analysis. These measurements rely upon significant judgment from management described as follows:⁴⁵ The qualitative analysis for goodwill and indefinite-lived intangible assets requires us to identify potential factors that may result in an impairment and estimate whether they would warrant performance of a quantitative test.⁴⁶ The quantitative impairment test requires us to estimate the fair value of our reporting units and indefinite-lived intangible assets. We estimate the fair value of each reporting unit using a weighted average of two valuation methods based on a discounted cash flows method and a guideline public company method. These valuation methods require management to make various assumptions, including, but not limited to, future profitability, cash flows, discount rates, weighting of valuation methods and the selection of comparable publicly traded companies. Our estimates are based on historical trends, management's⁴⁷ knowledge and experience and overall economic factors, including projections of future earnings potential. Developing future cash flows in applying the income approach requires us to evaluate our intermediate to longer-term strategies, including, but not limited to, estimates about net sales growth, operating margins, capital requirements, inflation and working capital management. The development of appropriate rates to discount the estimated future cash flows requires the selection of risk premiums, which can materially impact the present value of future cash flows. Selection of an appropriate peer group under the market approach involves judgment, and an alternative selection of guideline companies could yield materially different market multiples. Weighing the different value indications involves judgment about their relative usefulness and comparability to the reporting unit. We did not record any impairment charges as a result of our October 1, 2024 impairment testing. Each reporting unit had a fair value that was in excess of its carrying value, and our indefinite-lived intangible assets did not show any indications that their fair value was more likely than not below their carrying value. Estimating valuation allowances on deferred tax assets We are required to estimate the degree to which tax assets and loss carryforwards will result in a future income tax benefit, based on our expectations of future profitability by tax jurisdiction. We provide a valuation allowance for deferred tax assets that we believe will more likely than not go unutilized. If it becomes more likely than not that a deferred tax asset will be realized, we reverse the related valuation allowance and recognize an income tax benefit for the amount of the reversal. At December⁴⁴ 31, 2024, our valuation allowance on deferred tax assets was \$214.1 million, \$149.2 million of which relates to foreign net operating loss carryforwards that are not expected to be realized. We must make assumptions and judgments to estimate the amount of valuation allowance to be recorded against our deferred tax assets, which take into account current tax laws and estimates of the amount of future taxable income, if any. Changes to any of the assumptions or judgments could cause our actual income tax obligations to differ from our estimates. Accounting for uncertain tax positions In the ordinary course of business, there is inherent uncertainty in quantifying our income tax positions. We assess income tax positions for all years subject to examination based upon our evaluation of the facts, circumstances and information available at the reporting date. For those tax positions where it is more likely than not that a tax benefit will be sustained, we have recorded an amount having greater than 50% likelihood of being realized upon ultimate settlement with a taxing authority assumed to have full knowledge of all relevant information. For those income tax positions where it is not more likely than not that a tax benefit will be sustained, no tax benefit has been recognized in the financial statements. Our reserve for uncertain tax positions was \$83.3 million at December⁴⁴ 31, 2024, exclusive of penalties and interest. Where applicable, associated interest expense has also been recognized as a component of interest expense. We operate in numerous countries under many legal forms and, as a result, we are subject to the jurisdiction of numerous domestic and non-U.S. tax authorities, as well as to tax agreements and treaties among these governments. Our tax positions may be scrutinized by local tax authorities upon examination. Determination of taxable income in any jurisdiction requires the interpretation of the related tax laws and regulations, including transfer pricing guidelines, and the use of estimates and assumptions regarding significant future events, such as the amount, timing and character of deductions and the sources and character of income and tax credits. Changes in tax laws, regulations, agreements and treaties, currency exchange restrictions or our level of operations or profitability in each taxing jurisdiction could have an impact upon the amount of current and deferred tax balances and hence our net income. We file tax returns in each tax jurisdiction that requires us to do so. Should tax return positions not be sustained upon audit, we could be required to record an income tax provision. Should previously unrecognized tax benefits ultimately be sustained, we could be required to record an income tax benefit. Calculating expense for long-term compensation arrangements Our employees receive various long-term compensation awards, including stock options, RSUs, performance stock units and cash-based awards. We calculate expense for some of those awards using fair value estimates based on unobservable inputs. Additionally, some of those awards contain performance or market conditions. We assess the probability of achieving those performance conditions, and in cases where partial or exceptional performance affects the size of the award, we also estimate the projected achievement level. We determine the fair value of awards with market conditions on their grant date using a Monte Carlo model, which incorporates the probability of achieving the market condition in the awards' fair value. We recognize the expense for such awards ratably over their vesting term. Expense for stock options without performance or market conditions is determined on the grant date and recognized ratably over their vesting term. We estimate the grant date fair value of stock options using the Black-Scholes model. This model requires us to make various assumptions, with the most significant assumption currently being the volatility of our stock price. A public quotation was first established for our common stock in May 2019, which does not provide adequate historical basis to reasonably estimate the expected volatility of our common stock over their more than six-year expected life. Instead, we estimate volatility based on historical stock price trends of a peer company set. The fair value of our awards would have differed had we selected different peer companies or used a different technique to estimate volatility. Increasing our expected volatility assumption by 5 percentage points for all stock options at the date of grant would have increased our 2024 stock-based compensation expense by \$1.1 million. Estimating the net realizable value of inventories We value our inventories at the lower of cost or net realizable value. We regularly review quantities of inventories on hand and compare these amounts to the expected use of each product or product line, which can require us to make significant judgments. If our judgments prove to be incorrect, we may be required to record a charge to cost of sales to reduce the carrying amount of inventory on hand to net realizable value. As with any significant estimate, we cannot be certain of future events which may cause us to change our judgments. Item 7A. Quantitative and qualitative disclosures about market risk Foreign currency exchange risk Although we report our results and financial condition in U.S. dollars, a significant portion of our operating and financing activities are denominated in foreign currencies, principally the Euro but also many others. Certain of our U.S. subsidiaries carry Euro-denominated debt. This does not result in any material risks from an earnings perspective because the exposure from these instruments is substantially hedged by offsetting exposures from intercompany borrowing arrangements. From a cash flow perspective, we have the risk of paying more or less cash for any optional or mandatory repayments of our Euro-denominated debt that may not be offset with equivalent cash repayments of our intercompany borrowings. For example, an optional debt repayment of approximately \$100 million on December⁴⁴ 31, 2024 and December⁴⁴ 31, 2023, with a 10% weakening of the U.S. dollar would have caused us to pay an additional \$10.3 million and \$11.1 million, respectively, to extinguish that debt. Changes to foreign currency exchange rates could favorably or unfavorably affect the translation of our foreign operating results. For example, during times of a strengthening U.S. dollar, our reported international sales and earnings will be reduced because local currencies will translate into fewer U.S. dollars. For the year ended December⁴⁴ 31, 2024, a 10% strengthening of the U.S. dollar compared to all other currencies would have decreased net income by \$16.2 million and decreased Adjusted Operating Income by \$30.6 million. For the year ended December⁴⁴ 31, 2023, a 10% strengthening of the U.S. dollar compared to all other currencies would have increased net income by \$17.5 million and decreased Adjusted Operating Income by \$19.6 million. Interest rate risk We carry debt that exposes us to interest rate risk. A portion of our debt consists of variable-rate instruments. We have also issued fixed-rate secured and unsecured notes. None of our other financial instruments are subject to material interest rate risk. At December⁴⁴ 31, 2024, we had borrowings of \$617.7 million under our senior secured credit facilities and our receivables facility. Borrowings under these facilities bear interest at variable rates based on prevailing LIBOR, EURIBOR and SOFR rates in the financial markets. At December⁴⁴ 31, 2024, the Company had \$100.0 million of interest rate swaps to convert variable rate interest to fixed rate interest. Changes to those market rates affect both the amount of cash we pay for interest and our reported interest expense. At December⁴⁴ 31, 2024, a 100 basis point increase to the applicable variable rates of interest taking into account our interest rate swap would have increased the amount of interest by \$5.2 million per annum. At December⁴⁴ 31, 2023, a 100 basis point increase to the applicable variable rates of interest would have increased the amount of interest by \$11.4 million per annum. Our senior secured notes and senior unsecured notes bear interest at fixed rates, so their fair value will increase if interest rates fall and decrease if interest rates rise. At December⁴⁴ 31, 2024, a 100 basis point decrease in the market rate of interest would have increased their aggregate fair value by \$99.9 million. At December⁴⁴ 31, 2023, a 100 basis point decrease in the market rate of interest would have increased their aggregate fair value by \$130.6 million. Item 8A. Financial statements and supplementary data The information required by this item is included at the end of this report beginning on page F-1. Item 9A. Changes in and disagreements with accountants on accounting and financial disclosure None. Item 9A. Control and procedures Management's⁴⁸ evaluation of disclosure controls and procedures Our management, with the participation of our Chief Executive Officer and Chief Financial Officer, evaluated the effectiveness of our disclosure controls and procedures (as such term is defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934) as of December⁴⁴ 31, 2024. Based on this evaluation, our Chief Executive Officer and Chief Financial Officer concluded that, as of December⁴⁴ 31, 2024, our disclosure controls and procedures were effective in providing reasonable assurance that information required to be disclosed by us in the reports that we file or submit under the Securities Exchange Act of 1934 is recorded, processed, summarized, reported, accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosure. Changes in internal control over financial reporting There have been no changes to our internal control over financial reporting during the fiscal quarter ended December⁴⁴ 31, 2024 that have materially affected or are reasonably likely to materially affect our internal control over financial reporting. Management's⁴⁹ annual report on internal control over financial reporting Our management, including our Chief Executive Officer and Chief Financial Officer, is responsible for establishing and maintaining adequate internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the company. Internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with accounting principles generally accepted in the United States of America. Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate. Our management conducted an assessment of the effectiveness of our internal control over financial reporting as of December⁴⁴ 31, 2024 based on criteria established in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on this assessment, our management concluded that, as of December⁴⁴ 31, 2024, our internal control over financial reporting was effective. Deloitte & Touche LLP (PCAOB ID No. 34), an independent registered public accounting firm, which has audited and reported on the consolidated financial statements contained in this Form 10-K, has issued its report on the effectiveness of the Company's⁵⁰ internal control over financial reporting which follows this report. REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM To the stockholders and the Board of Directors of Avantor, Inc. Opinion on Internal Control over Financial Reporting We have audited the internal control over financial reporting of Avantor, Inc. and subsidiaries (the "Company") as of December⁴⁴ 31, 2024, based on criteria established in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December⁴⁴ 31, 2024, based on criteria established in Internal Control - Integrated Framework (2013) issued by COSO. We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated financial statements as of and for the year ended December⁴⁴ 31, 2024, of the Company and our report dated February 7, 2025, expressed an unqualified opinion on those financial statements. Basis for Opinion The Company's⁵¹ management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's⁵² Annual Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the Company's⁵³ internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB. We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion. Definition and Limitations of Internal Control over Financial Reporting A company's⁵⁴ internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's⁵⁵ internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's⁵⁶ assets that could have a material effect on the financial statements. Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate. /s/ Deloitte & Touche LLP Philadelphia, Pennsylvania February 7, 2025 Item 9B. Other information Securities Trading Plans of Directors and Officers No directors or officers, as defined in Rule 16a-1(f) of the Securities Exchange Act of 1934, of the Company adopted or terminated (i) a Rule 10b5-1 trading arrangement, as defined in Item 408(a) under Regulation S-K of the Securities Act of 1933, or (ii) a non-Rule 10b5-1 trading arrangement, as defined in Item 408(c) under Regulation S-K of the Securities Act of 1933, during the three months ended December 31, 2024. Item 9C. Disclosure regarding foreign jurisdictions that prevent inspections Not applicable. PART III See Part I, "Information about our executive officers" for information about our executive officers, which is incorporated by reference herein. The other information required by Part III is incorporated herein by reference to our definitive proxy statement for our 2025 annual meeting of stockholders. Item 10A. Directors, executive officers and corporate governance See Part I, "Information about our executive officers" for information about our executive officers, which is incorporated by reference herein. The other information required by this Item is incorporated herein by reference to the applicable information in our definitive proxy statement for our 2025 annual meeting of stockholders which we intend to file with the SEC no later than 120 days after our 2024 fiscal year end (the "2025 Proxy Statement"). Item 11. Executive compensation The information required by this Item

is incorporated by reference to the applicable information in our 2025 Proxy Statement. Item 12. A. A. A. Security ownership of certain beneficial owners and management and related stockholder matters. The information required by this Item is incorporated by reference to the applicable information in our 2025 Proxy Statement. Item 13. A. A. A. Certain relationships and related transactions, and director independence. The information required by this Item is incorporated by reference to the applicable information in our 2025 Proxy Statement. Item 14. A. A. A. Principal accountant fees and services. The information required by this Item is incorporated by reference to the applicable information in our 2025 Proxy Statement. PART IV Item 15. A. A. A. Exhibits and financial statement schedules. The following documents are filed as part of this report. 1. Financial Statements and Schedules. See Index to Consolidated Financial Statements and Schedules on page F-1. 2. Exhibits: Exhibit no. Description: Location of exhibits Form: Exhibit no. Filing date: 3. 1. Fourth Amended and Restated Certificate of Incorporation, effective May 9, 2024-K3.15/10/202451 Exhibit no. Description: Location of exhibits Form: Exhibit no. Filing date: 3. 2. Fourth Amended and Restated Bylaws of Avantor, Inc. 8-K3.12/28/20244. 1. Description of capital stock*4. 2. Indenture, dated as of July 17, 2020, among Avantor Funding, Inc., the guarantors party thereto and The Bank of New York Mellon Trust Company, N.A., as Trustee. 8-K4.17/17/20204. 3. Indenture, dated as of November 6, 2020, among Avantor Funding, Inc., the guarantors party thereto and The Bank of New York Mellon Trust Company, N.A., as Trustee and Notes Collateral Agent. 8-K4.111/6/20204. 4. Indenture, dated as of October 26, 2021, among Avantor Funding, Inc., the guarantors party thereto and The Bank of New York Mellon Trust Company, N.A., as Trustee. 8-K4.111/6/2026/202110. 1. Credit Agreement, dated as of November 21, 2017, by and among Vail Holdco Sub LLC, Avantor Funding, Inc. (f/k/a Avantor, Inc.), the guarantors party thereto, Goldman Sachs Bank USA and the other lenders, L/C issuers and parties thereto. S-1/A10.14/10/201910. 2. Amendment No. 1, dated as of November 27, 2018, to the Credit Agreement, dated as of November 21, 2017, among Vail Holdco Sub LLC, Avantor Funding, Inc., the guarantors party thereto, Goldman Sachs Bank USA, as administrative agent and collateral, Swing Line Lender and an L/C issuer, the lenders party thereto and Goldman Sachs Bank USA, as the Additional Euro Term Lender and the Additional Dollar Term Lender. S-1/A10.24/10/201910. 3. Amendment No. 2, dated as of June 18, 2019, to the Credit Agreement, dated as of November 21, 2017, among Vail Holdco Sub LLC, Avantor Funding, Inc., each of the Guarantors, each of the lenders from time to time party thereto and Goldman Sachs Bank USA, as administrative agent and collateral, Swing Line Lender and an L/C Issuer, the lenders party thereto and Goldman Sachs Lending Partners LLC, as the Additional Initial B-2 Euro Term Lender and the Additional Initial B-2 Dollar Term Lender. 8-K10.16/18/201910. 4. Amendment No. 3, dated as of January 24, 2020, to the Credit Agreement, dated as of November 21, 2017, among Vail Holdco Sub LLC, Avantor Funding, Inc., each of the Guarantors, each of the lenders from time to time party thereto and Goldman Sachs Bank USA, as administrative agent and collateral, Swing Line Lender and an L/C Issuer, the lenders party thereto and Goldman Sachs Lending Partners LLC, as the Additional Initial B-3 Euro Term Lender and the Additional Initial B-3 Dollar Term Lender. 8-K10.11/27/202052 Exhibit no. Description: Location of exhibits Form: Exhibit no. Filing date: 10. 5. Amendment No. 4, dated as of July 14, 2020, to the Credit Agreement, dated as of November 21, 2017, among Vail Holdco Sub LLC, Avantor Funding, Inc., each of the Guarantors, each of the lenders from time to time party thereto and Goldman Sachs Bank USA, as administrative agent and collateral agent, Swing Line Lender and an L/C Issuer. 8-K10.17/14/202010. 6. Amendment No. 5, dated as of November 6, 2020, to the Credit Agreement, dated as of November 21, 2017, among Vail Holdco Sub LLC, Avantor Funding, Inc., each of the Guarantors, each of the lenders from time to time party thereto and Goldman Sachs Bank USA, as administrative agent and collateral agent, Swing Line Lender and an L/C Issuer, the lenders party thereto and Goldman Sachs Lending Partners LLC, as Swing Line Lender, an L/C Issuer and the New Term Lender. 8-K10.111/6/202010. 7. Amendment No. 6, dated as of June 10, 2021, to the Credit Agreement, dated as of November 21, 2017, among Vail Holdco Sub LLC, Avantor Funding, Inc., each of the Guarantors, each of the lenders from time to time party thereto and Goldman Sachs Bank USA, as administrative agent and collateral agent, the lenders party thereto and Goldman Sachs Lending Partners LLC, as Swing Line Lender, an L/C Issuer and Goldman Sachs Bank USA, as the New Term Lender. 8-K10.16/14/202110. 8. Amendment No. 7, dated as of July 7, 2021, to the Credit Agreement, dated as of November 21, 2017, among Vail Holdco Sub LLC, Avantor Funding, Inc., each of the Guarantors, each of the lenders from time to time party thereto and Goldman Sachs Bank USA, as administrative agent and collateral agent, Goldman Sachs Lending Partners LLC, as Swing Line Lender and an L/C Issuer, the lenders party thereto and Bank of America, N.A., as the Additional Initial B-4 Dollar Term Lender and as the Additional Incremental B-5 Dollar Term Lender. 8-K10.17/9/202110. 9. Amendment No. 8, dated as of November 1, 2021, to the Credit Agreement, dated as of November 21, 2017, among Vail Holdco Sub LLC, Avantor Funding, Inc., each of the Guarantors, each of the lenders from time to time party thereto and Goldman Sachs Bank USA, as administrative agent and collateral agent, and Goldman Sachs Bank USA, as the 2021 Incremental B-5 Dollar Term. 8-K10.111/2/202110. 10. Amendment No. 9, dated as of April 7, 2022, to the Credit Agreement, dated as of November 21, 2017, between Avantor Funding, Inc., and Goldman Sachs Bank USA, as administrative agent and collateral agent for the lenders. 10-Q10.17/29/202253 Exhibit no. Description: Location of exhibits Form: Exhibit no. Filing date: 10. 11. Amendment No. 10, dated as of March 17, 2023, to the Credit Agreement, dated as of November 21, 2017, among Avantor Funding, Inc., Goldman Sachs Bank USA, as administrative agent and collateral agent for the lenders and the Revolving Credit Lenders. 10-Q10.14/28/202310. 12. Amendment No. 11, dated as of June 29, 2023, to the Credit Agreement, dated as of November 21, 2017, among Vail Holdco Sub, LLC, Avantor Funding, Inc., each of the Guarantors, each of the lenders from time to time party thereto and Goldman Sachs Bank USA, as administrative agent and collateral agent, Swing Line Lender and an L/C Issuer. 8-K10.17/5/202310. 13. Amendment No. 12, dated as of April 2, 2024 (the "a/c Credit Agreement Amendment"), to the Credit Agreement, dated as of November 21, 2017 among Vail Holdco Sub LLC, Avantor Funding, Inc., each of the guarantors, Goldman Sachs Bank USA, as administrative agent and collateral agent, the Swing Line Lender, a L/C issuer and Goldman Sachs Bank USA, as the Additional Incremental B-6 Dollar Term Lender (as defined in the Credit Agreement Amendment) and the other lenders party thereto. 8-K10.14/5/202410. 14. Security Agreement, dated as of November 21, 2017, among the grantors identified therein and Goldman Sachs Bank USA, as agent. S-1/A10.34/10/201910. 15. First Lien Intercreditor Agreement, dated as of November 21, 2017, by and among Avantor Funding, Inc. (f/k/a Avantor, Inc.), Vail Holdco Sub LLC, the other grantors party thereto, Goldman Sachs Bank USA, as collateral agent for the credit agreement secured parties, the Bank of New York Mellon Trust Company, N.A., as collateral agent for the indenture secured parties and each additional agent party from time to time thereto. S-1/A10.44/10/201910. 16. Receivables Purchase Agreement, dated March 27, 2020, among Avantor Receivables Funding, LLC, VWR International, LLC, the various conduit purchasers from time to time party thereto, the various related committed purchasers from time to time party thereto, the various purchaser agents from time to time party thereto, the various LC participants from time to time party thereto and PNC Bank, National Association, as Administrator and LC Bank. 8-K10.13/202054 Exhibit no. Description: Location of exhibits Form: Exhibit no. Filing date: 10. 17. Amendment No. 1, dated as of December 21, 2021, to the Receivables Purchase Agreement, dated as of March 27, 2020, among Avantor Receivables Funding, LLC, VWR International, LLC, the various conduit purchasers from time to time party thereto, the various related committed purchasers from time to time party thereto, the various purchaser agents from time to time party thereto, the various LC participants from time to time party thereto and PNC Bank, National Association, as Administrator and LC Bank. 8-K10.14/5/202410. 18. Security Agreement, dated as of November 21, 2017, among the grantors identified therein and Goldman Sachs Bank USA, as agent. S-1/A10.34/10/201910. 19. First Lien Intercreditor Agreement, dated as of November 21, 2017, by and among Avantor Funding, Inc. (f/k/a Avantor, Inc.), Vail Holdco Sub LLC, the other grantors party thereto, Goldman Sachs Bank USA, as collateral agent for the credit agreement secured parties, the Bank of New York Mellon Trust Company, N.A., as collateral agent for the indenture secured parties and each additional agent party from time to time thereto. S-1/A10.44/10/201910. 20. Receivables Purchase Agreement, dated March 27, 2020, among Avantor Receivables Funding, LLC, VWR International, LLC, the various conduit purchasers from time to time party thereto, the various related committed purchasers from time to time party thereto, the various purchaser agents from time to time party thereto, the various LC participants from time to time party thereto and PNC Bank, National Association, as Administrator and LC Bank. 8-K10.13/202054 Exhibit no. Description: Location of exhibits Form: Exhibit no. Filing date: 10. 21. Amendment No. 1, dated as of December 21, 2021, to the Receivables Purchase Agreement, dated as of March 27, 2020, among Avantor Receivables Funding, LLC, VWR International, LLC, the various conduit purchasers from time to time party thereto, the various related committed purchasers from time to time party thereto, the various purchaser agents from time to time party thereto, the various LC participants from time to time party thereto and PNC Bank, National Association, as Administrator and LC Bank. 8-K10.14/5/202410. 22. ^Avantor Funding, Inc. (f/k/a Avantor, Inc.) Equity Incentive Plan (as amended through September 28, 2016). S-1/A10.124/5/201910. 23. ^Form of Nonqualified Stock Option Agreement under the Avantor Funding, Inc. Equity Incentive Plan. S-1/A10.134/25/201910. 24. ^Avantor, Inc. (f/k/a Vail Holdco Corp) Equity Incentive Plan. S-1/A10.144/5/201955 Exhibit no. Description: Location of exhibits Form: Exhibit no. Filing date: 10. 25. ^Form of Nonqualified Stock Option Agreement under the Avantor Funding, Inc. Equity Incentive Plan. S-1/A10.154/25/201910. 26. ^Avantor, Inc. 2019 Equity Incentive Plan. S-1/A10.25/25/201910. 27. ^Form of Option Grant Notice under the Avantor, Inc. 2019 Equity Incentive Plan (Employees). 10-K2022/16/202110. 29. ^Form of Restricted Stock Unit Grant Notice under the Avantor, Inc. 2019 Equity Incentive Plan (Employees). S-1/A10.264/25/201910. 30. ^Form of Restricted Stock Unit Grant Notice under the Avantor, Inc. 2019 Equity Incentive Plan (Non-Employee Directors). S-1/A10.274/25/201910. 31. ^Form of 2024 Option Grant Notice under the Avantor, Inc. 2019 Equity Incentive Plan. *10.32. ^Form of 2024 Performance Stock Unit Grant Notice under the Avantor, Inc. 2019 Equity Incentive Plan. *10.33. ^Form of 2024 Restricted Stock Unit Grant Notice under the Avantor, Inc. 2019 Equity Incentive Plan (Employees). *10.34. ^Avantor, Inc. 2019 Employee Stock Purchase Plan. S-1/A10.35/21/201910. 35. ^Amendment No. 1 to the Avantor, Inc. 2019 Employee Stock Purchase Plan. S-1/A10.34/14/14/201910. 36. ^Amendment No. 2 to the Avantor, Inc. 2019 Employee Stock Purchase Plan. S-1/A10.34/11/2022/11/202110. 18. Amendment and Restated Employment Agreement, dated April 10, 2019, between Michael Stubblefield and Avantor, Inc. (f/k/a Vail Holdco Corp) S-1/A10.164/25/201910. 39. ^Amended and Restated Employment Letter Agreement, dated April 2, 2019, between Gerard Brophy and VWR Management Services, LLCs. 1/A10.194/10/201910. 40. ^Contract of Employment, dated June 29, 2018, between Frederic Vanderhaegen and VWR International GmbHHS-1/A10.204/25/201910. 41. ^Addendum to Contract of Employment, dated April 10, 2019, between Frederic Vanderhaegen and VWR International GmbHHS-1/A10.214/25/201910. 42. ^Offer Letter, dated July 12, 2023 between R. Brent Jones and VWR Management Services, LLC8-K10.17/13/202310. 43. ^Consulting Agreement dated April 3, 2024 by and between VWR International, LLC and BrophyBio, LLC10-Q10.24/26/202456 Exhibit no. Description: Location of exhibits Form: Exhibit no. Filing date: 10. 44. ^Scientific Advisory Board Consulting Agreement dated April 3, 2024, by and between Avantor, Inc. and Gerard Brophy10-Q10.34/26/202410. 45. ^Amended and Restated Employment Letter Agreement, dated April 2, 2019, between Jim Bramwell and VWR International, LLC10-Q10.44/26/202410. 46. ^Employment Letter Agreement, dated April 11, 2023, between Randy Stone and VWR Management Services, LLC10-Q10.54/26/202410. 47. ^Form of Indemnification Agreement (between Avantor, Inc. and its directors and officers) S-1/A10.234/25/201919. ^Insider Trading Policy*21 List of subsidiaries of Avantor, Inc. *23Consent of Deloitte& Touche LLP*31.1Certification of Principal Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002*32.1Certification of Principal Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002*32.2Certification of Principal Financial Officer pursuant to 18 U.S.C. 1350 (Section 906 of the Sarbanes-Oxley Act of 2002)*32.2Certification of Principal Financial Officer pursuant to 18 U.S.C. 1350 (Section 906 of the Sarbanes-Oxley Act of 2002)*97* Erroneously Awarded Compensation Recovery Policy10-K972/14/2024101 The following materials from this report, formatted in iXBRL (Inline eXtensible Business Reporting Language): (i) the Consolidated Statements of Income, (ii) the Consolidated Statements of Comprehensive Income, (iii) the Consolidated Balance Sheets, (iv) the Consolidated Statements of Cash Flows, and (v) Notes to Consolidated Financial Statements.*104Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)*A A A Filed herewith*^A A A Furnished herewith*^A A A Indicates management contract or compensatory plan, contract or arrangement. Item 16. A A A Form 10-K summaryNone. 57SIGNATURESPursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized. Avantor, Inc. Date: February 7, 2025. /s/ Steven EckName: Steven EckTitle: Senior Vice President and Chief Accounting Officer (Principal Accounting Officer) Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities indicated, as of February 7, 2025. /s/ Juan AndresDirectorJuan Andres/s/ John CarethersDirectorJohn Carethers/s/ Steven EckSenior Vice President and Chief Accounting Officer(Principal Accounting Officer) Steven Eck/s/ R. Brent JonesExecutive Vice President and Chief Financial Officer(Principal Financial Officer) R. Brent Jones/s/ Lan KangDirectorLan Kang/s/ Dame Louise MakinDirectorDame Louise Makin/s/ Mala MurthyDirectorMala Murthy/s/ Joseph MassaroDirectorJoseph Massaro/s/ Jonathan PeacockChairman of the Board of DirectorsJonathan Peacock58/s/ Michael StubblefieldDirector, President and Chief Executive Officer(Principal Executive Officer) Michael Stubblefield/s/ Greg SummeDirectorGreg Summe/s/ Michael SeverinoDirectorMichael Severino59Avantor, Inc. and subsidiariesIndex to consolidated financial statementsPageReport of independent registered public accounting firm*2Consolidated balance sheets*4Consolidated statements of operations*5Consolidated statements of comprehensive income or loss*6Consolidated statements of stockholders' equity*7Consolidated statements of cash flows*9Notes to consolidated financial statements*13F-1REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM To the stockholders and the Board of Directors of Avantor, Inc. Opinion on the Financial Statements We have audited the accompanying consolidated balance sheets of Avantor, Inc. and subsidiaries (the "Company") as of December 31, 2024 and 2023, the related consolidated statements of operations, comprehensive income or loss, stockholders' equity, and cash flows, for each of the three years in the period ended December 31, 2024, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2024 and 2023, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2024, in conformity with accounting principles generally accepted in the United States of America. We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2024, based on criteria established in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated February 7, 2025, expressed an unqualified opinion on the Company's internal control over financial reporting. Basis for Opinion These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB. We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion. Critical Audit Matter The critical audit matter communicated below is a matter arising from the current-period audit of the financial statements that was communicated or required to be communicated to the audit committee and that (1) relates to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates. F-2Goodwill Impairment - Refer to Notes 2, 6 and 11 to the financial statements. Critical Audit Matter Goodwill is tested for impairment at the reporting unit level on October 1 of each year or more frequently whenever an event or change in circumstance occurs that would require reassessment of the recoverability of the asset. Quantitative impairment testing requires the Company to estimate the fair value of each of its six reporting units. The Company estimates the fair value of each reporting unit using a weighted average of two valuation methods based on a discounted cash flows method and a guideline public company method. These valuation methods require management to make various assumptions, which include, but are not limited to, future profitability, cash flows, discount rates, weighting of valuation methods, and the selection of comparable publicly traded companies (peer groups). If the Company determines the carrying value of a reporting unit exceeds its fair value, an impairment charge is recorded for the excess. No impairment charges were recorded as each reporting unit had a fair value in excess of its carrying value. The principal considerations for our determination that performing audit procedures relating to the goodwill impairment assessments of the Buy Sell Lab and Proprietary Lab reporting units is a critical audit matter are (i) the significant judgment by management when developing the fair value estimate of these reporting units; (ii) a high degree of auditor judgment in evaluating the reasonableness of management's assumptions under the discounted cash flows method, including the net sales growth and discount rate assumptions, and, under the guideline public company method, the selection of appropriate peer groups and market multiples; and (iii) an increased extent of effort, including the need to involve our fair value specialists. How the Critical Audit Matter Was

