

Dow, Sartorius and Südpack collaborate to support global supply of coronavirus vaccines

SUDPRCK MEDICA SARTORIUS

Essential products manufactured by Sartorius, using Südpack polymer films made from Dow resins, support safe and effective vaccine production for global vaccine supply

Switzerland – February 22, 2022 – Value chain partners Dow (NYSE: DOW), Sartorius and Südpack Medica, have come together to support the global coronavirus vaccination effort by manufacturing bioprocessing bags, which are an essential component for the safe production and transportation of coronavirus vaccines globally.

As the global fight against the pandemic continues, people around the world need access to vaccines produced efficiently and to rigorous safety standards. Dow, alongside Sartorius, a leading international partner of life science research and the biopharmaceutical industry, and packaging company Südpack, are each contributing innovative solutions and expertise in a collaborative value chain effort, to support the demands of the global vaccine supply and to ensure vaccines arrive to those in need quickly and safely.

Sterile bio-reactor bags with a capacity of up to 2.000 litres, made from multilayer films, can help to achieve outstanding speed, quality, and flexibility in the vaccine development process as well as in commercial manufacturing operations. They are engineered for highly efficient mixing and high oxygen transfer and ideal for mammalian cell culture – processes which demand a high cell density or are microcarrier based. Under precisely defined conditions in bio-reactors, for instance, cells produce the agent needed for the production of coronavirus vaccines.

The success of the collaboration between the partners is a stable, predictable process that delivers a safe, reliable biologic medicine for patients around the world. The 3D flexible bags are dedicated for sterile and ready to use solutions and designed for storage and shipping of large volume biopharmaceutical solutions. They provide a secure and convenient single-use solution for an in-process fluid handling, storage and shipping needs for all the process steps.

Sartorius' technology supports the production of current vaccines and emerging vaccine technologies. The bio-reactor bags and 3D bags it produces, are used by pharmaceutical companies to cultivate important vaccines, including the coronavirus vaccine. Südpack is one of the partners of Sartorius for this polymer film supply.

The high performance of Südpack's films is integral to support safe vaccine production. Importantly, the innovative technology and R&D processes as well as the hygiene and quality standards behind Südpack films, provide the essential flexibility to address - and speed to meet - the fast-changing requirements of the pharmaceutical industry and to respond to the pandemic relief effort. The films in the bio-reactors support the reproductive growth behaviour of the sensitive cell lines. Excellent cell viability and density reduces the risk of batch loss or inconsistencies and achieves a high product purity and improved productivity.

Thomas Freis, Managing Director Südpack Medica AG said: *"With our excellent film robustness it is possible to develop, control and scale-up the highly sensitive biopharma processes on a global level. These multilayer films have been a fundamental part of the value chain for the production of single use* Page 1 of 3

^{®TM} Trademark of The Dow Chemical Company ("Dow") or an affiliated company of Dow

bio-reactors and have therefore enabled the scalability and accelerated development of the mRNA technology. Thus, we at Südpack Medica are extremely proud to be an integral part of the global fight against the Covid-19 pandemic and are aware of our responsibility coming along with."

"Sartorius is part of the solution. Since we are helping our customers with our technologies to enable large-scale manufacture of vaccines, many of our products play an essential role in helping to overcome the pandemic. Therefore, it is crucial for our customers that we ensure our delivery capability. In this challenging situation, with supply chains temporarily under strain, we are particularly pleased to have reliable partners like DOW and Südpack Medica at our side", said Günther van de Rijt, Head of Procurement, Supply Network & Logistics BPS at Sartorius.

"At Dow, we are committed to doing what we can to support the global Covid-19 vaccination effort, and feel very proud that our resins, in collaboration with each level of the value chain, are supporting the development and roll out of vaccines across the world. It is an impressive collective effort, from the raw materials we are producing, right through to when the vaccines are administered – there are so many companies and individuals working hard behind the scenes to support the value chain at this critical time", said Abby Turner, global marketing director for Healthcare & Hygiene business at Dow.

###

About Südpack Medica

SÜDPACK Medica AG is headquartered in Baar (CH) and is one of the leading suppliers of sterile packaging solutions in Europe as well as a pioneering partner for the global medical, pharmaceutical and diagnostics industries. The company is part of the SÜDPACK company group and was founded in 1989. The core competency of SÜDPACK Medica is the development of plastic-based packaging solutions for sterile goods. The product and performance range of SÜDPACK Medica extends from standard solutions to tailor-made, customer-specific packaging concepts. It includes the production of coextruded flexible and rigid films, which are used as base and lidding films, and of pre-made bag solutions for a wide variety of products. SÜDPACK Medica also benefits from the SÜDPACK Group's long-standing leadership in technology and innovation in the coextrusion of polymer-based film solutions. The production of SÜDPACK Medica products is performed at four sites in France, Germany, Switzerland and the Netherlands. These sites are equipped with the latest plant technology and manufacture to the highest standards of quality and hygiene, including the capacity to operate under clean room conditions. For optimal support and collaboration with their customers around the world, SÜDPACK Medica relies on a specialist team working in quality, sales, development and application technology, one that has long-standing expertise in polymers and process engineering and in the market for sterile packaging. This makes SÜDPACK Medica a competent solutions partner for their customers when it comes to the implementation of packaging solutions, including those with the most demanding requirements. SÜDPACK is committed to sustainable development and fulfils its responsibility as an employer and towards society, the environment and its customers. With its own site for processing biopolymers and its own compounding facilities, the SÜDPACK Group is also among the trailblazers in the production of forward-looking, sustainable and recyclable packaging concepts. For more information, please visit <u>www.suedpack-medica.com</u> and follow us on LinkedIn.

About Südpack Group

SÜDPACK is a leading producer of high-tech films and packaging materials for food, non-food, medical and pharmaceutical applications, offering maximum product protection as well as optimized material efficiency and functionality. The privately-owned company is based in Ochsenhausen and was founded in 1964 by Alfred Remmele. Its production sites in Germany, France, Poland, Switzerland, the Netherlands, India and the United States are equipped with latest state-of-the-art technology and manufacture according to the most demanding standards, also including clean-room conditions. With its world-wide sales and service network, the company ensures a high proximity to its customers as

well as a sophisticated technical application support in more than 70 countries. At its Innovation Centre in Ochsenhausen the research-focused company provides its customers an optimal platform for application testing and the development of customized solutions. SÜDPACK is highly committed to a sustainable development and assumes its responsibility as employer, towards the society and the environment as well as its customers by offering the most efficient and sustainable packaging solutions. For more information, please visit <u>www.suedpack.com</u> and follow us on <u>LinkedIn</u>.

A profile of Sartorius

The Sartorius Group is a leading international partner of life science research and the biopharmaceutical industry. With innovative laboratory instruments and consumables, the Group's Lab Products & Services Division concentrates on serving the needs of laboratories performing research and quality control at pharma and biopharma companies and those of academic research institutes. The Bioprocess Solutions Division with its broad product portfolio focusing on single-use solutions helps customers to manufacture biotech medications and vaccines safely and efficiently. The Group has been annually growing by double digits on average and has been regularly expanding its portfolio by acquisitions of complementary technologies. In fiscal 2021, the company earned sales revenue of some 3.45 billion euros. At the end of 2021, nearly 14,000 people were employed at the Group's approximately 60 manufacturing and sales sites, serving customers around the globe. Follow Sartorius on Twitter and on LinkedIn.

About Dow Packaging and Specialty Plastics

Packaging and Specialty Plastics (P&SP), a business unit of Dow (NYSE: DOW), combines core strengths of R&D, worldwide reach, broad product lines and industry expertise to deliver high