maturity of the modified debt, depending on the type of cost and whether the modification was substantial or insubstantial. Borrowings and repayments under lines of credit are short-term in nature and presented on the statement of cash flows on a net basis. EquityStockholders' equity or deficit comprises nonredeemable ownership interests in MCPS and common stock. Our accounting policies for these instruments are as follows: MCPS is classified as permanent equity and initially recorded at fair value, net of issuance costs. Accrued but unpaid MCPS dividends are classified as other current liabilities with a corresponding reduction to common stock including paid-in capital. Common stock is presented at par value plus additional paid-in amounts, net of issuance costs. Distributions are accounted for as reductions to common stock including paid-in capital and are classified as financing activities on the statement of cash flows. Upon issuance, paid-in capital is allocated among host stock instruments on a relative fair value basis. Costs directly associated with new equity issuances are recorded as other current assets until the issuances are completed or abandoned. If the issuance is completed, the costs are reclassified to stockholders' equity and presented as a reduction of proceeds received. If the issuance is abandoned, the costs are reclassified to SG&A expenses. Costs associated with secondary equity offerings under a registration rights agreement are recorded as SG&A expenses. Disclosures about certain classes of stock are provided in the footnotes and not stated separately on the balance sheet or statement of stockholders' equity when those presentations are not deemed to be material. Revenue recognition We recognize revenue by applying a five-step process: (i) identify the contract with a customer, (ii) identify the performance obligation in the contract, (iii) determine the transaction price, (iv) allocate the transaction price to the performance obligations and (v) recognize revenue as the performance obligations F-17 are satisfied by transferring control of the performance obligation through delivery of a promised product or service to a customer. Control of a performance obligation may transfer to the customer either at a point in time or over time depending on an evaluation of the specific facts and circumstances for each contract, including the terms and conditions of the contract as agreed with the customer, as well as the nature of the products or services to be provided. The substantial majority of our net sales are recognized at a point in time based upon the delivery of products to customers pursuant to purchase orders. We recognize service revenues and sales of certain of our custom-manufactured products over time as control passes to the customer concurrent with our performance. We are able to fulfill most purchase orders rapidly, and service and custom-manufacturing cycles are short. As a result, we do not record material contract assets or liabilities, nor do we have material unfulfilled performance obligations. We have elected to use the practical expedient not to adjust the transaction price of a contract for the effects of a significant financing component if, at the inception of the contract, we expect that the period between when we transfer a promised good or service to a customer and when the customer pays for that good or service will be one year or less. Some customer contracts include variable consideration, such as rebates and prebates, some of which depend upon our customers meeting specified performance criteria, such as purchasing level over a period of time. We use judgment to estimate the value of these pricing arrangements at each reporting date and record contract assets or liabilities to the extent that estimated values are recognized at a different time than the revenue for the related products. When estimating variable consideration, we also apply judgment when considering the probability of whether a reversal of revenue could occur and only recognize revenue subject to this constraint. The only significant costs we incur to obtain contracts are related to sales commissions. These commissions are primarily based on purchase order amounts, not recoverable and not applicable to periods greater than one year. We elected to apply the practical expedient to expense these costs as incurred as if the amortization period of the asset that would have otherwise been recognized is one year or less. Performance obligations following the delivery of products, such as rights of return and warranties, are not material. No other types of revenue arrangements were material to our consolidated financial statements. Classification of expenses â€" cost of sales Cost of sales includes the cost of the product, depreciation of production assets, supplier rebates, shipping and receiving charges and inventory adjustments. For manufactured products, the cost of the product includes direct and indirect manufacturing costs, plant administrative expenses and the cost of raw materials consumed in the manufacturing process. Classification of expenses â€" selling, general and administrative Selling, general and administrative expenses include personnel and facility costs, amortization of intangible assets, depreciation of non-production assets, research and development costs, advertising expense, promotional charges and other charges related to our global operations. Research and development expenses were not material for the periods presented. F-18 Employee benefit plans Some of our employees participate in defined benefit plans that we sponsor. We present these plans as follows due to their differing geographies, characteristics and actuarial assumptions: U.S. plans â€" The two U.S. plans are closed to participants who joined the Company after 2018, and annual accruals of future pension benefits for participating employees are not material to our financial statements. One of our two U.S. plans is in the process of being terminated as discussed in note 17. Non-U.S. plans â€" Eight plans for our employees around the world that we acquired from VWR in 2017, most of which continue to accrue future pension benefits. Medical plan â€" A post-retirement medical plan for certain employees in the United States. The medical plan is closed to new employees, and annual accruals of future pension benefits for participating employees are not material to our financial statements. We sponsor a number of other defined benefit plans around the world that are not material individually or in the aggregate and therefore are not included in our disclosures. Defined contribution and other employee benefit plans are also not material. The cost of our defined benefit plans is incurred systematically over expected employee service periods. We use actuarial methods and assumptions to determine expense each period and the value of projected benefit obligations. Actuarial changes in the projected value of defined benefit obligations are deferred to AOCI and recognized in earnings systematically over future periods. The portion of cost attributable to continuing employee service is included in SG&A expenses. The rest of the cost is included in other income or expense, net. Stock-based compensation expense Some of our management and directors are compensated with stock-based awards. Stock-based compensation expense is included in SG&A expenses on the statement of operations. Stock options and RSUs We measure the expense of stock options and RSUs based on their grant-date fair values. These awards typically vest with continuing service, so expense is recognized on a straight-line basis from the date of grant through the end of the requisite service period. When awards are contingent upon the achievement of a performance condition, we record expense over the life of the awards in accordance with the probability of achievement. We measure the expense of awards with a market condition based on the grant-date fair value, which includes the probability of achieving the market condition. We recognize forfeitures of unvested awards as they occur by reversing any expense previously recorded in the period of forfeiture. We issue new shares of common stock upon exercise or vesting of awards. The grant-date fair value of stock options is measured using the Black-Scholes pricing model using assumptions based on the terms of each stock option agreement, the expected behavior of grant recipients and peer company data. We have limited historical data about our own awards upon which to base our assumptions. Expected volatility is calculated based on the observed equity volatility for a peer group over a period of time equal to the expected life of the stock options. The risk-free interest rate is based on U.S. Treasury observed market rates continuously compounded over the duration of the expected life. The F-19 expected life of stock options is estimated as the midpoint of the weighted average vesting period and the contractual term. The grant-date fair value for RSUs in which the vesting condition is based only on continuing service is measured as the quoted closing price of our common stock on the grant date. For awards with market conditions, we measure the grant-date fair value using a Monte Carlo model. The grant-date fair value of awards with performance conditions is the quoted closing price of our common stock on the grant date, adjusted for the probability of achievement. Award modifications When stock-based compensation arrangements are modified, we treat the modification as an exchange of the original award for a new award and immediately recognize expense for the incremental value of the new award. The incremental value is measured as the excess of the fair value of new awards over the fair value of the original awards, each based on circumstances and assumptions as of the modification date. Fair value is measured using the same methods previously described. We have not had any such modifications for the periods presented in these financial statements. Income taxes Our worldwide income is subject to the income tax regulations of many governments. Income tax expense is calculated using an estimated global rate with recognition of deferred tax assets and liabilities for expected temporary differences between taxable and reported income. Deferred tax assets and liabilities are measured using the enacted tax rates expected to apply to taxable income when those temporary differences are expected to reverse. We record a valuation allowance to reduce deferred tax assets to the amount that is more likely than not to be realized. Income tax regulations change from time to time. The effect of a change in tax law on deferred tax assets and liabilities is recognized as a cumulative adjustment to income tax expense or benefit in the period of enactment. The effect of a change in tax law on the income tax expense or benefit itself is recognized prospectively for the applicable tax years. Income tax regulations can be complex, requiring us to interpret tax law and take positions. Upon audit, tax authorities may challenge our positions. We regularly assess the outcome of potential examinations and only recognize positions that are more likely than not to be sustained. Recognized income tax positions are measured at the largest amount that is more likely than not of being realized. Changes in recognition or measurement are reflected in the period in which a change in judgment occurs, as a result of information that arises or when a tax position is effectively settled. We recognize accrued interest and penalties related to unrecognized tax benefits as a component of interest expense in our consolidated financial statements. F-20 Fair value measurements Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at a measurement date. We classify fair value measurements based on the lowest of the following levels that is significant to the measurement: Level 1 â€" Quoted prices in active markets for identical assets or liabilities; Level 2 â€" Inputs that are observable for the asset or liability, either directly or indirectly through market corroborations, for substantially the full term of the asset or liability; Level 3 â€" Inputs that are unobservable for the asset or liability based on our evaluation of the assumptions market participants would use in pricing the asset or liability. We exercise considerable judgment when estimating fair value, particularly when evaluating what assumptions market participants would likely make. The use of different assumptions or estimation methodologies could have a material effect on the estimated fair values. Foreign currency translation Our operations span the globe, so we are impacted by changes in foreign currency exchange rates. We determine the functional currency of our subsidiaries based upon the primary currency used to generate and expend cash, which is usually the currency of the country in which the subsidiary is located. For subsidiaries with functional currencies other than the U.S. dollar, assets and liabilities are translated into U.S. dollars using period-end exchange rates, and revenues, expenses, income and losses of our subsidiaries are translated into U.S. dollars using monthly average exchange rates. The resulting foreign currency translation gains or losses are deferred as AOCI and reclassified to earnings only upon sale or liquidation of those businesses. Gains and losses related to the remeasurement of debt and intercompany financing into functional currencies are reported in earnings as other income or expense, net. When foreign currency-denominated debt is designated as a hedge of our net investments in non-U.S. denominated subsidiaries, gains and losses are reported in AOCI as part of the cumulative translation adjustment. Gains and losses associated with the remeasurement of operating assets and liabilities into functional currencies are reported within the applicable component of operating income. Leases We primarily enter into real estate leases for manufacturing, warehousing and commercial office space to support our global operations. We also enter into vehicle and equipment leases to support those operations. We determine if an arrangement is a lease at inception. Short-term leases, defined as having an initial term of twelve months or less, are expensed as incurred and not recorded on the balance sheet. We record the value of all other leased property and the related obligations as assets and liabilities on the balance sheet. Information about the amount and classification of lease assets and liabilities is included in note 23. At inception, lease assets and liabilities are measured at the present value of future lease payments over the lease term. As most of our leases do not provide an implicit rate, we exercise judgment in selecting the incremental borrowing rate based on the information available at inception to determine the present F-21 value of future payments. Operating lease assets are further adjusted for lease incentives and initial direct costs. Our lease terms may include options to extend or terminate the lease. We exercise judgment to calculate the term of those leases when extension or termination options are present and include such options in the calculation of the lease term when it is reasonably certain that we will exercise those options. Operating lease expense is recognized on a straight-line basis over the lease term, except for variable rent which is expensed as incurred. Short-term lease and variable rent expense was immaterial to the financial statements and has been included within operating lease expense. Finance lease expense includes depreciation, which is recognized on a straight-line basis over the expected life of the leased asset and interest expense. Some of our lease agreements include both lease and non-lease components. We account for those components separately for real estate leases and as a combined single lease component for all other types of leases. Business combinations We account for business acquisitions under the accounting standards for business combinations. The results of each acquisition are included in our consolidated results as of the acquisition date and the purchase price of an acquisition is allocated to tangible and intangible assets and assumed liabilities based on their estimated fair values. Any excess of the fair value consideration transferred over the estimated fair values of the identifiable net assets acquired is recognized as goodwill. Any purchase price that is considered contingent consideration is measured at its estimated fair value at the acquisition date. Contingent consideration is remeasured at the end of each reporting period, with changes in estimated fair value being recorded through SG&A expense within our statement of operations. Derivatives and hedging We use derivative instruments primarily to manage currency exchange and interest rate risks and recognize them as either assets or liabilities which are measured at fair value. Cash flow hedges â€" We use interest rate derivatives to add stability to interest expense and to manage our exposure to interest rate movements. For derivative instruments that are designated and qualify as a cash flow hedge, the gain or loss on the derivative is recorded in AOCI and reclassified into earnings in the same period(s) during which the hedged transaction affects earnings and is presented in the same income statement line item as the earnings effect of the hedged item. Net Investment hedges â€" We use foreign currency-denominated debt and cross-currency swaps to hedge our net investments in foreign operations against adverse movements in exchange rates. For derivatives designated as net investment hedges, the gain or loss on the derivative is reported in AOCI as part of the cumulative translation adjustment. Amounts are reclassified out of AOCI into earnings in the event the hedged net investment is either sold or substantially liquidated. 3.A. A New accounting standards Segment Reporting F-22 In November 2023, the FASB issued ASU 2023-07, Improvements to Reportable Segment Disclosures, which amends the existing segment reporting guidance (ASC Topic 280) to improve reportable segment disclosure requirements, primarily through enhanced disclosures about significant segment expenses that are regularly provided to the CODM and included within each reported measure of segment profit or loss, an amount for other segment items by reportable segment and a description of its composition, the title and position of the CODM and an explanation of how the CODM uses the reported measure(s) of segment profit or loss in assessing segment performance and deciding how to allocate resources. The amendments in this update were effective for fiscal years beginning after December 15, 2023, and interim periods within fiscal years beginning after December 15, 2024. We adopted this standard on a retrospective basis within our annual report for the year ended December 31, 2024, which resulted in additional disclosures in our segment financial information footnote, primarily related to significant segment expenses that are regularly provided to the CODM and included within our reported measure of segment profit or loss. Refer to note 7 for these additional disclosures. Income Taxes In December 2023, the FASB issued ASU 2023-09, Improvements to Income Tax Disclosures, which amends the existing income taxes guidance (ASC Topic 740) to require additional disclosures surrounding annual rate reconciliation, income taxes paid and other income tax related disclosures. The amendments in this update are effective for annual periods beginning after December 15, 2024. Early adoption is permitted. We are currently evaluating the impact of our pending adoption of this standard on our financial statement disclosures. Disaggregation of Income Statement Expenses (DISE) In November 2024, the FASB issued ASU 2024-03, Disaggregation of Income Statement Expenses (DISE), requiring additional disclosure of the nature of expenses included in the income statement. The new standard requires disclosures about specific types of expenses included in the expense captions presented on the face of the income statement as well as disclosures about selling expenses. The amendments in this update are effective for annual periods beginning after December 15, 2026 and interim periods within fiscal years beginning after December 15, 2027. Early adoption is permitted. We are currently evaluating the impact of our pending adoption of this standard on our financial statement disclosures. Other There were no other new accounting standards that we expect to have a material impact on our financial position or results of operations upon adoption. Adoption of rules to enhance and standardize climate-related disclosures for Investors On March 6, 2024, the SEC adopted final rules to require registrants to disclose certain climate-related information in registration statements and annual reports. On April 4, 2024, the SEC issued an order staying the final rules pending completion of judicial review of the petitions challenging the final rules. The order does not amend the compliance dates contemplated by the final rules, which are applicable to the Company for fiscal years beginning with the Company's annual report on Form 10-K for the fiscal year ending December 31, 2025. We are currently evaluating the impact of our pending adoption of these requirements on our financial statement disclosures. F-234. A. A. A. Divestitures We completed the sale of our Clinical Services business, a component of the Company's Laboratory Solutions reportable segment, on October 17, 2024, pursuant to a definitive agreement that was signed on August 16, 2024. We received gross proceeds of approximately \$595.0 million, which are subject to customary post-closing adjustments. In connection with the sale, we recorded a gain of \$446.6 million in the consolidated statements of operations. The Clinical Services business has not been classified as a discontinued operation as it did not represent a strategic shift that will have a major effect on our operations and financial results. 5. A. A. A. Earnings per share The following table presents the reconciliation of basic and diluted earnings per share for the years ended December 31, 2024, 2023 and 2022: (in millions, except per share data) Year A ended December 31, 2024 Year A ended December 31, 2023 Year A ended December 31, 2022

December 31, 2022 Earnings (numerator) Weighted average shares outstanding (denominator) Earnings per share Earnings (numerator) Weighted average shares outstanding (denominator) Earnings per share Basic \$711.56 679.64 \$1.05A \$321.1A 675.64 \$0.48A \$662.3A 650.94 \$1.02A Dilutive effect of stock-based awards â€“ 2.3A â€“ 2.8A â€“ 5.6A Dilutive impact of MOPCs A â€“ A â€“ A 24.2A 22.9A Diluted \$711.56 681.94 \$1.04A \$321.1A 678.4A \$0.47A \$686.5A 679.44 \$1.01A 6.6A A A Risks and uncertainties Remeasurement of foreign-denominated debt and intercompany borrowings Our operations span the globe. To fund those operations, we have entered into significant Euro-denominated indebtedness (see note 14), and we have also established intercompany borrowings among our subsidiaries that are denominated in various currencies. Changes in foreign currency exchange rates, particularly the Euro, have required us to record gains and losses, some of which have been significant, to remeasure the debt and the intercompany borrowings into functional currencies of the subsidiaries holding them. Our intercompany capitalization structure is intended to mitigate substantially all of our net Euro financing exposure in future periods. We expect to record gains and losses related to intercompany borrowings denominated in other currencies. Historically, the remeasurement of borrowings denominated in currencies other than the Euro has not been material. Impairment testing On January 1, 2024, in connection with the Companyâ€™s reporting segment structure change, we performed quantitative impairment testing of goodwill for each of our reporting units. We did not record any impairment charges as each reporting unit had a fair value that was in excess of its carrying value. F-24 On October 1, 2024, we performed quantitative annual impairment testing of goodwill for each of our reporting units. We did not record any impairment charges. Each reporting unit had a fair value that was in excess of its carrying value. Unfavorable changes to forecasted results and other assumptions used to determine fair values of reporting units could present a risk of impairment in future periods. We have not recorded any material impairments during the periods presented. Collective bargaining arrangements As of December 31, 2024, approximately 5% of our employees in North America were represented by unions, and a majority of our employees in Europe are represented by workersâ€™ councils or unions. 7. A A Segment financial information Effective January 1, 2024, we changed our operating model and reporting segment structure into two reportable business segments: Laboratory Solutions and Bioscience Production. Corporate costs are managed on a standalone basis, certain of which are allocated to our reportable segments. In connection with this change, our CODM changed the measure used to evaluate segment profitability from Adjusted EBITDA to Adjusted Operating Income. The CODM uses Adjusted Operating Income for each segment predominantly in the annual budget and forecasting process. We have recasted prior-period segment disclosures given the change in our reportable segments. F-25 The following table presents information by reportable segment: A A A (in millions) Net sales Year A ended December 31, Adjusted Operating Income Year A ended December 31, 2024 2023 2022 2021 Laboratory Solutions \$4,610.1A \$4,738.3A \$5,002.4A \$598.0A \$668.3A \$764.7A Bioscience Production \$2,173.5A 2,228.9A 2,510.0A 558.2A 601.9A 778.9A Corporate A â€“ A â€“ A (66.4) (58.4) (66.3) Total \$6,783.6A \$6,967.2A \$7,512.4A \$1,089.8A \$1,211.8A \$1,477.3A (in millions) Year A ended December 31, 2024 Laboratory Solutions Bioscience Production Corporate Total Net sales \$4,610.1A \$2,173.5A â€“ A \$6,783.6A Adjusted cost of sales \$13,288.4A 1,203.8A â€“ A 4,492.2A Adjusted operating expenses \$2723.7A 411.5A 66.4A 1,201.6A Adjusted Operating Income \$598.0A \$558.2A (\$66.4) \$1,089.8A (in millions) Year A ended December 31, 2023 Laboratory Solutions Bioscience Production Corporate Total Net sales \$4,738.3A \$2,228.9A â€“ A \$6,967.2A Adjusted cost of sales \$13,380.3A 1,223.1A â€“ A 4,603.4A Adjusted operating expenses \$2689.7A 403.9A 58.4A 1,152.0A Adjusted Operating Income \$668.3A \$601.9A (\$58.4) \$1,211.8A (in millions) Year A ended December 31, 2022 Laboratory Solutions Bioscience Production Corporate Total Net sales \$5,002.4A \$2,510.0A â€“ A \$7,512.4A Adjusted cost of sales \$13,533.0A 1,361.6A â€“ A 4,894.6A Adjusted operating expenses \$2704.7A 369.5A 66.3A 1,140.5A Adjusted Operating Income \$764.7A \$778.9A (\$66.3) \$1,477.3A â€“ A â€“ A â€“ A â€“ A â€“ A Adjusted cost of sales exclude \$12.1 million and \$15.0 million of non-GAAP adjustments primarily related to restructuring and severance and purchase accounting as described in more detail within the non-GAAP reconciliation presented below, for the years ended December 31, 2024 and December 31, 2022, respectively. There were no such non-GAAP adjustments to cost of sales for the year ended December 31, 2023. 2. Adjusted operating expenses exclude \$(7.1) million, \$515.4 million and \$332.1 million of non-GAAP adjustments primarily related to gain on sale of business, impairment charges, restructuring and severance charges and transformation expenses as described in more detail within the non-GAAP reconciliation F-26 presented below, for the years ended December 31, 2024, December 31, 2023 and December 31, 2022, respectively. (in millions) Depreciation and amortization Year A ended December 31, 2024 2023 2022 Laboratory Solutions \$212.8A \$215.0A \$215.9A Bioscience Production \$192.7A 187.3A 189.6A Total \$405.5A \$402.3A \$405.5A Information about our segmentâ€™s assets and capital expenditures is not disclosed because this information is not provided to our CODM. The amounts above exclude inter-segment activity because it is not material. All of the net sales for each segment are from external customers. The following table presents the reconciliation of Adjusted Operating Income, our segment profitability measure, to Income before income taxes, the nearest measurement under GAAP: (in millions) Year A ended December 31, 2024 2023 2022 Adjusted Operating Income \$1,089.8A \$1,211.8A \$1,477.3A Amortization (299.8) (307.7) (318.3) Integration-related expenses â€“ A (7.6) (19.2) Purchase accounting adjustments â€“ A â€“ A (9.4) Restructuring and severance charges (382.8) (265.3) (5) Transformation expenses (458.9) (5.4) â€“ A Reserve for certain legal matters, net (9.2) (7.1) â€“ A Other (6.0) (9.0) (0.3) 3.3A Impairment charges â€“ A (16.0) â€“ A Gain on sale of business \$8446.6A â€“ A â€“ A Interest expense, net (218.8) (284.8) (265.8) Loss on extinguishment of debt (10.9) (6.9) (12.5) Other (expense) income, net (1.2) (5.8) (0.8) Income before income taxes \$853.9A \$410.5A \$851.1A â€“ A â€“ A â€“ A â€“ A Represents direct costs incurred with third parties and the accrual of a long-term retention incentive to integrate acquired companies. These expenses represent incremental costs and are unrelated to normal operations of our business. Integration expenses are incurred over a pre-defined integration period specific to each acquisition. 2. Represents the non-cash reduction of contingent consideration related to the Ritter acquisition and the amortization of the purchase accounting adjustment to record Masterflex inventory at fair value. 3. Reflects the incremental expenses incurred in the period related to restructuring initiatives to increase profitability and productivity. Costs included in this caption are specific to employee severance, site-related exit costs, and contract termination costs. The expenses recognized in 2024 represent costs incurred to achieve the Companyâ€™s publicly-announced cost transformation initiative. F-274. Represents incremental expenses directly associated with the Companyâ€™s publicly-announced cost transformation initiative, primarily related to the cost of external advisors. 5. Represents charges and legal costs, net of recoveries, in connection with certain litigation and other contingencies that are unrelated to our core operations and not reflective of on-going business and operating results. 6. Represents other stock-based compensation expense (benefit) as described in notes 10 and 11.8. As described in note 4. The following table presents net sales by product category: (in millions) Year A ended December 31, 2024 2023 2022 Proprietary \$3,615.1A \$3,720.2A \$4,024.7A Third-party 3,168.5A 3,247.4A 3,487.7A Total \$6,783.6A \$6,967.2A \$7,512.4A The following table presents information by geographic area: (in millions) Net sales Year A ended December 31, Property, plant and equipment, net Year A ended December 31, 2024 2023 2022 United States \$3,549.6A \$3,705.2A \$4,278.1A \$445.8A \$462.1A All other countries 3,234.0A 3,262.0A 3,234.3A 262.3A 275.4A Total \$6,783.6A \$6,967.2A \$7,512.4A \$708.1A \$737.5A 8. A A A Supplemental disclosures of cash flow information The following tables present supplemental disclosures of cash balances: (in millions) December 31, 2024 2023 2022 Cash and cash equivalents \$261.9A \$262.9A Restricted cash classified as other assets \$2.8A 24.8A Total \$264.7A \$287.7A (in millions) Year A ended December 31, 2024 2023 2022 Cash flows from operating activities: Cash paid for income taxes, net \$247.8A \$224.4A \$256.9A Cash paid for interest, net, excluding financing leases \$211.0A 267.0A 242.2A Cash paid for interest on finance leases \$4.2A 5.1A 5.1A Cash paid under operating leases \$4.4A 43.8A 42.9A Cash flows from financing activities: Cash paid under finance leases \$5.7A 5.1A 4.6A F-289. A A A Inventory The following table presents components of inventory: (dollars in millions) December 31, 2024 2023 2022 Merchandise inventory \$416.0\$503.5 Finished goods 101.291.0 Raw materials 149.3167.2 Work in process 65.066.4 Total \$731.5\$828.1 Inventory under the LIFO method: Percentage of total inventory 22% 23% Excess of current cost over carrying values 39.7\$42.210. A A A Property, plant and equipment The following table presents the composition of property, plant and equipment: (in millions) December 31, 2024 2023 2022 Buildings and related improvements \$414.3A \$426.8A Machinery, equipment and other \$544.3A 548.3A Software \$238.9A 187.3A Land \$53.9A 55.6A Assets not yet placed into service \$86.2A 136.4A Property, plant and equipment, gross \$1,337.6A 1,354.4A Accumulated depreciation and impairment charges \$(629.5) (616.9) Property, plant and equipment, net \$708.1A \$737.5A Depreciation expense was \$105.7 million in 2024, \$94.6 million in 2023 and \$87.2 million in 2022. In the second quarter of 2023, persistently high customer inventory in the end markets served by Ritter and an overall slowdown in research activity caused Ritterâ€™s revenue to decline compared to prior expectations. Due to these circumstances, we performed an impairment test of the Ritter asset group, which resulted in a fair value that was lower than its carrying value. As a result, we recorded an impairment charge of \$54.4 million on Ritterâ€™s property, plant & equipment in the second quarter of 2023. This charge impacted our Laboratory Solutions reportable segment. Our impairment test was performed as of June 30, 2023 and utilized our then latest estimates of Ritterâ€™s projected cash flows, including revenues, gross margin, SG&A expenses, capital expenditures to maintain the acquired assets, and investments in debt free net working capital, as well as current market assumptions for the discount rate. F-2911. A A A Goodwill and other intangible assets Goodwill As described in note 2, we reorganized our segment reporting structure effective January 1, 2024. The segment reporting reorganization also resulted in a change to our reporting units for the purpose of goodwill impairment testing. Our new reporting units are Buy Sell Lab, Proprietary Lab, Services, Manufactured Products, Buy Sell Production, and NuSil. As a result of the reorganization, our goodwill was reassigned to the new reporting units making up our Laboratory Solutions and Bioscience Production reporting segments. We have reassigned goodwill as of January 1, 2024 to align to our new segment structure by using a relative fair value approach as required under GAAP. We tested goodwill for impairment immediately before and after the reorganization of our reporting structure; no impairment was identified. The following table presents goodwill by our reportable segments, on the effective date of the change: Laboratory Solutions Bioscience Production Total Goodwill, gross \$3,842.0A \$1,913.5A \$5,755.5A Accumulated impairment losses \$(18.4) (20.4) (38.8) Goodwill, net \$3,823.6A \$1,893.1A \$5,716.7A The following tables present changes in goodwill by reportable segment: (in millions) December 31, 2024 2023 2022 Laboratory Solutions Bioscience Production Total Beginning balance, net \$3,823.6A \$1,893.1A \$5,716.7A Currency translation (113.4) (5.1) (118.5) Divestitures \$(59.0) â€“ A (59.0) Ending balance, net \$3,651.1A 1,888.0A 5,539.2A Accumulated impairment losses 18.4A 20.4A 38.8A Ending balance, gross \$3,669.6A \$1,908.4A \$5,578.0A (in millions) December 31, 2023 Laboratory Solutions Bioscience Production Total Beginning balance, net \$3,760.7A \$1,891.9A \$5,652.6A Currency translation 6.9A 1.2A 64.1A Ending balance, net \$3,823.6A 1,893.1A 5,716.7A Accumulated impairment losses 18.4A 20.4A 38.8A Ending balance, gross \$3,842.0A \$1,913.5A \$5,755.5A F-30 The following table presents the components of other intangible assets: (in millions) December 31, 2024 2023 2022 Customer relationships \$4,697.5A \$1,840.4A \$2,857.1A \$4,883.2A \$1,670.3A \$3,212.9A Trade names \$351.6A 240.4A 111.2A 359.7A 228.3A 131.4A Other \$626.8A 327.2A 299.6A 635.5A 296.8A 338.7A Total finite-lived \$5,675.9A \$2,408.0A 3,267.9A \$5,878.4A \$2,195.4A 3,683.0A Indefinite-lived \$9.2A 9.2A Total \$3,360.2A \$3,775.3A â€“ A â€“ A â€“ A â€“ A As of December 31, 2024 and December 31, 2023, accumulated impairment losses on Customer relationships were \$65.9 million and on Other were \$40.5 million totaling \$106.4 million. Amortization expense was \$299.8 million in 2024, \$307.7 million in 2023 and \$318.3 million in 2022. We recorded an impairment charge of \$106.4 million on Ritterâ€™s finite-lived intangible assets in the second quarter of 2023 in connection with the impairment of Ritterâ€™s property, plant & equipment, as previously discussed in note 10. This charge impacted our Laboratory Solutions reportable segment. The following table presents estimated future amortization: (in millions) December 31, 2024 2025 2026 2027 2028 2029 2027.2A Thereafter 1,844.8A Total \$3,267.9A F-3112. A A A Restructuring The following table presents restructuring and severance expenses by plan: (in millions) Year A ended December 31, 2024 2023 2022 Restructuring program \$82.8A â€“ A â€“ A â€“ A Other 6.9A 26.5A 3.5A Total \$82.8A \$26.5A \$3.5A 2024 restructuring program The 2024 restructuring program is a part of the Companyâ€™s multi-year cost transformation initiative designed to right-size the Companyâ€™s cost base and optimize its footprint and organizational structure with a focus on driving significant cost improvement and productivity. We do not expect to incur any material charges in the future under the 2024 restructuring program. The following table presents information about expenses under the 2024 restructuring program for the periods covered under this report in which the plan was active: (in millions) Year A ended December 31, 2023 2024 2025 2026 2027 2028 2029 2027.2A Total 2024 expected charges \$204.8A Employee severance and related \$64.3A \$64.3A â€“ A \$64.3A Facility closure 1.6A 1.6A â€“ A 1.6A Other 16.9A 16.9A â€“ A 16.9A Total \$82.8A \$82.8A \$82.8A \$82.8A \$82.8A \$82.8A \$82.8A \$82.8A Bioscience Production \$41.3A \$41.3A â€“ A \$41.3A A A A Bioscience Production 40.6A 40.6A â€“ A 40.6A Corporate 0.9A 0.9A â€“ A 0.9A Total \$82.8A \$82.8A \$82.8A \$82.8A \$82.8A \$82.8A \$82.8A \$82.8A Other charges in the table above primarily relate to the write-downs of the carrying value of assets that we have or plan to dispose of under the program. The following table presents changes to accrued employee severance and related expenses under the 2024 restructuring program, which are primarily classified as employee-related current liabilities: (in millions) Year A ended December 31, 2024 2023 Beginning balance â€“ A Expenses 64.3A Cash payments (44.0) Currency translation 1.0A Ending balance \$21.3A F-3213. A A A Commitments and contingencies Our business involves commitments and contingencies related to compliance with environmental laws and regulations, the manufacture and sale of products and litigation. The ultimate resolution of contingencies is subject to significant uncertainty, and it is reasonably possible that contingencies could be decided unfavorably against us. Environmental laws and regulations Our environmental liabilities are subject to changing governmental policy and regulations, discovery of unknown conditions, judicial proceedings, method and extent of remediation, existence of other potentially responsible parties and future changes in technology. We believe that known and unknown environmental matters, if not resolved favorably, could have a material effect on our financial position, liquidity and profitability. Matters to be disclosed are as follows: Mallinckrodt indemnification In 2010, New Mountain Capital acquired us from Covidien plc in accordance with a stock purchase agreement dated May 25, 2010. At that time, we were organized as Mallinckrodt Baker, Inc. or MBI. Pursuant to the terms of that agreement, we are entitled to various levels of indemnification with respect to environmental liabilities involving the former MBI operations. In 2013, in connection with the Covidien plc divestiture of Mallinckrodt Group S.A.R.L and Mallinckrodt LLC, together â€œMallinckrodt,â€ and by a second amendment to the stock purchase agreement dated June 6, 2013, but effective upon the consummation of the divestiture, Covidien plc assigned its obligations as described herein to Mallinckrodt, and Mallinckrodt assumed those obligations from Covidien plc subject to a continuing guarantee by Covidien International Finance, S.A. (â€œCIFSAâ€). As a result of the stock purchase agreement and assignment, Mallinckrodt is contractually obligated to indemnify and defend us for all off-site environmental liabilities (for example, Superfund or CERCLA liabilities) arising from the pre-closing disposal of chemicals or wastes by former MBI operations. In connection with environmental liabilities arising from pre-closing noncompliance with environmental laws, Mallinckrodt became contractually obligated to reimburse us for a percentage of the total liability, with such reimbursements made through disbursements from a \$30.0 million environmental escrow established at the time of the closing. Specifically, Mallinckrodt became responsible for reimbursement of 80% of the total costs up to \$40.0 million of such environmental liabilities. Mallinckrodt became responsible for reimbursement of 100% of such liabilities up to the next \$30.0 million in the aggregate. Currently, reimbursements are 80% of the amounts spent by us, with reimbursements and settlements to date exceeding \$12.0 million. In addition, in connection with operation and maintenance activities required pursuant to administrative consent orders and subsequently issued remedial action permits involving our Phillipsburg, New Jersey, facility, amounts in excess of a small annual threshold are also subject to reimbursement, currently at the 80% level. In 2023, Mallinckrodt initiated bankruptcy proceedings under Chapter 11 of the Bankruptcy Code and notified us that it was seeking to reject the 2010 stock purchase agreement and its obligations thereunder. As noted above, Mallinckrodtâ€™s obligations under the 2010 stock purchase agreement were guaranteed by CIFSA, who has agreed to honor its indemnity obligations going forward. F-33 Other noteworthy matters The New Jersey Department of Environmental Protection has ordered us to remediate groundwater conditions near our plant in Phillipsburg, New Jersey. This matter is covered by the indemnification arrangement previously described. At December 31, 2024, our accrued obligation under this order is \$2.3 million, which is calculated based on expected cash payments discounted at rates ranging from 4.1% to 4.9% between 2025 and 2045. The undiscounted amount of that obligation is \$3.6 million. In 2016, we assessed the environmental condition of our chemical manufacturing site in Gliwice, Poland. Our assessment revealed specific types of soil and groundwater contamination throughout the site. We are also monitoring the condition of a closed landfill on that site. These matters are not covered by our indemnification arrangement because they relate to an operation we subsequently acquired. At December 31, 2024, our balance sheet includes a liability of \$1.1 million for remediation and monitoring costs. That liability is estimated primarily on discounted expected remediation payments and is not materially different from its undiscounted amount. Manufacture and sale of products Our business involves risk of product liability, patent infringement

20234.0Ä \$26.35Ä Granted2.3Ä 25.54Ä Vested(1.1)25.42Ä Forfeited(0.6)27.90Ä Balance on December 31, 20244.6Ä \$26.63Ä During 2024, we granted RSUs that will vest annually over three years, subject to the recipient continuously providing service to us through each such date. Certain of those awards contain performance and market conditions that impact the number of shares that will ultimately vest. We recorded expense on such awards of \$9.3 million, \$3.1 million and \$7.3 million, for the years ended December 31, 2024, 2023 and 2022, respectively. The fair value of RSUs that vested in 2024, 2023 and 2022 was \$31.0 million, \$29.5 million and \$20.9 million, respectively. 19.Ä Ä Ä Other income or expense, netThe following table presents the components of other income or expense, net:(in millions)YearÄ ended DecemberÄ 31, 202420232022Net foreign currency gain (loss) from financing activities\$4.7Ä \$3.1Ä \$(7.0)(Expense) income related to defined benefit plans(6.6)2.6Ä 6.0Ä Other(expense) income, net(1.2)Ä \$5.8Ä \$(0.8) Most of the net foreign currency remeasurement gain (loss) from financing activities was caused by the volatility of the U.S. dollar on unhedged intercompany loan positions as disclosed in note 6. Other income or expense related to our defined benefit plans primarily relates to pension termination charges as described in note 17, and the expected returns on defined benefit plan assets.F-4420.Ä Ä Ä Income taxesThe following table presents detail about captions appearing on the statements of operations:(in millions)YearÄ ended DecemberÄ 31, 202420232022Income (loss) before income taxes:United States\$521.2Ä \$527.6Ä \$618.0Ä Foreign332.7Ä (117.1)233.1Ä Total\$853.9Ä \$410.5Ä \$851.1Ä Current income tax (expense) benefit:Federal\$(97.6)(\$110.7)(\$119.9)State(30.4)(35.5) (32.2)Foreign(61.3)(115.6)(81.6)Subtotal(189.3)(261.8)(233.7)Deferred income tax (expense) benefit:Federal18.5Ä 18.9Ä 18.0Ä State(0.4)0.9Ä 4.4Ä Foreign28.1Ä 152.6Ä 46.7Ä Subtotal46.9Ä 172.4Ä 69.1Ä Income tax expense\$(142.4)(\$89.4)(\$164.6)The following table reconciles the income tax provision calculated at the United States federal corporate rate to the amounts presented in the statements of operations:(in millions)YearÄ ended DecemberÄ 31, 202420232022Income before income taxes\$853.9Ä \$410.5Ä \$851.1United States federal corporate rate21Ä %21Ä %Income tax expense at federal corporate rate(179.3)(86.2)(17.8)State income taxes, net of federal benefit(24.4)(27.3)(23.3)Rate changes related to foreign jurisdictions(0.3)1.51.3Stock-based compensation(0.8)0.13.5Foreign taxes21.738.712.8Valuation allowance(21.4)(22.1)4.8Changes to uncertain tax positions27.0(9.1)1.1Foreign-derived intangible income13.917.112.1Executive Compensation Limitation(2.2)(6.1)ÄÄ Global Intangible Low-Taxed Income(8.0)ÄÄ Clinical Services sale34.6ÄÄ Other, net(1.4)21.1Income tax expense\$(142.4)(\$89.4)(\$164.6)F-45Deferred taxesThe following table presents the components of deferred tax assets and liabilities:(in millions)DecemberÄ 31, 20242023Deferred tax assets:Reserves and accrued expenses\$54.7Ä \$50.8Ä Pension, postretirement and environmental liabilities8.2Ä 3.0Ä Net operating loss and deferred deductions45.8Ä 451.3Ä Other3.1Ä 22.9Ä Deferred tax assets, gross\$524.7Ä 528.0Ä Less: valuation allowances(214.1)(206.1)Deferred tax assets, net310.6Ä 321.9Ä Deferred tax liabilities:Intangibles(656.1)(741.3)Property, plant and equipment(57.8)(40.9)Investment in partnerships(58.5)(51.2)OtherÄÄ (1.2)Deferred tax liabilities(772.4)(834.6)Net deferred tax liability\$(461.8)(\$512.7)Classification on balance sheets:Other assets\$95.5Ä \$100.1Ä Deferred income tax liabilities(557.3)(612.8)The increase (decrease) in the valuation allowance was \$8.0 million in 2024, \$26.4 million in 2023 and \$(7.9) million in 2022. At DecemberÄ 31, 2024, \$149.2 million of the valuation allowances presented above relate to foreign net operating loss carryforwards that are not expected to be realized. We evaluate the realization of deferred tax assets by considering such factors as the reversal of existing taxable temporary differences, expected profitability by tax jurisdiction and available carryforward periods. The extent and timing of any such reversals will influence the extent of tax benefits recognized in a particular year. Should applicable losses, credits and deductions ultimately be realized, the resulting reduction in the valuation allowance would generally be recognized as an income tax benefit.Uncertain tax positionsWe file federal income tax returns in the United States and other tax returns in various states and international jurisdictions. In the normal course of business, we are subject to examination by taxing authorities throughout the world. In these cases, we evaluate our tax position using the recognition threshold and the measurement analysis in accordance with the accounting guidance. A tax position that meets the more-likely-than-not recognition threshold is measured to determine the amount of benefit recognized in our financial statements. Tax years are subject to examination in the United States since 2021 at the federal level, since 2016 for certain states and in certain international jurisdictions since 2014.F-46The following table reflects changes to the reserve for uncertain tax positions, excluding accrued interest and penalties:(in millions)YearÄ ended DecemberÄ 31, 202420232022Beginning balance\$106.9Ä \$51.8Ä \$55.3Ä Additions:Tax positions related to the current year1.1Ä ÄÄ 1.2Ä Tax positions related to prior years1.6Ä 65.2Ä ÄÄ Ä Reductions:Settlements with taxing authorities(6.3)(0.1)Lapse of statutes of limitations(25.6)(4.5)(2.4)Currency translation(0.7)0.7Ä (2.2)Ending balance\$83.3Ä \$106.9Ä \$51.8Ä At DecemberÄ 31, 2024, DecemberÄ 31, 2023 and DecemberÄ 31, 2022, the total amount of unrecognized tax benefits that, if recognized, would reduce income tax expense and the effective tax rate by \$31.3 million, \$50.8 million and \$51.8 million, respectively. Accrued interest and penalties related to the reserve for uncertain tax positions were \$7.2 million at DecemberÄ 31, 2024, \$8.2 million at DecemberÄ 31, 2023 and \$6.7 million at DecemberÄ 31, 2022. We believe that it is reasonably possible that the reserve for uncertain tax positions could decrease by up to \$2.6 million over the next twelve months.The development of reserves for uncertain tax positions requires judgments about tax issues, potential outcomes and the timing of settlement discussions with tax authorities. If we were to prevail on all uncertain tax positions, we would recognize an income tax benefit. Deferred tax treatment of retained goodwillThe Company completed the sale of its Clinical Services business on October 17, 2024. Under ASC 350-20-40-3, the Company determined the amount of goodwill that was deconsolidated in the sale by allocating goodwill between the Clinical Services business and the Company. The goodwill that was retained from the Clinical Services business by the Company has been treated as non-deductible goodwill, which creates a permanent basis difference for tax purposes for which no deferred tax liability has been provided.Other mattersUndistributed earnings of foreign subsidiaries that are deemed to be permanently reinvested amount to \$2,655.4 million at DecemberÄ 31, 2024. In addition to the one-time transition tax imposed on all accumulated foreign undistributed earnings through December 31, 2017, undistributed earnings of foreign subsidiaries as of DecemberÄ 31, 2024 may still be subject to certain taxes upon repatriation, primarily where foreign withholding taxes apply. We assert indefinite reinvestment related to investments in foreign subsidiaries. It is not practicable to calculate the unrecognized deferred tax liability on undistributed foreign earnings due to the complexity of the hypothetical calculation.At DecemberÄ 31, 2024, we had federal net operating loss carryforwards of \$9.6 million that have indefinite expirations and state net operating loss carryforwards of \$61.6 million that expire at various F-47times through 2040. In addition, we had foreign net operating loss carryforwards of \$613.1 million, which predominantly have indefinite expirations. At DecemberÄ 31, 2024, we had a remaining transition tax payable imposed by the Tax Cuts and Jobs Act of 2017 of \$19.3 million, all of which is payable in 2025.21.Ä Ä Ä Derivative and hedging activities Hedging instruments:We engage in hedging activities to reduce our exposure to foreign currency exchange rates and interest rates. Our hedging activities are designed to manage specific risks according to our strategies, as summarized below, which may change from time to time. Our hedging activities consist of the following:ÄÄ Economic hedges ÄÄ We are exposed to changes in foreign currency exchange rates on certain of our euro-denominated term loans and notes that move inversely from our portfolio of euro-denominated intercompany loans. The currency effects for these non-derivative instruments are recorded through earnings in the period of change and substantially offset one another;ÄÄ Other hedging activities ÄÄ Certain of our subsidiaries hedge short-term foreign currency denominated business transactions, external debt and intercompany financing transactions using foreign currency forward contracts. These activities were not material to our consolidated financial statements.Cash flow hedges of interest rate risk Our objectives in using interest rate derivatives are to add stability to interest expense and to manage its exposure to interest rate movements. To accomplish this objective, the Company primarily uses interest rate swaps as part of its interest rate risk management strategy. Interest rate swaps designated as cash flow hedges involve the receipt of variable amounts from a counterparty in exchange for the Company making fixed-rate payments over the life of the agreements without exchange of the underlying notional amount.ÄÄ For derivatives designated and that qualify as cash flow hedges of interest rate risk, the gain or loss on the derivative is recorded in AOCI and subsequently reclassified into interest expense in the same period(s) during which the hedged transaction affects earnings. Amounts reported in AOCI related to derivatives will be reclassified to interest expense as interest payments are made on the Company's variable-rate debt. During the next twelve months, the Company estimates that an immaterial amount will be reclassified as a decrease to interest expense. In April of 2023, the Company executed a \$100.0Ä million interest rate swap to convert SOFR based floating rate interest to fixed rate interest. The transaction is intended to mitigate our exposure to fluctuations in interest rates and will terminate on October 27, 2025. In addition, in April of 2023, we amended our \$750.0Ä million interest rate swap from LIBOR based floating rate interest to SOFR based floating rate interest. This amendment was done in accordance with ASC 848 and had no impact on the financial statements. The Company is applying optional expedients and exceptions to certain contract modifications and hedging relationships as permitted under ASC 2020-04 and 2022-06. During the quarter ended September 30, 2024, the hedging relationship between our \$750.0 million notional value interest swap and underlying hedged item became ineffective as the hedged forecast transaction was deemed no longer probable of occurring. Due to the ineffectiveness, hedge accounting was discontinued, which resulted in a \$6.2 million reclassification of gain on the hedged transaction from F-48AOCI into earnings. After the hedging relationship was discontinued, we terminated the interest rate swap and monetized \$6.2 million of cash proceeds, which were received in October 2024. As of DecemberÄ 31, 2024, the Company had the following outstanding interest rate derivatives that were designated as cash flow hedges of interest rate risk: (dollars in millions)Interest rate derivativeNumber of instrumentsNotionalInterest rate swaps\$1100.0Ä Effect of cash flow hedge accounting on AOCIThe table below presents the effect of cash flow hedge accounting on AOCI for the years ended DecemberÄ 31, 2024 and 2023.(in millions)Hedging relationshipsAmount of gain or (loss) recognized in OCI on DerivativeLocation of gain or (loss) reclassified from AOCI into incomeAmount of gain or (loss) reclassified from AOCI into incomeYearÄ ended DecemberÄ 31, 202420232023Interest rate products\$5.4Ä \$8.4Ä Interest expense, net\$21.7Ä \$18.0Ä Total\$5.4Ä \$8.4Ä \$21.7Ä \$18.0Ä Effect of cash flow hedge accounting on the income statementThe table below presents the effect of our derivative financial instruments on the statement of operations for the years ended DecemberÄ 31, 2024 and 2023. YearÄ ended DecemberÄ 31, 202420232023(in millions)Interest expense, netInterest expense, netTotal amounts of line items presented in the statements of operations where the effects of cash flow hedges are recorded(218.8)(\$284.8)Amount of gain reclassified from AOCI into income\$21.7Ä \$18.0Ä Net investment hedgesWe are exposed to fluctuations in foreign exchange rates on investments we hold in foreign entities, specifically our net investment in Avantor Holdings B.V., a EUR-functional-currency consolidated subsidiary, against the risk of changes in the EUR-USD exchange rate. For derivatives designated as net investment hedges, the gain or loss on the derivative is reported in AOCI as part of the cumulative translation adjustment. Amounts are reclassified out of AOCI into earnings in the event the hedged net investment is either sold or substantially liquidated.F-49As of DecemberÄ 31, 2024, we had the following outstanding foreign currency derivatives that were used to hedge its net investments in foreign operations:(value in millions)Foreign currency derivativeNumber of instrumentsNotional soldNotional purchasedCross-currency swaps1Ä Ä Ä -732.1Ä \$750.0Ä Effect of net investment hedges on AOCI and the income statementThe table below presents the effect of our net investment hedges on AOCI and the statement of operations for the years ended DecemberÄ 31, 2024 and 2023.(in millions)Hedging relationshipsAmount of gain or (loss) recognized in OCI on DerivativeLocation of gain or (loss) recognized in income on Derivative(amount excluded from effectiveness testing)Amount of gain or (loss) recognized in income on Derivative(amount excluded from effectiveness testing)YearÄ ended DecemberÄ 31, YearÄ ended DecemberÄ 31, 202420232023Cross currency swaps\$60.9Ä \$(21.1)Interest expense, net\$12.7Ä \$12.7Ä Total\$60.9Ä \$(21.1)\$12.7Ä \$12.7Ä The Company did not reclassify any other deferred gains or losses related to cash flow hedge from accumulated other comprehensive income (loss) to earnings for the years ended DecemberÄ 31, 2024 and 2023 other than those mentioned above.F-50The table below presents the fair value of our derivative financial instruments as well as their classification on the Balance Sheet as of DecemberÄ 31, 2024 and 2023:Derivative assetsDerivative liabilities DecemberÄ 31, DecemberÄ 31, 2024202320242023(in millions)Balance sheet locationFair valueBalance sheet locationFair valueBalance sheet locationFair valueBalance sheet locationFair valueLocationFair valueLocationFair valueDerivatives designated as hedging instruments:Interest rate productsOther current assets\$0.3Ä Other current assets\$16.6Ä Other current liabilities\$ÄÄ Ä Other current liabilities\$ÄÄ Ä Foreign exchange productsOther current assets\$ÄÄ Ä Other current assets\$ÄÄ Ä Other current liabilities(7.0)Other current liabilities(55.2)Total\$0.3Ä \$16.6Ä \$(7.0)(\$55.2)Termination of cross-currency swapIn July 2022, we terminated our existing \$750.0 million cross-currency swap, maturing on April 30, 2025 and monetized \$42.5 million of cash proceeds. We simultaneously entered into new on-market \$750.0Ä million fixed-to-fixed cross-currency swap to hedge our exposure to changes in foreign exchange rates of its foreign investments. The purpose of this swap is to replace the swap that we terminated in July 2022. The new swap matures on April 30, 2025. Cross-currency swaps involve the receipt of functional-currency fixed-rate amounts from a counterparty in exchange for making foreign-currency fixed-rate payments over the life of the agreement. Non-derivative financial instruments which are designated as hedging instruments:We designated all of our outstanding ÄÄ -400.0 million 3.875% senior unsecured notes, issued on July 17, 2020, and maturing on July 15, 2028, as a hedge of our net investment in certain of our European operations. For instruments that are designated and qualify as net investment hedges, the foreign currency transactional gains or losses are reported as a component of AOCI. In October 2024, the Company de-designated these outstanding ÄÄ -400.0 million 3.875% senior unsecured notes as a hedge of our net investment in certain of our European operations. The de-designation had no impact on earnings as the accumulated gain on the net investment hedge is only reclassified into earnings upon a liquidation event or deconsolidation of a hedged foreign subsidiary. The accumulated gain related to the foreign currency denominated debt designated as net investment hedges classified in the foreign currency translation adjustment component of AOCI was \$6.0 million and \$9.3 million as of DecemberÄ 31, 2024 and DecemberÄ 31, 2023, respectively. The amount of loss (gain) related to the foreign currency denominated debt designated as net investment hedges classified in the foreign currency translation adjustment component of other comprehensive F-51 income is presented below.(in millions)YearÄ ended DecemberÄ 31, 202420232022Net investment hedges\$3.3Ä \$15.0Ä \$(27.8)Ä Ä Ä Financial instruments and fair value measurementsOur financial instruments include cash and cash equivalents, accounts receivable, accounts payable and debt. Certain financial and non-financial assets and liabilities are measured at fair value on a nonrecurring basis and are subject to fair value adjustments in certain circumstances, such as when there is evidence of impairment. As discussed in note 10 and 11, during the second quarter of 2023, property, plant and equipment, customer relationships and developed technology related to Ritter were deemed to be impaired and their carrying values were reduced to estimated fair values of \$25.9 million, \$31.4 million and \$19.3 million, respectively. This was the result of an impairment charge of \$160.8 million. The Company estimated the fair value of Ritter using Level 3 inputs, which included a discounted cash flow analysis. Assets and liabilities for which fair value is only disclosedThe carrying amount of cash and cash equivalents was the same as its fair value and is a Level 1 measurement. The carrying amounts for trade accounts receivable and accounts payable approximated fair value due to their short-term nature and are Level 2 measurements. The following table presents the gross amounts, which exclude unamortized deferred financing costs, and the fair values of debt instruments:(in millions)December 31, 2024December 31, 2023Gross amountFairÄ Ä Ä Fair amountFairÄ Ä Ä Receivables facility\$125.0Ä \$125.0Ä \$221.0Ä Senior secured credit facilities: Euro term loans B-481.6Ä 82.1Ä 630.1Ä 630.9Ä Euro term loans B-5324.5Ä 326.1Ä 350.4Ä 351.1Ä U.S. dollar term loans B-5ÄÄ Ä ÄÄ Ä A 787.6Ä 791.0Ä U.S. dollar term loans B-686.6Ä 87.2Ä ÄÄ Ä 2.625% secured notes672.6Ä 668.4Ä 718.7Ä 705.3Ä 3.875% unsecured notes800.0Ä 729.9Ä 800.0Ä 727.3Ä 3.875% unsecured notes413.9Ä 413.6Ä 442.3Ä 434.3Ä 4.625% unsecured notes1,550.0Ä 1,480.6Ä 1,550.0Ä 1,489.1Ä Finance lease liabilities15.0Ä 15.0Ä 68.3Ä 68.3Ä 8.6Ä 11.6Ä 11.6Ä Total\$4,077.8Ä \$3,936.5Ä \$5,580.0Ä \$5,429.9Ä The fair values of debt instruments are based on standard pricing models that take into account the present value of future cash flows, and in some cases private trading data, which are Level 2 measurements.F-5223.Ä Ä Ä LeasesThe following table presents lease assets and liabilities and their balance sheet classification:(in millions)ClassificationDecemberÄ 31, 202420232023Operating leases:Lease assetsOther assets\$156.5Ä \$120.7Ä Current portion of liabilitiesOther current liabilities29.8Ä 36.2Ä Liabilities, net of current portionOther liabilities143.2Ä 88.5Ä Finance leases:Lease assetsProperty, plant and equipment, net15.2Ä 52.3Ä Current portion of liabilitiesCurrent portion of debt4.0Ä 5.5Ä Liabilities, net of current portionDebt, net of current portion11.0Ä 62.8Ä The following tables present information about lease expense:(in millions)YearÄ ended DecemberÄ 31, 202420232022Operating lease expense\$58.2Ä \$52.5Ä \$48.5Ä Finance lease expense10.6Ä 11.6Ä 10.7Ä Total\$68.8Ä \$64.1Ä \$59.2Ä (1)Operating lease expense for 2024 and 2023 includes \$14.6 million and \$7.8 million, respectively, classified as cost of sales and \$43.6 million and \$44.7 million classified as SG&A expenses, respectively.(2)Finance lease expense consists primarily of amortization of finance lease assets that is classified as SG&A expenses. DecemberÄ 31, (dollars in millions)202420232022Weighted average remaining lease term at end of the year:Operating leases6.2Ä 9.3Ä 6.6Ä Years:Finance leases4.4 years11.7 yearsWeighted average discount rate at end of the year:Operating leases6.2Ä 9.4Ä 9.7Ä %State of cash flows:Operating lease right-of-use assets obtained in exchange for operating lease liabilities\$100.1Ä \$39.3Ä \$2.6Ä Finance lease right-of-use assets obtained in exchange for Finance lease liabilities4.4Ä 22.4Ä 5.3Ä The fair value of debt instruments is based on standard pricing models that take into account the present value of future cash flows, and in some cases private trading data, which are Level 2 measurements.F-5223.Ä Ä Ä LeasesThe following table presents lease assets and liabilities and their balance sheet classification:(in millions)ClassificationDecemberÄ 31, 202420232023Operating leases:Lease assetsOther assets\$156.5Ä \$120.7Ä Current portion of liabilitiesOther current liabilities29.8Ä 36.2Ä Liabilities, net of current portionOther liabilities143.2Ä 88.5Ä Finance leases:Lease assetsProperty, plant and equipment, net15.2Ä 52.3Ä Current portion of liabilitiesCurrent portion of debt4.0Ä 5.5Ä Liabilities, net of current portionDebt, net of current portion11.0Ä 62.8Ä The following tables present information about lease expense:(in millions)YearÄ ended DecemberÄ 31, 202420232022Operating lease expense\$58.2Ä \$52.5Ä \$48.5Ä Finance lease expense10.6Ä 11.6Ä 10.7Ä Total\$68.8Ä \$64.1Ä \$59.2Ä (1)Operating lease expense for 2024 and 2023 includes \$14.6 million and \$7.8 million, respectively, classified as cost of sales and \$43.6 million and \$44.7 million classified as SG&A expenses, respectively.(2)Finance lease expense consists primarily of amortization of finance lease assets that is classified as SG&A expenses. DecemberÄ 31, (dollars in millions)202420232022Weighted average remaining lease term at end of the year:Operating leases6.2Ä 9.3Ä 6.6Ä Years:Finance leases4.4 years11.7 yearsWeighted average discount rate at end of the year:Operating leases6.2Ä 9.4Ä 9.7Ä %State of cash flows:Operating lease right-of-use assets obtained in exchange for operating lease liabilities\$100.1Ä \$39.3Ä \$2.6Ä Finance lease right-of-use assets obtained in exchange for Finance lease liabilities4.4Ä 22.4Ä 5.3Ä The fair

leases2025\$37.8Â \$4.4Â 202635.2Â 3.7Â 202728.4Â 2.9Â 202822.2Â 2.5Â 202916.3Â 2.3Â Thereafter96.2Â 0.3Â Total undiscounted lease payments236.1Â 16.1Â Difference between undiscounted and discounted lease payments(63.1)(1.1)Lease liabilities\$173.0Â \$15.0Â 24.Â Â Condensed unconsolidated financial information of Avantor, Inc.Pursuant to SEC regulations, the following presents condensed unconsolidated financial information of the registrant, Avantor, Inc.The following condensed unconsolidated financial statements should be read in conjunction with our consolidated financial statements and notes thereto because certain applicable disclosures are provided there in.These condensed unconsolidated financial statements, all of our subsidiaries are wholly-owned for the periods presented and presented as investments of Avantor, Inc. under the equity method.Under that method, the equity interest in subsidiariesâ™ assets and liabilities is stated as a net non current asset at historical cost on the balance sheet.No statements of operations are included because Avantor, Inc. only had equity in the earnings or loss of its subsidiaries for the periods presented in amounts equal to our consolidated net income or loss.F-54Avantor, Inc.Condensed unconsolidated balance sheets(in millions)DecemberÂ 31, 20242023AssetsInvestment in unconsolidated subsidiaries\$5,956.7Â \$5,252.6Â Total assets\$5,956.7Â \$5,252.6Â Stockholdersâ™ equityCommon stock including paid-in capital, 680.8 and 676.6 shares outstanding3,937.7Â 3,830.1Â Accumulated earnings2,203.0Â 1,491.5Â Accumulated other comprehensive loss(184.0)(69.0)Total stockholdersâ™ equity\$5,956.7Â \$5,252.6Â Avantor, Inc.Condensed unconsolidated statements of cash flows(in millions)YearÂ ended DecemberÂ 31, 2024YearÂ ended DecemberÂ 31, 2023YearÂ ended DecemberÂ 31, 2022Cash flows from investing activities:Contribution (to) from unconsolidated subsidiaries\$(60.6)Â \$(4.6)\$28.3A Net cash (used in) provided by investing activities(60.6)Â (4.6)28.3A Cash flows from financing activities:Payments of dividends on preferred stockâ™ Â (32.4)Proceeds received from exercise of stock options, net of shares repurchased to satisfy employee tax obligations for vested stock-based awards60.6Â 4.6Â 4.1Â Net cash provided by (used in) financing activities60.6Â 4.6Â (28.3)Net change in cash and cash equivalentsâ™ Â (4.6)Â (4.1)Â Cash, cash equivalents and restricted cash, beginning of yearâ™ Â (4.6)Â (4.1)Â Cash, cash equivalents and restricted cash, end of yearâ™ Â (4.6)Â (4.1)Â F-5525.Â Â Valuation and qualifying accountsThe following table presents changes to our valuation and qualifying accounts:(in millions)Allowance for expected credit lossesValuation allowances on deferred tax assetsBalance on December 31, 2021\$26.4Â \$187.6Â Charged to costs and expenses6.9A 2.7Â Deductions(1)(3.7)Â Currency translation(1.4)(10.6)Balance on December 31, 2022\$28.4Â \$187.6Â Charged to costs and expenses15.3Â 20.2Â Deductions(1)(9.2)Â Currency translation0.7Â 6.2Â Balance on December 31, 2023\$35.0Â 206.1Â Charged to costs and expenses5.3Â 21.8Â Deductions(1)(9.0)Â Currency translation(1)(13.8)Balance on December 31, 2024\$30.2Â \$214.1A (1)For the allowance for expected credit losses, deductions represent bad debts charged off, net of recoveries.F-56descriptionofcapitalstocExhibit 4.1 DESCRIPTION OF CAPITAL STOCK The following is a description of the material terms of our capital stock, and is qualified in its entirety by, our fourth amended and restated certificate of incorporation and fourth amended and restated bylaws, each of which is incorporated by reference as an exhibit to the Annual Report on Form 10-K of which this Exhibit 4.1 is a part. Our common stock is our only security registered pursuant to Section 12 of the Securities Exchange Act of 1934, as amended (the âœExchange Actâœ). Our purpose is to engage in any lawful act or activity for which corporations may now or hereafter be organized under the Corporation Law of the State of Delaware (as the same exists or may hereafter be amended from time to time, the âœDGCLâœ). Our authorized capital stock consists of 750,000,000 shares of common stock, par value \$0.01 per share, and 75,000,000 shares of preferred stock, par value \$0.01 per share. Unless our Board of Directors determines otherwise, we will issue all shares of our capital stock in uncertificated form. Common stock Holders of our common stock are entitled to one vote for each share held of record on all matters on which stockholders are entitled to vote generally, including the election or removal of directors, subject to certain limitations. The holders of our common stock do not have cumulative voting rights in the election of directors. Upon our liquidation, dissolution or winding up or the sale of all or substantially all of our assets and after payment in full of all amounts required to be paid to creditors and to the holders of preferred stock having liquidation preferences, if any, the holders of our common stock will be entitled to receive our remaining assets available for distribution on a pro rata basis. Holders of our common stock do not have preemptive, subscription, redemption or conversion rights. The common stock is not subject to further calls or assessment by us. There are no redemption or sinking fund provisions applicable to the common stock. All shares of our common stock that are outstanding are fully paid and non-assessable. The rights, powers, preferences and privileges of holders of our common stock will be subject to those of the holders of any shares of our preferred stock we may authorize and issue in the future. Preferred stock Our fourth amended and restated certificate of incorporation authorizes our Board of Directors to establish one or more series of preferred stock (including convertible preferred stock). Unless required by law or by the rules of the NYSE, the authorized shares of preferred stock will be available for issuance without further stockholder action. Our Board of Directors is able to determine, with respect to any series of preferred stock, the terms and rights of that series, including: A â¢ the designation of the series; â¢ the number of shares of the series, which our Board of Directors may, except where otherwise provided in the preferred stock designation, increase (but not above the total number of authorized shares of the class) or decrease (but not below the number of shares then outstanding); â¢ whether dividends, if any, will be cumulative or non-cumulative and the dividend rate of the series; â¢ the dates at which dividends, if any, will be payable; â¢ the redemption rights and price or prices, if any, for shares of the series; â¢ the terms and amounts of any sinking fund provided for the purchase or redemption of shares of the series; â¢ the amounts payable on shares of the series in the event of any voluntary or involuntary liquidation, dissolution or winding-up of the affairs of our company; â¢ whether the shares of the series will be convertible into shares of any other class or series, or any other security, of our company or any other corporation, and, if so, the specification of the other class or series or other security, the conversion price or prices or rate or rates, any rate adjustments, the date or dates as of which the shares will be convertible and all other terms and conditions upon which the conversion may be made; â¢ restrictions on the issuance of shares of the same series or of any other class or series; and â¢ the voting rights, if any, of the holders of the series. We could issue a series of preferred stock that could, depending on the terms of the series, impede or discourage an acquisition attempt or other transaction that some, or a majority, of you might believe to be in your best interests or in which you might receive a premium for your common stock over the market price of the common stock. Additionally, the issuance of preferred stock may adversely affect the holders of our common stock by restricting dividends on the common stock, diluting the voting power of the common stock or subordinating the liquidation rights of the common stock. As a result of these or other factors, the issuance of preferred stock could have an adverse impact on the market price of our common stock. Dividends The DGCL permits a corporation to declare and pay dividends out of âœsurplusâ or, if there is no âœsurplusâ out of its net profits for the fiscal year in which the dividend is declared and/or the preceding year. âœSurplusâ is defined as the excess of the net assets of the corporation over the amount determined to be the capital of the corporation by the Board of Directors. The capital of the corporation is typically calculated to be (and cannot be less than) the aggregate par value of all issued shares of capital stock. Net assets equal the fair value of the total assets minus total liabilities. The DGCL also provides that dividends may not be paid out of net profits if, after the payment of the dividend, capital is less than the capital represented by the outstanding stock of all classes having a preference upon the distribution of assets. Declaration and payment of any dividend will be subject to the discretion of our Board of Directors. The time and amount of dividends will be dependent upon our financial condition, operations, cash requirements and availability, debt repayment obligations, capital expenditure needs and restrictions in our debt instruments, industry trends, the provisions of Delaware law affecting the payment of dividends to stockholders and any other factors our Board of Directors may consider relevant. Anti-takeover effects of our fourth amended and restated Certificate of Incorporation and fourth amended and restated bylaws and certain provisions of Delaware Law Our fourth amended and restated certificate of incorporation, fourth amended and restated bylaws and the DGCL, which are summarized in the following paragraphs, contain provisions that are intended to enhance the likelihood of continuity and stability in the composition of our Board of Directors. These provisions are intended to avoid costly takeover battles, reduce our vulnerability to a hostile change of control and enhance the ability of our Board of Directors to maximize stockholder value in connection with any unsolicited offer to acquire us. However, these provisions may have an anti-takeover effect and may delay, deter or prevent a merger or acquisition of our company by means of a tender offer, a proxy contest or other takeover attempt that stockholder might consider is in its best interest, including those attempts that might result in a premium over the prevailing market price for the shares of common stock held by stockholders. Authorized but unissued capital stock Delaware law does not require stockholder approval for any issuance of authorized shares. However, the listing requirements of the NYSE, which would apply if and so long as our common stock remains listed on the NYSE, require stockholder approval of certain issuances equal to or exceeding 20% of the then outstanding voting power or their outstanding number of shares of common stock. These additional shares may be used for a variety of corporate purposes, including future public offerings, to raise additional capital or to facilitate acquisitions. Our Board of Directors may issue shares of preferred stock on terms calculated to discourage, delay or prevent a change of control of our company or the removal of our management. Moreover, our authorized but unissued shares of preferred stock will be available for future issuances without stockholder approval and could be utilized for a variety of corporate purposes, including future offerings to raise additional capital, acquisitions and employee benefit plans. One of the effects of the existence of unissued and unreserved common stock or preferred stock may be to enable our Board of Directors to issue shares to persons friendly to current management, which issuance could render more difficult or discourage an attempt to obtain control of our company by means of a merger, tender offer, proxy contest or otherwise, and thereby protect the continuity of our management and possibly deprive our stockholders of opportunities to sell their shares of common stock at prices higher than prevailing market prices. Business combinations We have opted out of Section 203 of the DGCL; however, our fourth amended and restated certificate of incorporation contains similar provisions providing that we may not engage in certain âœbusiness combinationsâ with any âœinterested stockholderâ for a three-year period following the time that the stockholder became an interested stockholder, unless: â¢ prior to such time, our Board of Directors approved either the business combination or the transaction which resulted in the stockholder becoming an interested stockholder; â¢ upon consummation of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of our voting stock outstanding at the time the transaction commenced, excluding certain shares; or â¢ at or subsequent to that time, the business combination is approved by our Board of Directors and by the affirmative vote of holders of at least 662/3% of the outstanding voting stock that is not owned by the interested stockholder. However, such restrictions will not apply if a stockholder becomes an interested stockholder inadvertently and (i) as soon as practicable divests itself of ownership of sufficient shares so that the stockholder ceases to be an interested stockholder and (ii) would not, at any time within the three-year period immediately prior to a business combination between the company and such stockholder, have been an interested stockholder but for the inadvertent acquisition of ownership. Generally, a âœbusiness combinationâ includes a merger, asset or stock sale or other transaction resulting in a financial benefit to the interested stockholder. Subject to certain exceptions, an âœinterested stockholderâ is a person who, together with that personâ™s affiliates and associates, owns, or within the previous three years owned, 15% or more of our voting stock. For purposes of this section only, âœvoting stockâ has the meaning given to it in Section 203 of the DGCL. Under certain circumstances, this provision will make it more difficult for a person who would be an âœinterested stockholderâ to effect various business combinations with a corporation for a three-year period. This provision may encourage companies interested in acquiring our company to negotiate in advance with our Board of Directors because the stockholder approval requirement would be avoided if our Board of Directors approves either the business combination or the transaction which results in the stockholder becoming an interested stockholder. These provisions also may have the effect of preventing changes in our Board of Directors and may make it more difficult to accomplish transactions which stockholders may otherwise deem to be in their best interests. Â Removal of Directors; Vacancies Our fourth amended and restated certificate of incorporation and fourth amended and restated bylaws provide that directors may be removed either with or without cause upon the affirmative vote of 662/3% of the voting power of all outstanding shares of stock entitled to vote generally in the election of directors, voting together as a single class. In addition, our fourth amended and restated certificate of incorporation and our fourth amended and restated bylaws also provide that, subject to the rights granted to one or more series of preferred stock then outstanding, any vacancies on our Board of Directors will be filled only by the affirmative vote of a majority of the remaining directors, even if less than a quorum, or by a sole remaining director. No cumulative voting Under Delaware law, the right to vote cumulatively does not exist unless the certificate of incorporation specifically authorizes cumulative voting. Our fourth amended and restated certificate of incorporation does not authorize cumulative voting. Special stockholder meetings Our fourth amended and restated certificate of incorporation provides that special meetings of our stockholders may be called at any time only by or at the direction of the Board of Directors or the chairman of the Board of Directors; however, stockholders of record who own shares of common stock representing at least 20% of the relevant voting power continuously for at least one year can request that the Board of Directors call a special meeting of stockholders, provided that the stockholders satisfy specified requirements. Proxy Access Our fourth amended and restated bylaws provide for proxy access, which permits a stockholder, or a group of up to 20 stockholders, owning 3% or more of our outstanding common stock continuously for at least three years, to nominate and include in our proxy materials qualifying director nominees constituting up to the greater of (i) two directors or (ii) twenty percent of our Board of Directors. To be timely, the notice of proxy access nomination must be addressed to and received by the Secretary not less than 120 days nor more than 150 days prior to the first anniversary of the date on which our definitive proxy statement was released to stockholders in connection with the prior yearâ™s annual meeting; provided, however, that if the annual meeting is convened more than 30 days prior to or delayed by more than 60 days after the first anniversary of the date of the preceding yearâ™s annual meeting, the information must be so received not earlier than 120 days prior to such annual meeting and not later than the close of business on the later of (x) the 90th day prior to such annual meeting or (y) the 10th day following the day on which a public announcement of the date of our annual meeting is first made; provided further that in no event shall any adjournment or postponement of an annual meeting, or the public announcement thereof, commence a new time period or extend any time period for the receipt of the information. The complete proxy access provisions for director nominations are set forth in our fourth amended and restated bylaws. Requirements for advance notification of director nominations and stockholder proposals Our fourth amended and restated bylaws establish advance notice procedures with respect to stockholder proposals and the nomination of candidates for election as directors, other than nominations made by or at the direction of the Board of Directors or a committee of the Board of Directors. In order for any matter to be âœproperly broughtâ before a meeting, a stockholder will have to comply with advance notice requirements and provide us with certain information. Generally, to be timely, a stockholderâ™s notice must be received at our principal executive offices not less than 90 days nor more than 120 days prior to the first anniversary date of the immediately preceding annual meeting of stockholders. Our fourth amended and restated bylaws will also specify requirements as to the form and content of a stockholderâ™s notice. Stockholders who deliver a notice of nomination must comply with the provisions and requirements of our fourth amended and restated bylaws and applicable law, including Rule 14a-19 promulgated under the Exchange Act. Our fourth amended and restated bylaws allow the chairman of the meeting at a meeting of the stockholders to adopt rules and regulations for the conduct of meetings which may have the effect of precluding the conduct of certain business at a meeting if the rules and regulations are not followed. These provisions may defer, delay or discourage a potential acquirer from conducting a solicitation of proxies to elect the acquirerâ™s own slate of directors or otherwise attempting to influence or obtain control of our company. Stockholder action by written consent Pursuant to Section 228 of the DGCL, any action required to be taken at any annual or special meeting of the stockholders may be taken without a meeting, without prior notice and without a vote if a consent or consents in writing, setting forth the action so taken, is signed by the holders of outstanding stock having not less than the minimum number of votes that would be necessary to authorize or take such action at a meeting at which all shares of our stock entitled to vote thereon were present and voted, unless our fourth amended and restated certificate of incorporation provides otherwise. Dissentersâ™ rights of appraisal and payment Under the DGCL, with certain exceptions, our stockholders will have appraisal rights in connection with a merger or consolidation of us. Pursuant to the DGCL, stockholders who properly request and perfect appraisal rights in connection with such merger or consolidation will have the right to receive payment of the fair value of their shares as determined by the Delaware Court of Chancery. A Stockholdersâ™ derivative actions Under the DGCL, any of our stockholders may bring an action in our name to procure a judgment in our favor, also known as a derivative action, provided that the stockholder bringing the action is a holder of our shares at the time of the transaction to which the action relates or such stockholderâ™s stock thereafter devolved by operation of law. Exclusive forum Our fourth amended and restated certificate of incorporation provides that unless we consent to the selection of an alternative forum, the state or federal courts (as appropriate) located within the State of Delaware shall, to the fullest extent permitted by law, be the sole and exclusive forum for any (i) derivative action or proceeding brought on behalf of our company, (ii) action asserting a claim of breach of a fiduciary duty owed by any director, officer, or other employee or stockholder of our company to us or our stockholders, creditors or other constituents, (iii) action against us or any of our directors or officers involving a claim or defense arising pursuant to any provision of the DGCL or our fourth amended and restated certificate of incorporation or our fourth amended and restated bylaws, (iv) action against us or any director or officer of the company involving a claim or defense implicating the internal affairs doctrine, or (v) action against us or any of our directors or officers involving a claim or defense arising

pursuant to the Exchange Act or the Securities Act of 1933, as amended. It is possible that these exclusive forum provisions may be challenged in court and may be deemed unenforceable in whole or in part. Our exclusive forum provision shall not relieve the company of its duties to comply with the federal securities laws and the rules and regulations thereunder, and our stockholders will not be deemed to have waived our compliance with these laws, rules and regulations. Conflicts of interest Delaware law permits corporations to adopt provisions renouncing any interest or expectancy in certain opportunities that are presented to the corporation or its officers, directors or stockholders. Limitations on liability and indemnification of officers and directors The DGCL authorizes corporations to limit or eliminate the personal liability of directors and certain officers to corporations and their stockholders for monetary damages for breaches of directors' fiduciary duties, subject to certain exceptions. Our fourth amended and restated certificate of incorporation includes a provision that eliminates the personal liability of directors and such officers for monetary damages for any breach of fiduciary duty as a director or such officer, except to the extent such exemption from liability or limitation thereof is not permitted under the DGCL. The effect of these provisions is to eliminate the rights of us and our stockholders, through stockholders' derivative suits on our behalf, to recover monetary damages from a director or such officer for breach of fiduciary duty as a director or such officer. Directors and such officers remain liable for: (i) any breach of duty of loyalty to us or our stockholders; (ii) any act or omission not in good faith or which involves intentional misconduct or a knowing violation of the law; (iii) with respect to directors, any liability under Section 174 of the DGCL, which relates to the payment of unlawful dividends and unlawful stock purchases or redemptions; (iv) any transaction from which the director or officer derives an improper personal benefit; and (v) with respect to officers, any action by or in the right of the company. Our fourth amended and restated bylaws provide that we must generally indemnify, and advance expenses to, our directors and officers to the fullest extent authorized by the DGCL. We are also expressly authorized to carry directors' and officers' liability insurance providing indemnification for our directors, officers and certain employees for some liabilities. We also have entered into indemnification agreements with our directors, which agreements require us to indemnify these individuals to the fullest extent permitted under Delaware law against liabilities that may arise by reason of their service to us, and to advance expenses incurred as a result of any proceeding against them as to which they could be indemnified. We believe that these indemnification and advancement provisions and insurance are useful to attract and retain qualified directors and executive officers. The limitation of liability, indemnification and advancement provisions in our fourth amended and restated certificate of incorporation and fourth amended and restated bylaws may discourage stockholders from bringing a lawsuit against directors for breach of their fiduciary duty. These provisions also may have the effect of reducing the likelihood of derivative litigation against directors and officers, even though such an action, if successful, might otherwise benefit us and our stockholders. In addition, your investment may be adversely affected to the extent we pay the costs of settlement and damage awards against directors and officers pursuant to these indemnification provisions. Transfer agent and registrar The transfer agent and registrar for our common stock is Equiniti Trust Company. Listing Our common stock is listed on the NYSE under the symbol "AVTR." A **OPTION GRANT NOTICE UNDER THE AVANTOR, INC. 2019 EQUITY INCENTIVE PLAN** Avantor, Inc. (the "Company"), pursuant to its 2019 Equity Incentive Plan, as it may be amended and restated from time to time (the "Plan"), hereby grants to the Participant set forth below the number of Options (each Option representing the right to purchase one share of Common Stock) set forth below, at an Exercise Price per share as set forth below. The Options are subject to all of the terms and conditions as set forth herein, in the Option Agreement (attached hereto), any Exhibit attached thereto, and in the Plan, all of which are incorporated herein in their entirety. Capitalized terms not otherwise defined herein shall have the meaning set forth in the Plan. Participant: [Insert Participant Name] Grant Date: [Insert Grant Date] Vesting Start Date: [Insert Vesting Start Date] Number of Options: [Insert Number of Options] Exercise Price: [Insert Exercise Price] Option Period Expiration Date: [Insert Expiration Date] Type of Option: Nonqualified Stock Option Vesting Schedule: Provided that the Participant has not undergone a Termination prior to the time of each applicable vesting date (or event): [Insert Vesting Schedule] For US Participants: The award of Options is expressly conditioned on your acceptance of the terms and conditions of the attached Option Agreement and Restrictive Covenant Agreement. You should carefully read the terms and conditions of both agreements. If you are not willing to agree to all of the terms contained in the Option Agreement and Restrictive Covenant Agreement, do not accept this Grant. If you accept this Grant, you are accepting and agreeing to all of the terms and conditions of the Option Agreement and the Restrictive Covenant Agreement, which includes, among other things and to the extent permissible under applicable law, non-competition, customer and employee non-solicitation, and non-disclosure provisions. **By Title:** **AVANTOR, INC.** **THE UNDERSIGNED PARTICIPANT ACKNOWLEDGES RECEIPT OF THIS OPTION GRANT NOTICE, THE OPTION AGREEMENT, ANY EXHIBIT ATTACHED THERETO, AND THE PLAN (AND THE RESTRICTIVE COVENANT AGREEMENT IF A US PARTICIPANT), AND, AS AN EXPRESS CONDITION TO THE GRANT OF OPTIONS HEREUNDER, AGREES TO BE BOUND BY THE TERMS OF THIS OPTION GRANT NOTICE, THE OPTION AGREEMENT, ANY EXHIBIT ATTACHED THERETO, THE PLAN, AND THE RESTRICTIVE COVENANT AGREEMENT. PARTICIPANT**

1 To the extent that the Company has established, either itself or through a third-party plan administrator, the ability to accept this award electronically, such acceptance shall constitute the Participant's signature hereto. **A. 4 OPTION AGREEMENT UNDER THE AVANTOR, INC. 2019 EQUITY INCENTIVE PLAN** Pursuant to the Option Grant Notice (the "Grant Notice") delivered to the Participant (as defined in the Grant Notice), and subject to the terms of this Option Agreement (this "Option Agreement"), the Avantor, Inc. 2019 Equity Incentive Plan, as it may be amended and restated from time to time (the "Plan"), and the Restrictive Covenant Agreement attached hereto (the "Restricted Covenant Agreement"), Avantor, Inc. (the "Company") and the Participant agree as follows. Capitalized terms not otherwise defined herein shall have the same meaning as set forth in the Plan. 1. Grant of Option. Subject to the terms and conditions set forth herein and in the Plan, the Company hereby grants to the Participant the number of Options provided in the Grant Notice (with each Option representing the right to purchase one share of Common Stock), at an Exercise Price per share as provided in the Grant Notice. The Company may make one or more additional grants of Options to the Participant under this Option Agreement by providing the Participant with a new Grant Notice, which may also include any terms and conditions differing from this Option Agreement to the extent provided therein. The Company reserves all rights with respect to the granting of additional Options hereunder and makes no implied promise to grant additional Options. 2. Vesting. (a) Subject to the conditions contained herein and in the Plan, the Options shall vest as provided in the Grant Notice. (b) Notwithstanding the foregoing, in the event of a Change in Control, any unvested Options that are assumed by the acquirer in the Change in Control will remain outstanding and subject to vesting; provided, however, that in the event the Participant's employment terminates within two years following a Change in Control due to either (i) a termination by the Company without Cause or (ii) a resignation by the Participant with Good Reason, any unvested Options will immediately vest as of the date of termination. If the Options are not assumed by the acquirer in the Change in Control, all unvested Options will become vested in full upon the consummation of the Change in Control. (c) For purposes of Section 2(b), "Good Reason" means: (i) a material diminution to the Participant's base salary, bonus opportunity, authority, duties or responsibilities, (ii) the Company fails to make any compensatory payment to the Participant when due, which is required to be paid to the Participant pursuant to this Agreement or any other material agreement between the Participant and the Company, (iii) a relocation of the Participant's principal place of employment to a location that is outside a 50 mile radius from the Participant's principal place of employment immediately prior to the Change in Control, or (iv) any other action or inaction by the Company which constitutes a material breach of this Agreement or any other material agreement with the Company; provided that, in order for the Participant's resignation for Good Reason to be effective, written notice of the occurrence of any event that constitutes Good Reason must be delivered by the Participant to the Company within 90 days after the Participant has actual knowledge of the occurrence of any such event and the occurrence of such event. 3. Exercise of Options Following Termination. The provisions of Section 7(c)(ii) of the Plan are incorporated herein by reference and made a part hereof. 4. Method of Exercising Options. The Options may be exercised by the delivery of notice of the number of Options that are being exercised accompanied by payment in full of the Exercise Price applicable to the Options so exercised. Such notice shall be delivered either (a) in writing to the Company at its principal office or at such other address as may be established by the Committee, to the attention of the Company's General Counsel or (b) to a third-party plan administrator as may be arranged for by the Company or the Committee from time to time for purposes of the administration of outstanding Options under the Plan, in the case of either (a) or (b), as communicated to the Participant by the Company from time to time. Payment of the aggregate Exercise Price may be made using any of the methods described in Section 7(d)(i) or (ii) of the Plan; provided, that the Participant may not use the methods described in Section 7(d)(ii)(A) or (C) of the Plan unless specifically authorized by the Committee. 5. Issuance of Shares of Common Stock. Following the exercise of an Option hereunder, as promptly as practical after receipt of such notification and full payment of such Exercise Price and any required income or other tax withholding amount (as provided in Section 14 hereof), the Company shall issue or transfer, or cause such issue or transfer, to the Participant the number of shares of Common Stock with respect to which the Options have been so exercised, and shall either (a) deliver, or cause to be delivered, to the Participant a certificate or certificates therefor, registered in the Participant's name or (b) cause such shares of Common Stock to be credited to the Participant's account at the third party stock plan administrator. 6. Company; Participant. (a) The term "Company" as used in this Option Agreement (including any Exhibit attached hereto) with reference to employment shall include the Company and its Subsidiaries. (b) Whenever the word "Participant" is used in any provision of this Option Agreement under circumstances where the provision should logically be construed to apply to the executors, the administrators, or the person or persons to whom the Options may be transferred by will or by the laws of descent and distribution, the word "Participant" shall be deemed to include such person or persons. 7. Non-Transferability. The Options are not transferable by the Participant except to Permitted Transferees in accordance with Section 13(b) of the Plan. Except as otherwise provided herein, no assignment or transfer of the Options, or of the rights represented thereby, whether voluntary or involuntary, by operation of law or otherwise, shall vest in the assignee or transferee any interest or right herein whatsoever, but immediately upon such assignment or transfer the Options shall terminate and become of no further effect. 8. Rights as Shareholder. The Participant or a Permitted Transferee of the Options shall have no rights as a shareholder with respect to any share of Common Stock. 9. Covered by an Option until the Participant (or such Permitted Transferee, as applicable) shall have become the holder of record or the beneficial owner of such share of Common Stock, and no adjustment shall be made for dividends or distributions or other rights in respect of such share of Common Stock for which the record date is prior to the date upon which the Participant (or a Permitted Transferee, as applicable) shall become the holder of record or the beneficial owner thereof. 10. Notice. Every notice or other communication relating to this Option Agreement between the Company and the Participant shall be in writing, and shall be mailed to or delivered to the party for whom it is intended at such address as may from time to time be designated by such party in a notice mailed or delivered to the other party as herein provided; provided that, unless and until some other address be so designated, all notices or communications by the Participant to the Company shall be mailed or delivered to the Company at its principal executive office, to the attention of the Company's General Counsel, and all notices or communications by the Company to the Participant may be given to the Participant personally or may be mailed to the Participant at the Participant's last known address, as reflected in the Company's records. Notwithstanding the above, all notices and communications between the Participant and any third-party plan administrator shall be mailed, delivered, transmitted or sent in accordance with the procedures established by such third-party plan administrator and communicated to the Participant from time to time. 11. Right to Continued Service. Any questions as to whether and when there has been a Termination shall be determined in the sole discretion of the Company. This Option Agreement does not confer upon the Participant any right to continue as an employee or service provider to the Company. 12. Binding Effect. This Option Agreement shall be binding upon the heirs, executors, administrators and successors of the parties hereto. 13. Waiver and Amendments. Except as otherwise set forth in Section 12 of the Plan, any waiver, alteration, amendment or modification of any of the terms of this Option Agreement shall be valid only if made in writing and signed by the parties hereto; provided, however, that any such waiver, alteration, amendment or modification is consented to on the Company's behalf by the Committee. No waiver by either of the parties hereto of their rights hereunder shall be deemed to constitute a waiver with respect to any subsequent occurrences or transactions hereunder unless such waiver specifically states that it is to be construed as a continuing waiver. 14. Clawback / Forfeiture. Notwithstanding anything to the contrary contained herein or in the Plan, if the Participant has engaged in or engages in any Detrimental Activity, then the Committee may, in its sole discretion, take actions permitted under the Plan, including: (i) canceling the Options; or (ii) requiring that the Participant forfeit any gain realized on the exercise of the Options or the disposition of any shares of Common Stock received upon exercise of the Options, and repay such gain to the Company. In addition, if the Participant receives any amount in excess of what the Participant should have received under the terms of this Option Agreement for any reason (including without limitation by reason of a financial restatement, mistake in calculations or other administrative error), then the Participant shall be required to repay any such excess amount to the Company. Without limiting the foregoing, all Options shall be subject to any clawback or similar policy as permitted or mandated by applicable laws, rules, regulations or any Company policy as enacted, adopted or modified from time to time, including any recoupment policy adopted by the Company and, to the extent applicable, the Erroneously Awarded Compensation Recovery Policy (as may be amended from time to time) or any other Dodd-Frank clawback policy adopted by the Company. 15. Governing Law and Venue. This Option Agreement shall be construed and interpreted in accordance with the laws of the State of Delaware, without regard to the principles of conflicts of law thereof. Notwithstanding anything contained in this Option Agreement, the Grant Notice or the Plan to the contrary, if any suit or claim is instituted by the Participant or the Company relating to this Option Agreement, the Grant Notice or the Plan, the Participant hereby submits to the exclusive jurisdiction of and venue in the courts of Delaware, unless Participant has an agreement with the Company to arbitrate employment-related disputes, in which case any disputes relating to this Option Agreement, the Grant Notice, or the Plan will be resolved through arbitration. 16. Plan. The terms and provisions of the Plan are incorporated herein by reference. In the event of a conflict or inconsistency between the terms and provisions of the Plan and the provisions of this Option Agreement (including the Grant Notice), the Plan shall govern and control. 17. Restrictive Covenants. For US Participants (a) Consideration and Acceptance. Participant acknowledges and agrees that this Grant is expressly conditioned on Participant's acceptance of the terms and conditions of the Restrictive Covenant Agreement. Participant further acknowledges and agrees that by accepting this Grant, Participant is accepting and agreeing to all of the terms and conditions of the Restrictive Covenant Agreement, which includes, among other things and to the extent permissible under applicable law, non-competition, customer and employee non-solicitation, and non-disclosure provisions. (b) Consequences of Breach. Any breach of the Restrictive Covenant Agreement will constitute Detrimental Activity under the Plan. In the event of such breach, Participant shall immediately forfeit all unvested Options without payment. For any Options that have vested during the 12 month period prior to the breach and after such breach, Participant shall repay or otherwise reimburse the Company, immediately upon demand, an amount in cash or Avantor, Inc., common stock equal to (i) the number of shares acquired by exercising such Options multiplied by the difference between the Fair Market Value and the Exercise Price on the date the Options were exercised and (ii) any dividends paid on those shares. A Participant understands and agrees that the relief provided in this Section 17(b) does not constitute the Company's exclusive remedy for violations of this Section 17 or the Restrictive Covenant Agreement because they do not address the irreparable harm the Company will suffer from such violations. Therefore, the Company may seek any additional legal or equitable remedy, including injunctive relief, for such violations. For Non-US Participants The Participant acknowledges and agrees that the Participant is, or, unless otherwise determined by the Company, will become, party to an agreement with the Company which contains restrictive covenant obligations with respect to the Participant. The Participant hereby acknowledges and reaffirms the Participant's obligations under any such restrictive covenant agreement and hereby acknowledges and agrees that any breach of a restrictive covenant agreement will constitute Detrimental Activity under the Plan. 18. Exhibit for Non-US Participants. If the Participant is residing and/or working outside of the United States, the Option shall be subject to any special provisions set forth in Exhibit A to this Option Agreement. If the Participant becomes based outside the United States during the life of the Option, the special provisions set forth in Exhibit A shall apply to the Participant to the extent that the Company determines that the applications of such provisions is necessary or advisable for legal or administrative reasons. Moreover, if the Participant relocates between any of the countries included on Exhibit A, the special provisions set forth in Exhibit A for such country shall apply to the Participant to the extent that the Company determines that the applications of such provisions is necessary or advisable for legal or administrative reasons. Exhibit A constitutes part of this Option Agreement. 19. Data Privacy Acknowledgment. By electing to participate in the Plan via the Company's acceptance procedures, the Participant is declaring that he or she agrees with the data processing practices described herein and consents to the collection, processing and use of Personal Data (as defined below) by the Company and the transfer of Personal Data to the recipients mentioned herein, including recipients located in countries which do not adduce an adequate level of protection from a European (or other) data protection law perspective, for the purposes described herein. (a) Declaration of Consent. The Participant understands that he or she needs to review the following information about the

processing of his or her personal data by or on behalf of the Company, the Participantâ™s employer or contracting party (the âœEmployerâ) and/or any Subsidiary as described in this Option Agreement and any other Plan materials (the âœPersonal Dataâ) and declare his or her consent. About the processing of the Participantâ™s Personal Data in connection with the Plan and this Option Agreement, the Participant understands that the Company is the controller of his or her Personal Data. (b) Data Processing and Legal Basis. The Company collects, uses and otherwise processes Personal Data about the Participant for the purposes of allocating shares of Common Stock and implementing, administering and managing the Plan. The Participant understands that this Personal Data may include, without limitation, his or her name, home address and telephone number, email address, date of birth, social insurance number, passport Ä 9 number or other identification number (e.g., resident registration number), salary, nationality, job title, any shares of stock or directorships held in the Company, details of all Options or any other entitlement to shares of stock or equivalent benefits awarded, cancelled, exercised, vested, unvested or outstanding in the Participantâ™s favor. The legal basis for the processing of the Participantâ™s Personal Data, where required, will be his or her consent. (c) Stock Plan Administration Service Providers. The Participant understands that the Company may transfer his or her Personal Data, or parts thereof, to a third-party stock plan administrator (and its affiliated companies, as applicable) based in the United States which will assist the Company with the implementation, administration and management of the Plan. In the future, the Company may select a different service provider and share the Participantâ™s Personal Data with such different service provider that serves the Company in a similar manner. The Participant understands and acknowledges that the Companyâ™s service provider will open an account for him or her to receive and trade shares of Common Stock acquired under the Plan and that he or she will be asked to agree on separate terms and data processing practices with the service provider, which is a condition of the Participantâ™s ability to participate in the Plan. (d) International Data Transfers. The Participant understands that the Company and, as of the date hereof, any third parties assisting in the implementation, administration and management of the Plan, such as a third-party stock plan administrator, are based in the United States. The Participant understands and acknowledges that his or her country may have enacted data privacy laws that are different from the laws of the United States. For example, the European Commission has issued only a limited adequacy finding with respect to the United States that applies solely if and to the extent that companies self-certify and remain self-certified under the EU/U.S. Privacy Shield program. The Company currently participates in the EU/U.S. Privacy Shield Program. The Companyâ™s legal basis for the transfer of the Participantâ™s Personal Data is his or her consent. (e) Data Retention. The Participant understands that the Company will use his or her Personal Data only as long as is necessary to implement, administer and manage his or her participation in the Plan, or to comply with legal or regulatory obligations, including under tax and securities laws. In the latter case, the Participant understands and acknowledges that the Companyâ™s legal basis for the processing of his or her Personal Data would be compliance with the relevant laws or regulations. When the Company no longer needs the Participantâ™s Personal Data for any of the above purposes, the Participant understands the Company will remove it from its systems. (f) Voluntariness and Consequences of Denial/Withdrawal of Consent. The Participant understands that his or her participation in the Plan and his or her consent is purely voluntary. The Participant may deny or later withdraw his or her consent at any time, with future effect and for any or no reason. If the Participant denies or later withdraws his or her consent, the Company can no longer offer the Participant participation in the Plan or offer other equity awards to the Participant or administer or maintain such awards and the Participant would no longer be able to participate in the Plan. The Participant further understands that denial or withdrawal of his or her consent would not affect his or her status or salary as an employee or his Ä 10 or her career and that the Participant would merely forfeit the opportunities associated with the Plan. (g) Data Subject Rights. The Participant understands that data subject rights regarding the processing of Personal Data vary depending on the applicable law and that, depending on where the Participant is based and subject to the conditions set out in the applicable law, the Participant may have, without limitation, the rights to (i) inquire whether and what kind of Personal Data the Company holds about him or her and how it is processed, and to access or request copies of such Personal Data, (ii) request the correction or supplementation of Personal Data about him or her that is inaccurate, incomplete or out-of-date in light of the purposes underlying the processing, (iii) obtain the erasure of Personal Data no longer necessary for the purposes underlying the processing, processed based on withdrawn consent, processed for legitimate interests that, in the context of his or her objection, do not prove to be compelling, or processed in non-compliance with applicable legal requirements, (iv) request the Company to restrict the processing of his or her Personal Data in certain situations where the Participant feels its processing is inappropriate, (v) object, in certain circumstances, to the processing of Personal Data for legitimate interests, and to (vi) request portability of the Participantâ™s Personal Data that he or she has actively or passively provided to the Company (which does not include data derived or inferred from the collected data), where the processing of such Personal Data is based on consent or his or her employment and is carried out by automated means. In case of concerns, the Participant understands that he or she may also have the right to lodge a complaint with the competent local data protection authority. Further, to receive clarification of, or to exercise any of, the Participantâ™s rights, the Participant understands that he or she should contact his or her local human resources representative. (h) Alternate Basis and Additional Consents. Finally, the Participant understands that the Company may rely on a different basis for the collection, processing or transfer of Personal Data in the future and/or request that the Participant provide another data privacy consent. If applicable, the Participant agrees that upon request of the Company or the Employer, the Participant will provide an executed acknowledgment or data privacy consent form (or any other agreements or consents) that the Company and/or the Employer may deem necessary to obtain from him or her for the purpose of administering his or her participation in the Plan in compliance with the data privacy laws in his or her country, either now or in the future. The Participant understands and agrees that he or she will not be able to participate in the Plan if the Participant fails to provide any such consent or agreement requested by the Company and/or the Employer. 20. Acquired Rights. The Participant acknowledges and agrees that: (a) the Company may terminate or amend the Plan at any time; (b) the award of the Option made under this Agreement is completely independent of any other award or grant and is made at the sole discretion of the Company; (c) no past grants or awards (including, without limitation, the Option awarded hereunder) give the Participant any right to any grants or awards in the future whatsoever; and (d) any benefits granted under this Agreement are not part of the Participantâ™s ordinary salary, and shall not be considered as part of such salary in the event of severance, redundancy or resignation. A 11 21. Electronic Delivery and Acceptance. The Company may, in its sole discretion, decide to deliver any documents related to current or future participation in the Plan by electronic means. The Participant hereby consents to receive such documents by electronic delivery and agrees to participate in the Plan through an on-line or electronic system established and maintained by the Company or a third party designated by the Company. 22. Entire Agreement. This Option Agreement, the Grant Notice and the Plan constitute the entire agreement of the parties hereto in respect of the subject matter contained therein and supersede all prior agreements and understandings of the parties, oral and written, with respect to such subject matter. However, unless otherwise stated therein, the Restrictive Covenant Agreement will not be considered to supersede any prior non-competition, non- solicitation, or non-disclosure agreement between Participant and the Company, which will remain in effect, and be read in conjunction with the Restrictive Covenant Agreement and any future agreements on the same subject matter, so as to afford the Company the broadest protections allowed under applicable law. *** Ä 1 Exhibit A Additional Terms and Conditions Ä avantor-psgrantnotice20PERFORMANCE STOCK UNIT GRANT NOTICE UNDER THE AVANTOR, INC. 2019 EQUITY INCENTIVE PLAN (Employees) Avantor, Inc. (the âœCompanyâ), pursuant to its 2019 Equity Incentive Plan, as it may be amended and restated from time to time (the âœPlanâ), hereby grants to the Participant set forth below the number of performance-based Restricted Stock Units (âœPerformance Stock Unitsâ) set forth below. The Performance Stock Units are subject to all of the terms and conditions as set forth herein, in the Performance Stock Unit Agreement (attached hereto), any Exhibit attached thereto, and in the Plan, all of which are incorporated herein in their entirety. Capitalized terms not otherwise defined herein shall have the meaning set forth in the Plan. Participant: [Insert Participant Name] Grant Date: [Insert Grant Date] Performance Period: [Insert Performance Period] Target Number of Performance Stock Units: [Insert Target Number of Performance Units Granted] Vesting Schedule: The Performance Stock Units shall vest in accordance with Section 2 and Exhibit A. [Signature Page to PSU Agreement] AVANTOR, INC. By: Title: Ä [Signature Page to PSU Agreement] THE UNDERSIGNED PARTICIPANT ACKNOWLEDGES RECEIPT OF THIS PERFORMANCE STOCK UNIT GRANT NOTICE, THE PERFORMANCE STOCK UNIT AGREEMENT, ANY EXHIBIT ATTACHED THERETO AND THE PLAN, AND, AS AN EXPRESS CONDITION TO THE GRANT OF PERFORMANCE STOCK UNITS HEREUNDER, AGREES TO BE BOUND BY THE TERMS OF THIS PERFORMANCE STOCK UNIT GRANT NOTICE, THE PERFORMANCE STOCK UNIT AGREEMENT, ANY EXHIBIT ATTACHED THERETO AND THE PLAN. PARTICIPANT

1 To the extent that the Company has established, either itself or through a third-party plan administrator, the ability to accept this award electronically, such acceptance shall constitute the Participantâ™s signature hereto. Ä PERFORMANCE STOCK UNIT AGREEMENT UNDER THE AVANTOR, INC. 2019 EQUITY INCENTIVE PLAN (Employees) Pursuant to the Performance Stock Unit Grant Notice (the âœGrant Noticeâ) delivered to the Participant (as defined in the Grant Notice), and subject to the terms of this Performance Stock Unit Agreement (this âœPerformance Stock Unit Agreementâ) and the Avantor, Inc. 2019 Equity Incentive Plan, as it may be amended and restated from time to time (the âœPlanâ), Avantor, Inc. (the âœCompanyâ) and the Participant agree as follows. Capitalized terms not otherwise defined herein shall have the same meaning as set forth in the Plan. 1. Grant of Performance Stock Units. Subject to the terms and conditions set forth herein and in the Plan, the Company hereby grants to the Participant the number of performance-based Restricted Stock Units (the âœPerformance Stock Unitsâ) provided in the Grant Notice (with each Performance Stock Unit representing an unfunded, unsecured right to receive one share of Common Stock, subject to the terms set forth herein, including Exhibit A, attached hereto). The Company may make one or more additional grants of Performance Stock Units to the Participant under this Performance Stock Unit Agreement by providing the Participant with a new Grant Notice, which may also include any terms and conditions differing from this Performance Stock Unit Agreement to the extent provided therein. The Company reserves all rights with respect to the granting of additional Performance Stock Units hereunder and makes no implied promise to grant additional Performance Stock Units. 2. Vesting. Subject to the conditions contained herein and in the Plan, the Performance Stock Units shall be subject to service vesting and performance vesting criteria. The first day following both the Service Vesting Date and the Final Determination Date (each as defined below) shall be referred to as the âœVesting Dateâ). (a) Subject to the Participant continuously providing services to the Company and complying with the terms and conditions hereof through (and including) December 31, 2026 (the âœService Vesting Dateâ), the number of Performance Stock Units for which performance has been met or is eligible to be met in accordance with Section 2(b) or Section 2(c) will vest with respect to the service vesting criteria on the day immediately following the Service Vesting Date (unless previously vested or cancelled in accordance with the provisions of the Plan or this Agreement). (b) Subject to the Participant continuously providing services to the Company and complying with the terms and conditions hereof through (and including) the Final Determination Date, a number of Performance Stock Units will vest with respect to the performance vesting criteria in accordance with Section 2(c) or Exhibit A (the âœPerformance Vested PSUsâ) on the date immediately following the Final Determination Date. (c) Notwithstanding the foregoing, in the event of a Change in Control, any Performance Stock Units that have not become Performance Vested PSUs in accordance with Section 2(b) and Exhibit A as of the consummation of the Change in Control will become Performance Vested PSUs as of the consummation of the Change in Control based on an assumed Ä achievement of all relevant performance metrics at the âœtargetâ level, provided that, in the event that the Committee has certified performance for any fiscal year that occurs prior to the Change in Control, performance for such completed fiscal year will be assessed based on actual performance levels for such completed fiscal years prior to the Change in Control. If Performance Vested PSUs are assumed by the acquiror in the Change in Control, they will remain subject to satisfaction of the service-vesting criteria on the Service Vesting Date; provided, however, that in the event the Participantâ™s employment terminates within two years following a Change in Control due to either (i) a termination by the Company without Cause or (ii) a resignation by the Participant with Good Reason, any Performance Vested PSUs that are not service vested will immediately become service vested as of the date of termination. If the Performance Vested PSUs are not assumed by the acquiror in the Change in Control, all Performance Vested PSUs that have not service vested in full in accordance with Section 2(a) as of the consummation of the Change in Control will become service vested in full upon the consummation of the Change in Control. (d) For purposes of Section 2(c), âœGood Reasonâ means: (i) a material diminution to the Participantâ™s base salary, bonus opportunity, authority, duties or responsibilities, (ii) the Company fails to make any compensatory payment to the Participant when due, which is required to be paid to the Participant pursuant to this Agreement or any other material agreement between the Participant and the Company, (iii) a relocation of the Participantâ™s principal place of employment to a location that is outside a 50 mile radius from the Participantâ™s principal place of employment immediately prior to the Change in Control, or (iv) any other action or inaction by the Company which constitutes a material breach of this Agreement or any other material agreement with the Company; provided that, in order for the Participantâ™s resignation for Good Reason to be effective, written notice of the occurrence of any event that constitutes Good Reason must be delivered by the Participant to the Company within 90 days after the Participant has actual knowledge of the occurrence of any such event and the occurrence of such event. 3. Settlement of Performance Stock Units. Subject to the Performance Stock Units vesting in accordance with Section 2 and the other terms and conditions of this Agreement, the Company will deliver to the Participant, without charge, as soon as reasonably practicable following the Vesting Date (but in no event later than March 15 of the year in which the Vesting Date occurs) one share of Common Stock (or, in the event of a Change in Control where Performance Stock Units are assumed by the acquiror, an equivalent amount in shares of the acquirorâ™s common stock) for each Performance Stock Unit (as adjusted under the Plan, if applicable) which becomes vested hereunder and such vested Performance Stock Unit shall be cancelled upon such delivery. The Company shall either (a) deliver, or cause to be delivered, to the Participant a certificate or certificates therefor, registered in the Participantâ™s name or (b) cause such shares of Common Stock (or corresponding acquiror shares, if applicable) to be credited to the Participantâ™s account at the third-party stock plan administrator. Notwithstanding anything in this Performance Stock Unit Agreement to the contrary, the Company shall have no obligation to issue or transfer any shares of Common Stock (or corresponding acquiror shares, as applicable) as contemplated by this Performance Stock Unit Agreement unless and until such issuance or transfer complies with all relevant provisions of law and the requirements of any stock exchange on which the Companyâ™s shares of Common Stock are listed for trading. 4. Treatment of Performance Stock Units Upon Termination. In addition to the terms set forth in Section 2(c), the provisions of Section 9(c)(ii) of the Plan are incorporated herein by reference and made a part hereof. Ä 5. Company: Participant. (a) The term âœCompanyâ as used in this Performance Stock Unit Agreement (including any Exhibit attached hereto) with reference to employment shall include the Company, its successors and any of their respective Subsidiaries. (b) Whenever the word âœParticipantâ is used in any provision of this Performance Stock Unit Agreement under circumstances where the provision should logically be construed to apply to the executors, the administrators, or the person or persons to whom the Performance Stock Units may be transferred by will or by the laws of descent and distribution, the word âœParticipantâ shall be deemed to include such person or persons. 6. Non-Transferability. The Performance Stock Units are not transferable by the Participant and no assignment or transfer of the Performance Stock Units, or of the rights represented thereby, whether voluntary or involuntary, by operation of law or otherwise, shall vest in the assignee or transferee any interest or right herein whatsoever, but immediately upon such assignment or transfer the Performance Stock Units shall terminate and become of no further effect. 7. Rights as Shareholder; Dividend Equivalents. The Participant shall have no rights as a shareholder with respect to any share of Common Stock underlying a Performance Stock Unit unless and until the Participant shall have become the holder of record or the beneficial owner of such share of Common Stock, and no adjustment shall be made for dividends or distributions or other rights in respect of such share of Common Stock for which the record date is prior to the date upon which the Participant shall become the holder of record or the beneficial owner thereof. The Performance Stock Units shall be entitled to be credited with dividend equivalent payments upon the payment by the Company of dividends on shares of Common Stock. Such dividend equivalents will be provided in shares of Common Stock having a Fair Market Value on the date that the Performance Stock Units are settled equal to the amount of such applicable dividends, and shall be payable at the same time as the Performance Stock Units are settled in accordance with Section 3 above. In the event that any Performance Stock Unit is forfeited by its terms, the Participant shall have no right to dividend equivalent payments in respect of such forfeited Performance Stock Units. 8. Tax Withholding. The provisions of Section 13(d) of the Plan are incorporated herein by reference and made a part hereof. 9. Section 409A. It is intended that the Performance Stock Units granted hereunder shall be exempt from Section 409A of the Code pursuant to the âœshort-term deferralâ rule applicable to such section, as set forth in the regulations or other guidance published by the Internal Revenue Service thereunder. 10. Notice. Every notice or other communication relating to this Performance Stock Unit Agreement between the Company and the Participant shall be in writing, and shall be mailed to or delivered to the party for whom it is intended at such address as may from time to time be designated by such party in a notice mailed or delivered to the other party as herein provided; provided that, unless and until some other address be so designated, all notices or communications by the Participant to the Company shall be mailed or delivered to the Company at its principal executive office, to the attention of the Companyâ™s General Counsel, and all notices Ä or

communications by the Company to the Participant may be given to the Participant personally or may be mailed to the Participant at the Participant's last known address, as reflected in the Company's records. Notwithstanding the above, all notices and communications between the Participant and any third-party plan administrator shall be mailed, delivered, transmitted or sent in accordance with the procedures established by such third-party plan administrator and communicated to the Participant from time to time. 11. No Right to Continued Service. Any questions as to whether and when there has been a Termination shall be determined in the sole discretion of the Company. This Performance Stock Unit Agreement does not confer upon the Participant any right to continue as an employee or service provider to the Company. 12. Binding Effect. This Performance Stock Unit Agreement shall be binding upon the heirs, executors, administrators and successors of the parties hereto. 13. Waiver and Amendments. Except as otherwise set forth in Section 12 of the Plan, any waiver, alteration, amendment or modification of any of the terms of this Performance Stock Unit Agreement shall be valid only if made in writing and signed by the parties hereto; provided, however, that any such waiver, alteration, amendment or modification is consented to on the Company's behalf by the Committee. No waiver by either of the parties hereto of their rights hereunder shall be deemed to constitute a waiver with respect to any subsequent occurrences or transactions hereunder unless such waiver specifically states that it is to be construed as a continuing waiver. 14. Clawback / Forfeiture. Notwithstanding anything to the contrary contained herein or in the Plan, if the Participant has engaged in or engages in any Detrimental Activity, then the Committee may, in its sole discretion, take actions permitted under the Plan, including: (i) canceling the Performance Stock Units; or (ii) requiring that the Participant forfeit any gain realized on the settlement of the Performance Stock Unit or the disposition of any shares of Common Stock received upon settlement of the Performance Stock Units, and repay such gain to the Company. In addition, if the Participant receives any amount in excess of what the Participant should have received under the terms of this Performance Stock Unit Agreement for any reason (including without limitation by reason of a financial restatement, mistake in calculations or other administrative error), then the Participant shall be required to repay any such excess amount to the Company. Without limiting the foregoing, all Performance Stock Units shall be subject to any clawback or similar policy as permitted or mandated by applicable laws, rules, regulations or any Company policy as enacted, adopted or modified from time to time, including any recoupment policy adopted by the Company and, to the extent applicable, the Erroneously Awarded Compensation Recovery Policy (as may be amended from time to time) or any other Dodd-Frank clawback policy adopted by the Company. 15. Governing Law and Venue. This Performance Stock Unit Agreement shall be construed and interpreted in accordance with the laws of the State of Delaware, without regard to the principles of conflicts of law thereof. Notwithstanding anything contained in this Performance Stock Unit Agreement, the Grant Notice or the Plan to the contrary, if any suit or claim is instituted by the Participant or the Company relating to this Performance Stock Unit Agreement, the Grant Notice or the Plan, the Participant hereby submits to the exclusive jurisdiction of and venue in the courts of Delaware, unless Participant has an agreement with the Company to arbitrate employment-related disputes, in which case any disputes relating to this A Performance Stock Unit Agreement, the Grant Notice, or the Plan will be resolved through arbitration. 16. Plan. The terms and provisions of the Plan are incorporated herein by reference. In the event of a conflict or inconsistency between the terms and provisions of the Plan and the provisions of this Performance Stock Unit Agreement (including the Grant Notice), the Plan shall govern and control. 17. Restrictive Covenants. For US Participants (a) Consideration and Acceptance. Participant acknowledges and agrees that this Grant is expressly conditioned on Participant's acceptance of the terms and conditions of the Restrictive Covenant Agreement. Participant further acknowledges and agrees that by accepting this Grant, Participant is accepting and agreeing to all of the terms and conditions of the Restrictive Covenant Agreement, which includes, among other things and to the extent permissible under applicable law, non-competition, customer and employee non-solicitation, and non-disclosure provisions. (b) Consequences of Breach. Any breach of the Restrictive Covenant Agreement will constitute Detrimental Activity under the Plan. In the event of such breach, Participant shall immediately forfeit all unvested Performance Stock Units without payment. For any Performance Stock Units that have vested during the 12 month period prior to the breach and after such breach, Participant shall repay or otherwise reimburse the Company, immediately upon demand, an amount in cash or Avantor, Inc., common stock equal to (i) the aggregate Fair Market Value of the shares of Stock underlying such Performance Stock Units on the date the Performance Stock Units became vested and (ii) any dividends paid on those shares. Participant understands and agrees that the relief provided in this Section 17(b) does not constitute the Company's exclusive remedy for violations of this Section 17 or the Restrictive Covenant Agreement because they do not address the irreparable harm the Company will suffer from such violations. Therefore, the Company may seek any additional legal or equitable remedy, including injunctive relief, for such violations. For Non-US Participants The Participant acknowledges and agrees that the Participant is, or, unless otherwise determined by the Company, will become, party to an agreement with the Company which contains restrictive covenant obligations with respect to the Participant. The Participant hereby acknowledges and reaffirms the Participant's obligations under any such restrictive covenant agreement and hereby acknowledges and agrees that any breach of a restrictive covenant agreement will constitute Detrimental Activity under the Plan. 18. Exhibit for Non-US Participants. If the Participant is residing and/or working outside of the United States, the Performance Stock Units shall be subject to any special provisions set forth in Exhibit B to this Performance Stock Unit Agreement. If the Participant becomes based outside the United States during the life of the Performance Stock Units, the special provisions set A forth in Exhibit B shall apply to the Participant to the extent that the Company determines that the applications of such provisions is necessary or advisable for legal or administrative reasons. Moreover, if the Participant relocates between any of the countries included on Exhibit B, the special provisions set forth in Exhibit B for such country shall apply to the Participant to the extent that the Company determines that the applications of such provisions is necessary or advisable for legal or administrative reasons. Exhibit B constitutes part of this Performance Stock Unit Agreement. 19. Data Privacy Acknowledgment. By electing to participate in the Plan via the Company's acceptance procedures, the Participant is declaring that he or she agrees with the data processing practices described herein and consents to the collection, processing and use of Personal Data (as defined below) by the Company and the transfer of Personal Data to the recipients mentioned herein, including recipients located in countries which do not adduce an adequate level of protection from a European (or other) data protection law perspective, for the purposes described herein. (a) Declaration of Consent. The Participant understands that he or she needs to review the following information about the processing of his or her personal data by or on behalf of the Company, the Participant's employer or contracting party (the "Employer") and/or any Subsidiary as described in this Performance Stock Unit Agreement and any other Plan materials (the "Personal Data") and declare his or her consent. About the processing of the Participant's Personal Data in connection with the Plan and this Performance Stock Unit Agreement, the Participant understands that the Company is the controller of his or her Personal Data. (b) Data Processing and Legal Basis. The Company collects, uses and otherwise processes Personal Data about the Participant for the purposes of allocating shares of Common Stock and implementing, administering and managing the Plan. The Participant understands that this Personal Data may include, without limitation, his or her name, home address and telephone number, email address, date of birth, social insurance number, passport number or other identification number (e.g., resident registration number), salary, nationality, job title, any shares of stock or directorships held in the Company, details of all Performance Stock Units or any other entitlement to shares of stock or equivalent benefits awarded, cancelled, exercised, vested, unvested or outstanding in the Participant's favor. The legal basis for the processing of the Participant's Personal Data, where required, will be his or her consent. (c) Stock Plan Administration Service Providers. The Participant understands that the Company may transfer his or her Personal Data, or parts thereof, to a third-party stock plan administrator (and its affiliated companies, as applicable) based in the United States which will assist the Company with the implementation, administration and management of the Plan. In the future, the Company may select a different service provider and share the Participant's Personal Data with such different service provider that serves the Company in a similar manner. The Participant understands and acknowledges that the Company's service provider will open an account for him or her to receive and trade shares of Common Stock acquired under the Plan and that he or she will be asked to agree on separate terms and data processing practices with the service provider, which is a condition of the Participant's ability to participate in the Plan. A (d) International Data Transfers. The Participant understands that the Company and, as of the date hereof, any third parties assisting in the implementation, administration and management of the Plan, such as a third-party stock plan administrator, are based in the United States. The Participant understands and acknowledges that his or her country may have enacted data privacy laws that are different from the laws of the United States. For example, the European Commission has issued only a limited adequacy finding with respect to the United States that applies solely if and to the extent that companies self-certify and remain self-certified under the EU/U.S. Privacy Shield program. The Company currently participates in the EU/U.S. Privacy Shield Program. The Company's legal basis for the transfer of the Participant's Personal Data is his or her consent. (e) Data Retention. The Participant understands that the Company will use his or her Personal Data only as long as is necessary to implement, administer and manage his or her participation in the Plan, or to comply with legal or regulatory obligations, including under tax and securities laws. In the latter case, the Participant understands and acknowledges that the Company's legal basis for the processing of his or her Personal Data would be compliance with the relevant laws or regulations. When the Company no longer needs the Participant's Personal Data for any of the above purposes, the Participant understands the Company will remove it from its systems. (f) Voluntariness and Consequences of Denial/Withdrawal of Consent. The Participant understands that his or her participation in the Plan and his or her consent is purely voluntary. The Participant may deny or later withdraw his or her consent at any time, with future effect and for any or no reason. If the Participant denies or later withdraws his or her consent, the Company can no longer offer the Participant participation in the Plan or offer other equity awards to the Participant or administer or maintain such awards and the Participant would no longer be able to participate in the Plan. The Participant further understands that denial or withdrawal of his or her consent would not affect his or her status or salary as an employee or his or her career and that the Participant would merely forfeit the opportunities associated with the Plan. (g) Data Subject Rights. The Participant understands that data subject rights regarding the processing of Personal Data vary depending on the applicable law and that, depending on where the Participant is based and subject to the conditions set out in the applicable law, the Participant may have, without limitation, the rights to (i) inquire whether and what kind of Personal Data the Company holds about him or her and how it is processed, and to access or request copies of such Personal Data, (ii) request the correction or supplementation of Personal Data about him or her that is inaccurate, incomplete or out-of-date in light of the purposes underlying the processing, (iii) obtain the erasure of Personal Data no longer necessary for the purposes underlying the processing, processed based on withdrawn consent, processed for legitimate interests that, in the context of his or her objection, do not prove to be compelling, or processed in non-compliance with applicable legal requirements, (iv) request the Company to restrict the processing of his or her Personal Data in certain situations where the Participant feels its processing is inappropriate, (v) object, in certain circumstances, to the processing of Personal Data for legitimate interests, and to (vi) request portability of the Participant's Personal Data that he or she has actively or passively provided to the Company (which does not include data derived or inferred from the collected data), where the processing of such Personal Data is based on consent or his or her employment and is carried out by automated means. In case of concerns, the Participant understands that he or she may also have the right to lodge a complaint with the A competent local data protection authority. Further, to receive clarification of, or to exercise any of, the Participant's rights, the Participant understands that he or she should contact his or her local human resources representative. (h) Alternate Basis and Additional Consents. Finally, the Participant understands that the Company may rely on a different basis for the collection, processing or transfer of Personal Data in the future and/or request that the Participant provide another data privacy consent. If applicable, the Participant agrees that upon request of the Company or the Employer, the Participant will provide an executed acknowledgment or data privacy consent form (or any other agreements or consents) that the Company and/or the Employer may deem necessary to obtain from him or her for the purpose of administering his or her participation in the Plan in compliance with the data privacy laws in his or her country, either now or in the future. The Participant understands and agrees that he or she will not be able to participate in the Plan if the Participant fails to provide any such consent or agreement requested by the Company and/or the Employer. 20. Acquired Rights. The Participant acknowledges and agrees that: (a) the Company may terminate or amend the Plan at any time; (b) the award of the Performance Stock Units made under this Performance Stock Unit Agreement is completely independent of any other award or grant and is made at the sole discretion of the Company; (c) no past grants or awards (including, without limitation, the Performance Stock Units awarded hereunder) give the Participant any right to any grants or awards in the future whatsoever; and (d) any benefits granted under this Agreement are not part of the Participant's ordinary salary, and shall not be considered as part of such salary in the event of severance, redundancy or resignation. 21. Electronic Delivery and Acceptance. The Company may, in its sole discretion, decide to deliver any documents related to current or future participation in the Plan by electronic means. The Participant hereby consents to receive such documents by electronic delivery and agrees to participate in the Plan through an on-line or electronic system established and maintained by the Company or a third party designated by the Company. 22. Entire Agreement. This Performance Stock Unit Agreement (including, without limitation, any Exhibit attached hereto), the Grant Notice and the Plan constitute the entire agreement of the parties hereto in respect of the subject matter contained herein and supersede all prior agreements and understandings of the parties, oral and written, with respect to such subject matter. However, unless otherwise stated therein, the Restrictive Covenant Agreement will not be considered to supersede any prior non-competition, non-solicitation, or non-disclosure agreement between Participant and the Company, which will remain in effect, and be read in conjunction with the Restrictive Covenant Agreement and any future agreements on the same subject matter, so as to afford the Company the broadest protections allowed under applicable law. *** A avantor-rsugrantnoticeglRESTRICTED STOCK UNIT GRANT NOTICE UNDER THE AVANTOR, INC. 2019 EQUITY INCENTIVE PLAN (Employees) Avantor, Inc. (the "Company"), pursuant to its 2019 Equity Incentive Plan, as it may be amended and restated from time to time (the "Plan"), hereby grants to the Participant set forth below the number of Restricted Stock Units set forth below. The Restricted Stock Units are subject to all of the terms and conditions as set forth herein, in the Restricted Stock Unit Agreement (attached hereto), any Exhibit attached thereto, and in the Plan, all of which are incorporated herein in their entirety. Capitalized terms not otherwise defined herein shall have the meaning set forth in the Plan. Participant: [Insert Participant Name] Grant Date: [Insert Grant Date] Vesting Start Date: [Insert Vesting Start Date] Number of Restricted Stock Units: [Insert Number of RSUs] Vesting Schedule: Provided that the Participant has not undergone a Termination prior to the time of each applicable vesting date (or event): [Insert Vesting Schedule] For US Participants: The award of Restricted Stock Units is expressly conditioned on your acceptance of the terms and conditions of the attached Restricted Stock Unit Agreement and Restrictive Covenant Agreement. You should carefully read the terms and conditions of both agreements. If you are not willing to agree to all of the terms contained in these Agreements, do not accept this Grant. If you accept this Grant, you are accepting and agreeing to all of the terms and conditions of the Restricted Stock Unit Agreement and the Restrictive Covenant Agreement, which includes, among other things and to the extent permissible under applicable law, non-competition, customer and employee non-solicitation, and non-disclosure provisions. Signature page on next page A [Signature Page to RSU Agreement] AVANTOR, INC. By: Title: THE UNDERSIGNED PARTICIPANT ACKNOWLEDGES RECEIPT OF THIS RESTRICTED STOCK UNIT GRANT NOTICE, THE RESTRICTED STOCK UNIT AGREEMENT, ANY EXHIBIT ATTACHED THERETO, AND THE PLAN (AND THE RESTRICTIVE COVENANT AGREEMENT IF A US PARTICIPANT), AND, AS AN EXPRESS CONDITION TO THE GRANT OF RESTRICTED STOCK UNITS HEREUNDER, AGREES TO BE BOUND BY THE TERMS OF THIS RESTRICTED STOCK UNIT GRANT NOTICE, THE RESTRICTED STOCK UNIT AGREEMENT, ANY EXHIBIT ATTACHED THERETO, THE PLAN, AND THE RESTRICTIVE COVENANT AGREEMENT. PARTICIPANT1 1 To the extent that the Company has established, either itself or through a third-party plan administrator, the ability to accept this award electronically, such acceptance shall constitute the Participant's signature hereto. A 3 RESTRICTED STOCK UNIT AGREEMENT UNDER THE AVANTOR, INC. 2019 EQUITY INCENTIVE PLAN (Employees) Pursuant to the Restricted Stock Unit Grant Notice (the "Grant Notice"), delivered to the Participant (as defined in the Grant Notice), and subject to the terms of this Restricted Stock Unit Agreement (this "Restricted Stock Unit Agreement"), the Avantor, Inc. 2019 Equity Incentive Plan, as it may be amended and restated from time to time (the "Plan"), and the Restrictive Covenant Agreement attached hereto (the "Restrictive Covenant Agreement"), Avantor, Inc. (the "Company") and the Participant agree as follows. Capitalized terms not otherwise defined herein shall have the same meaning as set forth in the Plan. 1. Grant of Restricted Stock Units. Subject to the terms and conditions set forth herein and in the Plan, the Company hereby grants to the Participant the number of Restricted Stock Units provided in the Grant Notice (with each Restricted Stock Unit representing an unfunded, unsecured right to receive one share of Common Stock). The Company may make one or more additional grants of Restricted Stock Units to the Participant under this Restricted Stock Unit Agreement by providing the Participant with a new Grant Notice, which may also include any terms and conditions differing from this Restricted Stock Unit Agreement to the extent provided therein. The Company reserves all rights with respect to the granting of additional Restricted Stock Units hereunder and makes no implied promise to grant additional Restricted Stock Units. 2. Vesting. (a) Subject to the conditions contained herein and in the Plan, the Restricted Stock Units shall vest as provided in the Grant Notice. (b) Notwithstanding the foregoing, in the event of a Change in Control, any unvested Restricted Stock Units that are assumed by the acquiror in the Change in Control will remain outstanding and

subject to vesting; provided, however, that in the event the Participant's employment terminates within two years following a Change in Control due to either (i) a termination by the Company without Cause or (ii) a resignation by the Participant with Good Reason, any unvested Restricted Stock Units will immediately vest as of the date of termination. If the Restricted Stock Units are not assumed by the acquiror in the Change in Control, all unvested Restricted Stock Units will become vested in full upon the consummation of the Change in Control. (c) For purposes of Section 2(b), "Good Reason" means: (i) a material diminution to the Participant's base salary, bonus opportunity, authority, duties or responsibilities, (ii) the Company fails to make any compensatory payment to the Participant when due, which is required to be paid to the Participant pursuant to this Agreement or any other material agreement between the Participant and the Company, (iii) a relocation of the Participant's principal place of employment to a location that is outside a 50 mile radius from the Participant's principal place of A 4 employment immediately prior to the Change in Control, or (iv) any other action or inaction by the Company which constitutes a material breach of this Agreement or any other material agreement with the Company; provided that, in order for the Participant's resignation for Good Reason to be effective, written notice of the occurrence of any event that constitutes Good Reason must be delivered by the Participant to the Company within 90 days after the Participant has actual knowledge of the occurrence of any such event and the occurrence of such event. 3. Settlement of Restricted Stock Units. Subject to the Restricted Stock Units vesting in accordance with Section 2 and the other terms and conditions of this Agreement, the Company will deliver to the Participant, without charge, as soon as reasonably practicable following the applicable vesting date (but in no event later than March 15 of the year following the year in which the Restricted Stock Units become vested), one share of Common Stock for each Restricted Stock Unit (as adjusted under the Plan, as applicable) which becomes vested hereunder and such vested Restricted Stock Unit shall be cancelled upon such delivery. The Company shall either (a) deliver, or cause to be delivered, to the Participant a certificate or certificates therefor, registered in the Participant's name or (b) cause such shares of Common Stock (or corresponding acquiror shares, as applicable) to be credited to the Participant's account at the third party stock plan administrator. Notwithstanding anything in this Restricted Stock Unit Agreement to the contrary, the Company shall have no obligation to issue or transfer any shares of Common Stock (or corresponding acquiror shares, as applicable) as contemplated by this Restricted Stock Unit Agreement unless and until such issuance or transfer complies with all relevant provisions of law and the requirements of any stock exchange on which the Company's shares of Common Stock are listed for trading. 4. Treatment of Restricted Stock Units Upon Termination. In addition to the terms set forth in Section 2(b), the provisions of Section 9(c)(ii) of the Plan are incorporated herein by reference and made a part hereof. 5. Company; Participant. (a) The term "Company" as used in this Restricted Stock Unit Agreement (including any Exhibit attached hereto) with reference to employment shall include the Company, its successors and any of their respective Subsidiaries. (b) Whenever the word "Participant" is used in any provision of this Restricted Stock Unit Agreement under circumstances where the provision should logically be construed to apply to the executors, the administrators, or the person or persons to whom the Restricted Stock Units may be transferred by will or by the laws of descent and distribution, the word "Participant" shall be deemed to include such person or persons. 6. Non-Transferability. The Restricted Stock Units are not transferable by the Participant and no assignment or transfer of the Restricted Stock Units, or of the rights represented thereby, whether voluntary or involuntary, by operation of law or otherwise, shall vest in the assignee or transferee any interest or right herein whatsoever, but immediately upon such assignment or transfer the Restricted Stock Units shall terminate and become of no further effect. A 7. Rights as Shareholder; Dividend Equivalents. The Participant shall have no rights as a shareholder with respect to any share of Common Stock underlying a Restricted Stock Unit unless and until the Participant shall have become the holder of record or the beneficial owner of such share of Common Stock, and no adjustment shall be made for dividends or distributions or other rights in respect of such share of Common Stock for which the record date is prior to the date upon which the Participant shall become the holder of record or the beneficial owner thereof. The Restricted Stock Units shall be entitled to be credited with dividend equivalent payments upon the payment by the Company of dividends on shares of Common Stock. Such dividend equivalents will be provided in shares of Common Stock having a Fair Market Value on the date that the Restricted Stock Units are settled equal to the amount of such applicable dividends, and shall be payable at the same time as the Restricted Stock Units are settled in accordance with Section 3 above. In the event that any Restricted Stock Unit is forfeited by its terms, the Participant shall have no right to dividend equivalent payments in respect of such forfeited Restricted Stock Units. 8. Tax Withholding. The provisions of Section 13(d) of the Plan are incorporated herein by reference and made a part hereof. 9. Section 409A. It is intended that the Restricted Stock Units granted hereunder shall be exempt from Section 409A of the Code pursuant to the "short-term deferral" rule applicable to such section, as set forth in the regulations or other guidance published by the Internal Revenue Service thereunder. 10. Notice. Every notice or other communication relating to this Restricted Stock Unit Agreement between the Company and the Participant shall be in writing, and shall be mailed to or delivered to the party for whom it is intended at such address as may from time to time be designated by such party in a notice mailed or delivered to the other party as herein provided; provided that, unless and until some other address be so designated, all notices or communications by the Participant to the Company shall be mailed or delivered to the Company at its principal executive office, to the attention of the Company's General Counsel, and all notices or communications by the Company to the Participant may be given to the Participant personally or may be mailed to the Participant at the Participant's last known address, as reflected in the Company's records. Notwithstanding the above, all notices and communications between the Participant and any third-party plan administrator shall be mailed, delivered, transmitted or sent in accordance with the procedures established by such third-party plan administrator and communicated to the Participant from time to time. 11. No Right to Continued Service. Any questions as to whether and when there has been a Termination shall be determined in the sole discretion of the Company. This Restricted Stock Unit Agreement does not confer upon the Participant any right to continue as an employee or service provider to the Company. 12. Binding Effect. This Restricted Stock Unit Agreement shall be binding upon the heirs, executors, administrators and successors of the parties hereto. 13. Waiver and Amendments. Except as otherwise set forth in Section 12 of the Plan, any waiver, alteration, amendment or modification of any of the terms of this Restricted Stock Unit Agreement shall be valid only if made in writing and signed by the parties hereto; provided, however, that any such waiver, alteration, amendment or modification is consented to on the Company's behalf by the Committee. No waiver by either of the parties hereto of their rights hereunder shall be deemed to constitute a waiver with respect to any subsequent occurrences or transactions hereunder unless such waiver specifically states that it is to be construed as a continuing waiver. 14. Clawback / Forfeiture. Notwithstanding anything to the contrary contained herein or in the Plan, if the Participant has engaged in or engages in any Detrimental Activity, then the Committee may, in its sole discretion, take actions permitted under the Plan, including: (i) canceling the Restricted Stock Units; or (ii) requiring that the Participant forfeit any gain realized on the settlement of the Restricted Stock Unit or the disposition of any shares of Common Stock received upon settlement of the Restricted Stock Units, and repay such gain to the Company. In addition, if the Participant receives any amount in excess of what the Participant should have received under the terms of this Restricted Stock Unit Agreement for any reason (including without limitation by reason of a financial restatement, mistake in calculations or other administrative error), then the Participant shall be required to repay any such excess amount to the Company. Without limiting the foregoing, all Restricted Stock Units shall be subject to any clawback or similar policy as permitted or mandated by applicable laws, rules, regulations or any Company policy as enacted, adopted or modified from time to time, including any recoupment policy adopted by the Company and, to the extent applicable, the Erroneously Awarded Compensation Recovery Policy (as may be amended from time to time) or any other Dodd-Frank clawback policy adopted by the Company. 15. Governing Law and Venue. This Restricted Stock Unit Agreement shall be construed and interpreted in accordance with the laws of the State of Delaware, without regard to the principles of conflicts of law thereof. Notwithstanding anything contained in this Restricted Stock Unit Agreement, the Grant Notice or the Plan to the contrary, if any suit or claim is instituted by the Participant or the Company relating to this Restricted Stock Unit Agreement, the Grant Notice or the Plan, the Participant hereby submits to the exclusive jurisdiction of and venue in the courts of Delaware, unless Participant has an agreement with the Company to arbitrate employment-related disputes, in which case any disputes relating to this Restricted Stock Unit Agreement, the Grant Notice, or the Plan will be resolved through arbitration. 16. Plan. The terms and provisions of the Plan are incorporated herein by reference. In the event of a conflict or inconsistency between the terms and provisions of the Plan and the provisions of this Restricted Stock Unit Agreement (including the Grant Notice), the Plan shall govern and control. 17. Restrictive Covenant Agreement. For US Participants (a) Consideration and Acceptance. Participant acknowledges and agrees that this Grant is expressly conditioned on Participant's acceptance of the terms and conditions of the Restrictive Covenant Agreement. A 7 Participant further acknowledges and agrees that by accepting this Grant, Participant is accepting and agreeing to all of the terms and conditions of the Restrictive Covenant Agreement, which includes, among other things and to the extent permissible under applicable law, non-competition, customer and employee non-solicitation, and non-disclosure provisions. (b) Consequences of Breach. Any breach of the Restrictive Covenant Agreement will constitute Detrimental Activity under the Plan. In the event of such breach, Participant shall immediately forfeit all unvested Restricted Stock Units without payment. For any Restricted Stock Units that have vested during the 12 month period prior to the breach and after such breach, Participant shall repay or otherwise reimburse the Company, immediately upon demand, an amount in cash or Avantor, Inc., common stock equal to (i) the aggregate Fair Market Value of the shares of Stock underlying such Restricted Stock Units on the date the Restricted Stock Units became vested and (ii) any dividends paid on those shares. Participant understands and agrees that the relief provided in this Section 17(b) does not constitute the Company's exclusive remedy for violations of this Section 17 or the Restrictive Covenant Agreement because they do not address the irreparable harm the Company will suffer from such violations. Therefore, the Company may seek any additional legal or equitable remedy, including injunctive relief, for such violations. For Non-US Participants The Participant acknowledges and agrees that the Participant is, or, unless otherwise determined by the Company, will become, party to an agreement with the Company which contains restrictive covenant obligations with respect to the Participant. The Participant hereby acknowledges and reaffirms the Participant's obligations under any such restrictive covenant agreement and hereby acknowledges and agrees that any breach of a restrictive covenant agreement will constitute Detrimental Activity under the Plan. 18. Exhibit for Non-US Participants. If the Participant is residing and/or working outside of the United States, the Restricted Stock Units shall be subject to any special provisions set forth in Exhibit A to this Restricted Stock Unit Agreement. If the Participant becomes based outside the United States during the life of the Restricted Stock Units, the special provisions set forth in Exhibit A shall apply to the Participant to the extent that the Company determines that the applications of such provisions is necessary or advisable for legal or administrative reasons. Moreover, if the Participant relocates between any of the countries included on Exhibit A, the special provisions set forth in Exhibit A for such country shall apply to the Participant to the extent that the Company determines that the applications of such provisions is necessary or advisable for legal or administrative reasons. Exhibit A constitutes part of this Restricted Stock Unit Agreement. 19. Data Privacy Acknowledgment. By electing to participate in the Plan via the Company's acceptance procedures, the Participant is declaring that he or she agrees with the data processing practices described herein and consents to the collection, processing and use of Personal Data (as defined below) by the Company and the transfer of Personal Data to the recipients mentioned herein, including recipients located in countries which do not adduce an adequate level of protection from a European (or other) data protection law perspective, for the purposes described herein. (a) Declaration of Consent. The Participant understands that he or she needs to review the following information about the processing of his or her personal data by or on behalf of the Company, the Participant's employer or contracting party (the "Employer") and/or any Subsidiary as described in this Restricted Stock Unit Agreement and any other Plan materials (the "Personal Data") and declare his or her consent. About the processing of the Participant's Personal Data in connection with the Plan and this Restricted Stock Unit Agreement, the Participant understands that the Company is the controller of his or her Personal Data. (b) Data Processing and Legal Basis. The Company collects, uses and otherwise processes Personal Data about the Participant for the purposes of allocating shares of Common Stock and implementing, administering and managing the Plan. The Participant understands that this Personal Data may include, without limitation, his or her name, home address and telephone number, email address, date of birth, social insurance number, passport number or other identification number (e.g., resident registration number), salary, nationality, job title, any shares of stock or directorships held in the Company, details of all Restricted Stock Units or any other entitlement to shares of stock or equivalent benefits awarded, cancelled, exercised, vested, unvested or outstanding in the Participant's favor. The legal basis for the processing of the Participant's Personal Data, where required, will be his or her consent. (c) Stock Plan Administration Service Providers. The Participant understands that the Company may transfer his or her Personal Data, or parts thereof, to a third-party stock plan administrator (and its affiliated companies, as applicable) based in the United States which will assist the Company with the implementation, administration and management of the Plan. In the future, the Company may select a different service provider and share the Participant's Personal Data with such different service provider that serves the Company in a similar manner. The Participant understands and acknowledges that the Company's service provider will open an account for him or her to receive and trade shares of Common Stock acquired under the Plan and that he or she will be asked to agree on separate terms and data processing practices with the service provider, which is a condition of the Participant's ability to participate in the Plan. (d) International Data Transfers. The Participant understands that the Company and, as of the date hereof, any third parties assisting in the implementation, administration and management of the Plan, such as a third-party stock plan administrator, are based in the United States. The Participant understands and acknowledges that his or her country may have enacted data privacy laws that are different from the laws of the United States. For example, the European Commission has issued only a limited adequacy finding with respect to the United States that applies solely if and to the extent that companies self-certify and remain self-certified under the EU/U.S. Privacy Shield program. The Company currently participates in the EU/U.S. Privacy Shield Program. The Company's legal basis for the transfer of the Participant's Personal Data is his or her consent. (e) Data Retention. The Participant understands that the Company will use his or her Personal Data only as long as is necessary to implement, administer and manage his or her participation in the Plan, or to comply with legal or regulatory obligations, including under A 9 tax and securities laws. In the latter case, the Participant understands and acknowledges that the Company's legal basis for the processing of his or her Personal Data would be compliance with the relevant laws or regulations. When the Company no longer needs the Participant's Personal Data for any of the above purposes, the Participant understands the Company will remove it from its systems. (f) Voluntariness and Consequences of Denial/Withdrawal of Consent. The Participant understands that his or her participation in the Plan and his or her consent is purely voluntary. The Participant may deny or later withdraw his or her consent at any time, with future effect and for any or no reason. If the Participant denies or later withdraws his or her consent, the Company can no longer offer the Participant participation in the Plan or offer other equity awards to the Participant or administer or maintain such awards and the Participant would no longer be able to participate in the Plan. The Participant further understands that denial or withdrawal of his or her consent would not affect his or her status or salary as an employee or his or her career and that the Participant would merely forfeit the opportunities associated with the Plan. (g) Data Subject Rights. The Participant understands that data subject rights regarding the processing of Personal Data vary depending on the applicable law and that, depending on where the Participant is based and subject to the conditions set out in the applicable law, the Participant may have, without limitation, the rights to (i) inquire whether and what kind of Personal Data the Company holds about him or her and how it is processed, and to access or request copies of such Personal Data, (ii) request the correction or supplementation of Personal Data about him or her that is inaccurate, incomplete or out-of-date in light of the purposes underlying the processing, (iii) obtain the erasure of Personal Data no longer necessary for the purposes underlying the processing, processed based on withdrawn consent, processed for legitimate interests that, in the context of his or her objection, do not prove to be compelling, or processed in non-compliance with applicable legal requirements, (iv) request the Company to restrict the processing of his or her Personal Data in certain situations where the Participant feels its processing is inappropriate, (v) object, in certain circumstances, to the processing of Personal Data for legitimate interests, and to (vi) request portability of the Participant's Personal Data that he or she has actively or passively provided to the Company (which does not include data derived or inferred from the collected data), where the processing of such Personal Data is based on consent or his or her employment and is carried out by automated means. In case of concerns, the Participant understands that he or she may also have the right to lodge a complaint with the competent local data protection authority. Further, to receive clarification of, or to exercise any of, the Participant's rights, the Participant understands that he or she should contact his or her local human resources representative. (h) Alternate Basis and Additional Consents. Finally, the Participant understands that the Company may rely on a different basis for the collection, processing or transfer of Personal Data in the future and/or request that the Participant provide another data privacy consent. If applicable, the Participant agrees that upon request of the Company or the Employer, the Participant will provide an executed acknowledgment or data privacy consent form (or any other agreements or consents) that the Company and/or the Employer may deem necessary to obtain from him or her for the purpose of administering his or her participation in A 10 the Plan in compliance with the data privacy laws in his or her country, either now or in the future. The Participant understands and agrees that he or she will not be able to participate in the Plan if the Participant fails to provide any such consent or agreement requested by the Company and/or the Employer. 20. Acquired Rights. The Participant acknowledges

and agrees that: (a) the Company may terminate or amend the Plan at any time; (b) the award of the Restricted Stock Units made under this Restricted Stock Unit Agreement is completely independent of any other award or grant and is made at the sole discretion of the Company; (c) no past grants or awards (including, without limitation, the Restricted Stock Units awarded hereunder) give the Participant any right to any grants or awards in the future whatsoever; and (d) any benefits granted under this Agreement are not part of the Participant's ordinary salary, and shall not be considered as part of such salary in the event of severance, redundancy or resignation. 21. Electronic Delivery and Acceptance. The Company may, in its sole discretion, decide to deliver any documents related to current or future participation in the Plan by electronic means. The Participant hereby consents to receive such documents by electronic delivery and agrees to participate in the Plan through an on-line or electronic system established and maintained by the Company or a third party designated by the Company. 22. Entire Agreement. This Restricted Stock Unit Agreement, the Grant Notice and the Plan constitute the entire agreement of the parties hereto in respect of the subject matter contained herein and supersede all prior agreements and understandings of the parties, oral and written, with respect to such subject matter. However, unless otherwise stated therein, the Restrictive Covenant Agreement will not be considered to supersede any prior non-competition, non-solicitation, or non-disclosure agreement between Participant and the Company, which will remain in effect, and be read in conjunction with the Restrictive Covenant Agreement and any future agreements on the same subject matter, so as to afford the Company the broadest protections allowed under applicable law. *** A Exhibit A Additional Terms and Conditions A *avantorninsidertradingpol* Policy: Insider Trading Policy Policy Number: 04XX2019ITPv1 Policy Area: Governance Approved by: The Board of Directors Issue Date: April 25, 2019 Review/ revision date: February 24, 2023 Authored by: Legal Department This Insider Trading Policy (this "Policy") applies to all directors, officers, and employees (each of the foregoing, "Parent") and its subsidiaries (collectively with Parent, the "Company"), as well as those other persons described in the "Scope of Policy" section below. This Policy is designed to prevent insider trading or allegations of insider trading and to protect the Company's reputation for integrity and ethical conduct. It is your obligation to understand and comply with this Policy. Should you have any questions regarding this Policy, please contact the General Counsel, or his or her designee (any of them, the "Insider Trading Compliance Officer"), at 100 Matsford Road, Building One, Suite 200, Radnor, Pa 19087 (610) 386-1564 Adoption of Insider Trading Policy The board of directors of Parent has adopted this Policy for our insiders (as defined in the "Scope of Policy" section below) with respect to the trading of the Company's securities, as well as the securities of publicly traded companies with whom we have a business relationship. This Policy prohibits insiders from trading at any time while in possession of material nonpublic information regarding the Company or those publicly traded companies with whom we have a business relationship. Background Federal and state securities laws prohibit a person from buying or selling a company's securities on the basis of material information about that company that is not generally legally known or available to the public. Sharing such material nonpublic information with someone who trades the subject company's securities is also prohibited by these laws. Companies and their controlling persons are also subject to liability if they fail to take reasonable steps to prevent insider trading by company personnel. It is important that you understand the breadth of activities that constitute illegal insider trading and the consequences, which can be severe. The U.S. Securities and Exchange Commission (the "SEC") and the U.S. Department of Justice actively investigate and vigorously pursue insider trading violations. Increasingly sophisticated quantitative models for detecting hard-to-detect insider trading now exist and there is a focus on insider trading linked to cyber intrusions. Numerous cases have been successfully prosecuted against individuals with material nonpublic information, including instances of trading by family members and friends, and trading involving only a small number of shares, with significant monetary and/or criminal consequences. A Penalties for Noncompliance Civil and Criminal Penalties. Civil charges often result in disgorgement of material gains or losses avoided in addition to monetary penalties, and criminal charges may result in jail time. In addition, settlement agreements and convictions often stipulate that the accused may never again serve as a director or officer of a public company. Needless to say, a violation of law, or even an SEC investigation that does not result in prosecution, can tarnish one's reputation and irreparably damage a career. Controlling Person Liability. The United States federal securities laws provide that, in addition to sanctions against an individual who trades illegally, penalties may be assessed against what are known as "controlling persons" with respect to the violator. The term "controlling person" is not defined, but includes employers (i.e., the Company), its directors, officers and managerial and supervisory personnel. The concept is broader than what would normally be encompassed by a reporting chain. Individuals may be considered "controlling persons" with respect to any other individual whose behavior they have the power to influence. Liability can be imposed only if two conditions are met. First, it must be shown that the "controlling person" knew or recklessly disregarded the fact that a violation was likely. Second, it must be shown that the "controlling person" failed to take appropriate steps to prevent the violation from occurring. For this reason, the Company's supervisory personnel are directed to take appropriate steps to ensure that those they supervise, understand and comply with the requirements set forth in this Policy. Company Sanctions. Failure to comply with this Policy may also subject you to Company-imposed sanctions, including dismissal for cause, regardless of whether your failure to comply with this Policy results in a violation of law. Scope of Policy Persons Covered. This policy applies to all directors, officers, and employees of the Company. The same restrictions that apply to you apply to your family members who live with you, anyone else who lives in your household and any family members who do not live in your household but whose transactions in the Company's securities are directed by you or are subject to your influence or control, as well as trusts, corporations and other entities controlled by you or any of the foregoing family or household members (collectively with you, "insiders"). You are responsible for making sure that the trading of any security covered by this Policy by any of your family and household members complies with the terms of this Policy and, therefore, you should make them aware of the need to confer with you before they trade in the Company's securities. Companies Covered. The prohibition on insider trading in this Policy is not limited to trading in the Company's securities. It includes trading in the securities of other firms, such as customers or suppliers of the Company or firms with which the Company may be negotiating major transactions, such as an acquisition, investment or sale. Information that is not material to the Company may nevertheless be material to one of those other firms. Securities and Transactions Covered. This Policy applies to all transactions in the Company's securities, as well as the securities of publicly traded companies with whom we have a business relationship. This Policy also applies to certain transactions in mutual fund(s) and exchange traded fund(s) ("ETFs") that invest in the Company's securities. The term "securities" or "securities" is defined very broadly by the securities laws and includes stock (common and preferred), stock options, warrants, bonds, notes, debentures, convertible instruments, put or call options (i.e., exchange-traded options), derivative securities relating to the Company's stock, A whether or not issued by the Company, or other similar instruments. The term "trade" or "trading" means broadly any purchase, sale or other transaction to acquire, transfer or dispose of securities, including market option exercises, gifts or other contributions, exercises of stock options granted under the Company's stock plans, sales of stock acquired upon the exercise of options and vesting of restricted stock and other equity awards and trades made under an employee benefit plan such as a 401(k) plan. This Policy also applies to certain transactions under the Company's stock plans, as follows: A Stock Option Exercises. This Policy's restrictions generally do not apply to the exercise of stock options (including any net-settled stock option exercise); however, the sale of any stock acquired upon such exercise, including as part of a broker-assisted cashless exercise of an option or any other market sale for the purpose of generating the cash needed to pay the exercise price of an option or to satisfy tax withholding requirements, is subject to this Policy's restrictions A Tax Withholding. This Policy's restrictions generally do not apply to the withholding (whether mandated by the Company or pursuant to a tax withholding right) of shares of restricted stock, shares underlying restricted stock units or shares subject to an option to satisfy tax withholding requirements. Transactions Not Covered. The prohibition on trading in the Company's securities in this Policy does not apply to: A Investments in mutual fund(s) or ETFs that invest in a broad index or sector that also invest in Company Securities, are not prohibited, although the purchase, sale or hedging of mutual fund or ETF shares based on material nonpublic information about the Company would violate this Policy and implicate the securities laws. However, the SEC and other regulators have taken steps to stop market timing practices and punish people who have broken the insider trading laws through market timing. In light of this close scrutiny, frequent and excessive trading in mutual fund(s) and ETFs that invest in the Company's securities is prohibited, and short-term trading in-and-out of such funds, especially during periods surrounding the Company's scheduled release of financial results, is strongly discouraged. A The execution of transactions pursuant to a trading plan that complies with SEC Rule 10b5-1 and which has been approved by the Company. A Sales of the Company's securities as a selling stockholder in a registered public offering in accordance with applicable securities laws. A To the extent the Company offers its securities as an investment option in an employee stock purchase plan, the purchase of stock through the Company's employee stock purchase plan; however, elections to participate in such plan, the sale of any such stock and changing instructions regarding the level of withholding contributions which are used to purchase stock are subject to this Policy. A Transferring shares to an entity that does not involve a change in the beneficial ownership of shares (for example, to an inter vivos trust of which you are the sole beneficiary during your lifetime). Statement of Policy No Trading While in Possession of Material Nonpublic Information. No insider may trade in the Company's securities at any time when the insider has material nonpublic information about the Company. Similarly, no insider may trade securities of another company when the insider has material nonpublic information about that company, including, without limitation, any of our customers or suppliers, when that information was obtained as a result of the insider's employment or relationship with the Company. No Tipping. No insider may disclose ("tip") material nonpublic information to any other person (including family and household members and friends), and no insider may make trading recommendations on the basis of material nonpublic information. In addition, insiders should take care before trading on the recommendation of others to ensure that the recommendation is not the result of an illegal tip. A Disclosure of Nonpublic Information. No insider may comment on the Company's prospects, stock price movements or rumors of corporate developments (including discussions in internet chat rooms and on social media such as Twitter, Facebook and Instagram) that are of possible significance to the investing public unless it is part of the insider's job (such as Investor Relations), or the insider has been specifically authorized in accordance with the Company's Global Disclosure Policy. If an insider comments on the Company's prospects, stock price movements or rumors, or discloses material nonpublic information to a third party, he or she must contact the Insider Trading Compliance Officer immediately. No Exception for Hardship. The existence of a personal financial emergency does not excuse insiders from compliance with this Policy. Every insider has the individual responsibility to comply with this Policy. From time to time, insiders may have to forego a proposed transaction in the Company's securities even if the insider planned to make the transaction before learning of the material nonpublic information and even though the insider believes that he or she may suffer from an economic loss. Blackout and Pre-Clearance Procedures. To help prevent inadvertent violations of the federal securities laws and to avoid even the appearance of trading on the basis of material nonpublic information, Parent's board of directors has adopted an Addendum to Insider Trading Policy that applies to the Company's directors and officers who are subject to Section 16 of the Securities Exchange Act of 1934, as amended, and certain other designated individuals who have access to material nonpublic information about the Company. The Company will notify you if you are subject to this Addendum. The Addendum generally prohibits persons covered by it from trading in the Company's securities during quarterly blackout periods (beginning three weeks before the end of a quarter and ending after the end of the first full trading session following the release of the Company's earnings for that quarter), and during certain event-specific blackouts. Directors and officers of the Company and the other designated individuals subject to the Addendum must also pre-clear all trades in the Company's securities with the Insider Trading Compliance Officer. A Definition of Material Nonpublic Information. Note that material nonpublic information has two important elements: materiality and public availability. Material Information. It is not possible to define all categories of material information. However, information should be regarded as material if there is a reasonable likelihood that it would be considered important to an investor in deciding whether to buy, hold or sell a security. Similarly, any information that could reasonably be expected to affect the market price of the security is material. Common examples of material information are: A Financial and operating results A Projections of future financial performance or other earnings guidance (including missing guidance or consensus expectations of the investment community and confirming previously issued guidance on a later date) A Pending or proposed merger, acquisition or tender offer, acquisition or disposition of significant assets, or financing A Change in control or senior management A Financings and other events regarding the Company's securities (e.g., defaults on securities, calls of securities for redemption, share repurchase plans, stock splits, public or private sales of securities, changes in dividends and changes to the rights of securityholders) A Financial or liquidity problems, bankruptcy, corporate restructuring, or receivership A Actual or threatened significant litigation or governmental investigations or proceedings, or the resolution thereof A Significant developments with respect to products and services A Developments regarding the Company's material intellectual property A Significant developments regarding customers or suppliers, including the acquisition or loss of an important contract A Significant developments regarding customer research and development activities and drug trials A Significant write-downs of assets or additions to reserves for bad debts or contingent liabilities A Cyber intrusions or other data breaches A Change in or dispute with the Company's independent registered public accounting firm or notification that the Company may no longer rely on such firm's report The information may concern the Company or another company and may be positive or negative. Insiders should assume that information that would affect their consideration of whether to trade, or which might tend to influence the price of the security, is material. Because trading that receives scrutiny will be evaluated after the fact with the benefit of hindsight, questions concerning the materiality of particular information should be resolved in favor of materiality, and trading should be avoided. Insiders should keep in mind that the SEC's rules and regulations provide that the mere fact that a person is aware of the information is a bar to trading. It is no excuse that such person's reasons for trading were not based on the information. If you are unsure whether information is material or have any questions in this area, you should contact Insider Trading Compliance Officer before taking any action. Nonpublic Information. Nonpublic information is information that is not generally known or available to the public. For the purpose of this Policy, information is "nonpublic" until three criteria A have been satisfied: First, the information must have been widely disseminated to the public (such as by press release or other authorized public statement, including any filing with the SEC). Second, the information disseminated must be some form of "confidential" announcement. In other words, the fact that rumors, speculation, or statements attributed to unidentified sources are public is insufficient to be considered widely disseminated even when the information is accurate. Third, after the information has been disseminated, a period of time must pass sufficient for the information to be absorbed by the general public. As a general rule, information is considered nonpublic until after the first one full trading session has elapsed following the release of the information. For example, if the Company announces financial earnings before trading begins on a Tuesday, the first time you can buy or sell Company securities is the opening of the market on Wednesday (assuming you are not aware of other material nonpublic information at that time). However, if the Company announces earnings after trading begins on that Tuesday, the first time you can buy or sell Company securities is the opening of the market on Thursday. As with questions of materiality, if you are not sure whether information is considered public, you should either consult with the Insider Trading Compliance Officer or assume that the information is "nonpublic" and treat it as confidential. Short Sales and Other Speculative Transactions: Margin Accounts and Pledges. The Company considers it improper and inappropriate for those employed by or associated with the Company to engage in short term or speculative transactions in the Company's securities or in other transactions in the Company's securities that may lead to inadvertent violations of the insider trading laws. Accordingly, your trading in Company securities is subject to the following additional guidance. Short Sales. You may not engage in short sales of the Company's securities (sales of securities that are not then owned). Hedging. You are prohibited from engaging in any hedging or monetization transactions involving Company securities, including, such as prepaid variable forwards, equity swaps and collars. Publicly Traded Options. You may not engage in transactions in publicly traded options, such as puts, calls and other derivative securities related to the Company's securities, on an exchange or in any other organized market. Standing Orders. Standing orders should be used only for a very brief period of time. A standing order placed with a broker to sell or purchase stock at a specified price leaves you with no control over the timing of the transaction. A standing order transaction executed by the broker when you are aware of material nonpublic information may result in unlawful insider trading. Margin Accounts and Pledges. Securities held in a margin account or pledged as collateral for a loan may be sold without the borrower's consent by the broker if the borrower fails to meet a margin call or by the lender in foreclosure if the borrower defaults on the loan. Because a margin or foreclosure sale may occur when you are aware of material nonpublic information or otherwise are not permitted to trade in Company securities, you are prohibited from holding Company securities in a margin account or pledging Company securities as collateral for a loan without seeking pre-clearance from the Insider Trading Compliance Officer. An exception to this general prohibition may be granted where you wish to pledge Company securities as collateral for a loan (not including margin debt) and clearly demonstrate the financial capacity to repay the loan without resort to the pledged securities. If you wish to pledge Company securities as collateral for a loan, you must submit a request for approval to the Insider Trading Compliance Officer at least two weeks prior to the proposed execution of documents evidencing the proposed pledge. Post Termination Transactions This Policy continues to

apply to your transactions in Company securities even after you have terminated employment or other services to the Company. If you are aware of material nonpublic information when your employment or service relationship terminates, you may not trade in Company securities until that information has become public or is no longer material. Unauthorized Disclosure Maintaining the confidentiality of Company information is essential for competitive, security and other business reasons, as well as to comply with securities laws. You should treat all information you learn about the Company in connection with your employment as confidential and proprietary to the Company. Inadvertent disclosure of confidential or material nonpublic information may expose the Company and you to significant risk of investigation and litigation. The timing and nature of the Company's disclosure of material information to outsiders is subject to legal rules, the breach of which could result in substantial liability to you, the Company and its management and controlling stockholders, if any. Accordingly, it is important that responses to inquiries about the Company by the press, investment analysts or others in the financial community be made on the Company's behalf only through authorized individuals. You should not disclose any nonpublic information to any third party (including to family members), except when such disclosure is needed to carry out the Company's business and then only when you have no reason to believe that the recipient will misuse the information (for example, when such disclosures are authorized as necessary to negotiations with suppliers or customers or when such persons are subject to contractual confidentiality restrictions). When such information is disclosed, the recipient must be told that such information may be used only for the business purpose related to its disclosure and that the information must be held in confidence. You should disclose nonpublic information within the Company only in the ordinary course of business, for legitimate business purposes and in the absence of reasons to believe that the information will be misused or improperly disclosed by the recipient. Written information should be appropriately safeguarded and should not be left where it may be seen by persons not entitled to the information and nonpublic information should not be discussed with any person within the Company under circumstances where it could be overheard (such as in an elevator, reception area or cafeteria). In addition to other circumstances where it may be applicable, this confidentiality policy must be strictly adhered to in responding to inquiries about the Company that may be made by the press, securities analysts or other members of the financial community. It is important that responses to any such inquiries be made on behalf of the Company by a duly designated officer. Accordingly, you should not respond to any such inquiries and should refer all such inquiries to the Company's Investor Relations Officer or the General Counsel or their respective designees. A Personal Responsibility You should remember that the ultimate responsibility for adhering to this Policy and avoiding improper trading rests with you. If you violate this Policy, the Company may take disciplinary action, including dismissal for cause. Company Assistance Your compliance with this Policy is of the utmost importance both for you and for the Company. If you have any questions about this Policy or its application to any proposed transaction, you may obtain additional guidance from the Insider Trading Compliance Officer. Do not try to resolve uncertainties on your own, as the rules relating to insider trading are often complex, not always intuitive and carry severe consequences. * * * * A 1 Policy: Addendum to Insider Trading Policy Policy Number: 04252019AITPv1 Policy Area: Governance Approved by: The Board of Directors Issue Date: April 25, 2019 Review/revision date: February 24, 2023 Authored by: Legal Department To help prevent inadvertent violations of the federal securities laws and to avoid even the appearance of trading on inside information, the board of directors of Avantor, Inc. (the "Company") has adopted this Addendum to Insider Trading Policy. This addendum applies to Section 16 Persons, certain designated employees and consultants of the Company and its subsidiaries who have access to material nonpublic information about the Company, and family members of Section 16 Persons and such designated employees and consultants and trusts, corporations and other entities controlled by Section 16 Persons and such designated employees and consultants (collectively, "Covered Persons"). The positions of the Covered Persons subject to this Addendum are listed on the attached Schedule I. The Company may from time to time designate other positions that are subject to this Addendum and will amend Schedule I from time to time as necessary to reflect such changes. The term "Section 16 Person" means any of the Company's directors and officers (as defined in Rule 16a-1 under the Securities Exchange Act of 1934, as amended, (the "Exchange Act")). This Addendum is in addition to and supplements the Company's Insider Trading Policy. All terms used herein and not defined shall have the meanings ascribed to such term in the Insider Trading Policy. Pre-Clearance Procedures All Covered Persons are subject to the following pre-clearance procedures: Covered Persons may not trade in the Company's securities without first obtaining pre-clearance of the trade from the Company's General Counsel, or his or her designee (any of them, the "Insider Trading Compliance Officer"). A request for pre-clearance should be submitted in writing to the Insider Trading Compliance Officer at least two business days in advance of the proposed trade. The Insider Trading Compliance Officer is under no obligation to approve a trade submitted for pre-clearance, and may determine not to permit the trade. The Insider Trading Compliance Officer may not trade in Company securities unless the Chief Financial Officer of the Company, or, in his absence, his or her designee, has approved the trade in accordance with the procedures set forth in this Addendum. If pre-clearance is denied, that denial must be kept confidential by the person requesting pre-clearance. Unless otherwise provided, pre-clearance of a trade is valid for two business days. If the trade is not executed within that time, the person requesting pre-clearance must request pre-clearance again. A 2 Blackout Restrictions All Covered Persons are subject to the following blackout restrictions. Quarterly Blackout Periods. The Company's announcement of its quarterly financial results almost always has the potential to have a material effect on the market for the Company's securities. Therefore, to avoid even the appearance of trading on the basis of material nonpublic information, regardless of whether or not you are aware of any material nonpublic information, you may not engage in transactions in the Company's securities during the period beginning three weeks before the end of a quarter and ending after the end of the first full trading session following the release of the Company's earnings for that quarter. Persons subject to these quarterly blackout periods include the persons who hold the positions currently listed on Schedule I attached to this addendum and all other persons who are informed by the Insider Trading Compliance Officer that they are subject to the quarterly blackout periods. Interim Earnings Guidance and Event-Specific Blackouts. The Company may on occasion issue interim earnings guidance or other potentially material information by means of a press release, SEC filing or other means designed to achieve widespread dissemination of the information. Covered Persons should anticipate that trading will be prohibited while the Company is in the process of assembling the information to be released and until the information has been released and fully absorbed by the market. From time to time, an event may occur that is material to the Company and is known by only a few individuals. So long as the event remains material and nonpublic, the persons who are aware of the event may not trade in the Company's securities. The existence of an event-specific blackout will not be announced, other than to those who are aware of the event giving rise to the blackout. If, however, a person whose trades are subject to pre-clearance requests permission to trade in the Company's securities during an event-specific blackout, the Insider Trading Compliance Officer may inform the requesting person of the existence of a blackout period, without disclosing the reason for the blackout. Any person made aware of the existence of an event-specific blackout should not disclose the existence of the blackout to any other person. The failure of the Insider Trading Compliance Officer to designate a person as being subject to an event-specific blackout will not relieve that person of the obligation not to trade while aware of material nonpublic information. Directors and executive officers may also be subject to event-specific blackouts pursuant to the SEC's Regulation BTR, which prohibits certain sales and other transfers by insiders during certain pension plan blackout periods. Even outside of a blackout period, the provisions of the Company's Insider Trading Policy continue to apply, and at no time may a Covered Person trade in Company securities while aware of material nonpublic information about the Company. Although the Company may from time to time recommend that Covered Persons suspend trading outside of a blackout period because of developments known to the Company and not yet disclosed to the public, each person is individually responsible at all times for compliance with the prohibitions against insider trading. Trading in the Company's securities outside of a blackout period should not be considered a safe harbor, and all Covered Persons should use good judgment at all times. A 3 Exception for Approved 10b5-1 Plans Trades by Covered Persons in the Company's securities that are executed pursuant to an approved 10b5-1 plan are not subject to the prohibition on trading on the basis of material nonpublic information contained in the Insider Trading Policy or to the restrictions set forth above relating to pre-clearance procedures and blackout periods. Rule 10b5-1 provides an affirmative defense from insider trading liability under the federal securities laws for trading plans that meet certain requirements. In general, a 10b5-1 plan must be entered into when you are not aware of material nonpublic information. A 10b5-1 plan must be in writing and must be entered into in good faith and not as part of a scheme to evade insider trading liability and you must act in good faith with respect to any 10b5-1 plan for the duration of such plan. Once the plan is adopted, you must not exercise any influence over the amount of securities to be traded, the price at which they are to be traded or the date of the trade. The plan must either specify (including by formula) the amount, pricing and timing of transactions in advance or delegate discretion on those matters to an independent third party. Copies of the plan must be delivered to the Company's legal department prior to adoption. Frequent modifications or terminations of an existing 10b5-1 plan are strongly discouraged. The Company requires that all 10b5-1 plans adopted, amended or terminated by Covered Persons be approved in writing in advance by the Insider Trading Compliance Officer. Notwithstanding any pre-clearance of a 10b5-1 plan, the Company assumes no liability for the consequences of any transaction made pursuant to such plan. 10b5-1 plans generally may not be adopted during a blackout period and may only be adopted or amended at a time when the person adopting the plan is not aware of material nonpublic information. 10b5-1 plans must otherwise comply with the conditions and limitations set forth in Rule 10b5-1 of the Exchange Act, including but not limited to the length of time between plan commencement and the first trade thereunder (i.e., "cooling-off periods"), certification requirements and restrictions on overlapping plans. Once a 10b5-1 plan is approved, transactions made pursuant to the plan will not require additional approval, as long as the plan specifies the dates, prices and amounts (i.e., number of securities) of the contemplated transactions or establishes a formula for determining dates, prices and amounts. Transactions made under a 10b5-1 plan need to be promptly reported on Form 4. Section 16 Beneficial Ownership Forms and Liability Section 16(a) of the Exchange Act and the SEC's rules thereunder require all Section 16 Persons to report their initial beneficial ownership of equity securities of the Company and any subsequent changes in that ownership. A Form 3 must be filed within 10 days of becoming a Section 16 Person. This report discloses the reporting person's beneficial interest in Company securities and must be filed even if such person does not own any Company securities. A Form 4 must be filed to report acquisitions and dispositions of Company securities, including, but not limited to, (a) any open market or private sale or purchase of Company securities, (b) any grant, exercise or conversion of Company restricted stock or derivative securities (e.g., stock options), (c) any intra-plan transfers involving Company securities held under pension or retirement plans and (d) any gifts. A Form 4 must generally be filed within two business days of the date of execution of the transaction (not the settlement date or subsequent closing or delivery date). Consequently, it is important that Section 16 Persons ensure that their brokers and the plan administrator notify them promptly of any transaction. A Form 4 must also be filed after a 4 person ceases to be a Section 16 Person if there is a non-exempt, "opposite-way" transaction within six months of such person's last transaction while a Section 16 Person (e.g., an open market sale within six months of an open market purchase). A Form 5 must be filed within 45 days after the Company's fiscal year-end by every person who was a Section 16 Person at any time during the fiscal year to report (i) certain miscellaneous transactions or certain acquisitions of Company securities not otherwise required to be reported on a Form 4 and (ii) any transaction during the last fiscal year that was required to be reported on a Form 3 or Form 4 but was not reported. The regulations provide that, at the discretion of the Section 16 Person involved, transactions normally reported at fiscal year-end on a Form 5 may be reported earlier on a Form 4. If there are no reportable transactions, or if all reportable transactions have already been reported on a Form 3 or Form 4, a Form 5 is not required. The Company encourages the use of the Form 4 early reporting option to help prevent transactions from going unreported at fiscal year-end and to help eliminate the need to file a Form 5. Section 16 reports must be filed electronically with the SEC via EDGAR and promptly posted to the Company's website. Under SEC rules, the preparation and filing of Section 16 reports is the sole responsibility of the reporting person. However, the Company endeavors to assist executive officers and directors in preparing and filing these forms. The Company can only facilitate compliance by executive officers and directors to the extent they provide the Company with the information required. The Company does not assume any legal responsibility in this regard. Under Section 16(b) of the Exchange Act, any "profitable" (broadly defined) realized by a reporting person on a "short-swing" transaction (i.e., a non-exempt purchase and sale, or sale and purchase, of the Company's equity securities within a period of less than six months) must be disgorged to the Company upon demand by the Company or a stockholder acting on the Company's behalf. Liability under Section 16(b) is imposed in a mechanical fashion without regard to intent. All that is necessary for a successful claim is to show that a reporting person realized profits on a short-swing transaction. When computing recoverable profits on multiple purchases and sales within a six-month period, the courts maximize the recovery by matching the lowest purchase price with the highest sale price, the next lowest purchase price with the next highest sale price, and so on. The use of this method makes it possible in some instances for the Company to recover profits under Section 16(b) even though the Section 16 Person sustained a net loss on the transactions. For example, a purchase at \$100, followed by a sale at \$40, followed by a purchase at \$20, results in a Section 16(b) gain of \$20. Note that the Section 16 beneficial ownership reporting requirements do not apply to all senior personnel of the Company. These requirements, as well as the "short-swing" profit disgorgement provisions, apply only to Section 16 Persons. Senior personnel with questions about their status for Section 16 reporting purposes should consult with the Insider Trading Compliance Officer. Post-Termination Transactions If you are aware of material nonpublic information when you terminate employment or services, you may not trade in the Company's securities until that information has become public or is no longer material. Unless notified otherwise by the Insider Trading Compliance Officer, you must comply with the pre-clearance requirements described in this Addendum for six months after the termination of your employment or other service or consulting relationship with the Company. Company Assistance A 5 Your compliance with this Addendum and the Company's Insider Trading Policy is of the utmost importance both for you and for the Company. If you have any questions about this addendum, the Insider Trading Policy or their application to any proposed transaction, you may obtain additional guidance from the Insider Trading Compliance Officer. Certification All Covered Persons must certify their understanding of, and intent to comply with, the Company's Insider Trading Policy and this addendum on the form attached to this Addendum. A AVANTOR, INC. ADDENDUM TO INSIDER TRADING POLICY CERTIFICATION To Avantor, Inc.: I, _____, have received and read a copy of the Avantor, Inc. Insider Trading Policy and the Addendum to Insider Trading Policy regarding pre-clearance procedures and blackout restrictions. I hereby agree to comply with the specific requirements of such policy and addendum in all respects. I understand that my failure to comply in all respects with such policy and addendum may be a basis for termination for cause of my employment or other service relationship with Avantor, Inc. and may be a basis for civil and criminal liability. Signature _____ Print Name Date A Schedule I Covered Persons [Maintained by Legal Department] A DocumentExhibit 21Subsidiaries of Avantor, Inc.as of DecemberA 31, 2024Jurisdiction of incorporationUnited States:Applied Silicone Company LLC California Morehouse Cowles LLC California STech NuSil LLC California Avantor Funding, Inc. Delaware Avantor Performance Materials International, LLC Delaware Jenkins (Scientific) LLC Delaware NuSil Acquisition Corp. Delaware NuSil Investments LLC Delaware NuSil Technology LLC Delaware Reliable Biopharmaceutical, LLC Delaware Vail Holdco Sub LLC Delaware VWR Corporation Delaware VWR Funding, Inc. Delaware VWR Global Holdings, Inc. Delaware VWR International, LLC Delaware VWR International Holdings, Inc. Delaware VWR Lux Holdco LLC Delaware VWR Management Services, LLC Delaware Avantor Receivables Funding, LLC Delaware Avantor Trading Services LP Delaware Avantor EU Trading Services LP Delaware GGC GP Curie Blocker Inc. Delaware Curie HoldCo Corp. Delaware Masterflex, LLC Delaware Avantor Fluid Handling, LLC Massachusetts Avantor Performance Materials, LLC New Jersey VWR Chemicals, LLC New York Puritan Products, Inc. Pennsylvania Other jurisdictions: Avantor Life Sciences Pty Ltd Australia Klen International (74) Pty Ltd Australia VWR International Holdings Pty Ltd Australia VWR International GmbH Austria VWR International SRL Barbados VWR International Europe BV Belgium VWR BRASIL PARTICIPAA-ES LTD TDA Brazil Avantor Services Canada Co. Canada Jurisdiction of incorporation Seastar Chemicals ULCCanada VWR International Co. Canada Avantor International Holdings LPCayman Islands Comercial y Servicios Anachemia Science Limitada Chile Avantor Life Science (Shanghai) Co. Ltd China Avantor Performance Materials Trading (Shanghai) Co. Ltd. China Avantor VWR (Shanghai) Co. Co. Ltd. China VWR International China Co., Ltd. China RIM Direct (China) Metal Works Company Ltd. China RIM Bio Co., Ltd. (China) China VWR International CR Limitada Costa Rica VWR International Limitada Costa Rica VWR International Europe Services s.r.o. Czech Republic VWR International s.r.o. Czech Republic VWR International A/S Denmark VWR International Oy Finland NuSil Technology Europe S.a.r.l. France VWR International S.A.S. France Clemens GmbH Germany Varietal Management Services GmbH Germany VWR International Mgmt Services GmbH & Co. KG Germany VWR International GmbH Germany VWR International Immobilien GmbH Germany VWR International Investors Europe GmbH Germany VWR International Lab Services GmbH Germany VWR International Verwaltung-GmbH Germany Ritter Beteiligungs GmbH Germany Ritter Objekt GmbH Germany Ritter GmbH Germany Adcatec GmbH Germany VWR International KFT. Hungary VWR Lab Products Private Limited India Avantor Performance Materials India Private Limited India Halmahera Ltd. Ireland VWR International Ltd. Ireland Ireland VWR International S.r.l. Italy Avantor Performance Materials Korea Limited Korea Avantor Performance Materials Holdings S.r.l. Luxembourg VWR International North America S.r.l. Luxembourg VWR International Europe S.r.l. Luxembourg Jurisdiction of incorporation VWR International South America S.r.l. Luxembourg Avantor Performance Materials Sdn. Bhd. Malaysia Basan Cleanroom

Malaysia Sdn. Bhd.MalaysiaAvantor Investment Holdings (Malta) LtdMaltaVWR Europe Services, LtdMauritiusVWR NA Services, LtdMauritiusAvantor Performance Materials S.A. de C.V.MexicoAvantor US Business Center, S. de R.L. de C.V.MexicoVWR International, S. de R.L de C.V.MexicoAvantor Holdings B.V.NetherlandsAvantor Fluid Handling B.V.NetherlandsVWR International B.V.NetherlandsVWR International (N. Ireland) Ltd.Northern IrelandVWR International ASNorwayAvantor Performance Materials Poland S.A.PolandLinares Investments Sp z.o.o.PolandVWR International Sp z.o.o.PolandVWR International Material de Laboratio, Sociedade Unipessoal, LdaPortugalVWR Advanced Instruments, LLCPuerto RicoVWR International Europe Services SRLRomaniaAvantor Holdings Pte Ltd.SingaporeVWR International Holdings CH Pte. Ltd.SingaporeVWR International Holdings G.P Pte. Ltd.SingaporeVWR International Holdings Pte. Ltd.SingaporeVWR Singapore Pte. Ltd.SingaporeAvantor Investment Holdings Pte. Ltd.SingaporeVWR International s.r.o.SlovakiaRitter d.o.o.SloveniaVWR International Eurolab, S.L.SpainVWR International ABSwedenVWR International GmbHSwitzerlandAvantor Trading Services GmbHSwitzerlandAvantor Performance Materials Taiwan Co Ltd.TaiwanVWR International FZ-LLCUnited Arab EmiratesAdvanced Chromatography Technologies Ltd.United KingdomHichrom LimitedUnited KingdomJencons (Scientific) Ltd.United KingdomVWR Holdco Ltd.United KingdomVWR International Ltd.United KingdomVWR Jencons USA, Ltd.United KingdomJurisdiction of incorporationVWR Lab Services Ltd.United KingdomAvantor Holdings Ltd.United KingdomDocumentExhibit 23CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRMWe consent to the incorporation by reference in Registration Statement No. 333-248127 on Form S-3 and Registration Statement Nos. 333-231561 and 333-234704 on Form S-8 of our reports dated February 7, 2025, relating to the financial statements of Avantor, Inc. and the effectiveness of Avantor, Inc.'s internal control over financial reporting appearing in this Annual Report on Form 10-K for the year ended December 31, 2024. /s/ Deloitte & Touche LLPPhiladelphia, PennsylvaniaFebruary 7, 2025DocumentExhibitA 31.1CERTIFICATION OF CHIEF EXECUTIVE OFFICER PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002I, Michael Stubblefield, certify that:1.I have reviewed this Annual Report on Form 10-K of Avantor, Inc.;2.Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;3.Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report.4.The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:a)Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;b)Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;c)Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; andd)Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and5.The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):a)All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; andb)Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.Date: February 7, 2025By:/s/ Michael StubblefieldTitle:President and Chief Executive Officer(Principal Executive Officer)DocumentExhibitA 31.2CERTIFICATION OF CHIEF FINANCIAL OFFICER PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002I, R. Brent Jones, certify that:1.I have reviewed this Annual Report on Form 10-K of Avantor, Inc.;2.Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;3.Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report.4.The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:a)Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;b)Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;c)Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; andd)Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and5.The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):a)All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; andb)Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.Date: February 7, 2025By:/s/ R. Brent JonesName:R. Brent JonesTitle:Executive Vice President and Chief Financial Officer(Principal Financial Officer)DocumentExhibitA 32.1Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002In connection with the Annual Report on Form 10-K of Avantor, Inc. (the "Company") for the year ended December 31, 2024, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Michael Stubblefield, President and Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. §1350, as adopted pursuant to §906 of the Sarbanes-Oxley Act of 2002, that to the best of my knowledge:(1)The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and(2)The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.Date: February 7, 2025By:/s/ Michael StubblefieldTitle:President and Chief Executive Officer(Principal Executive Officer)DocumentExhibitA 32.2Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002In connection with the Annual Report on Form 10-K of Avantor, Inc. (the "Company") for the year ended December 31, 2024, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, R. Brent Jones, Executive Vice President, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. §1350, as adopted pursuant to §906 of the Sarbanes-Oxley Act of 2002, that to the best of my knowledge:(1)The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and(2)The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.Date: February 7, 2025By:/s/ R. Brent JonesName:R. Brent JonesTitle:Executive Vice President and Chief Financial Officer(Principal Financial Officer)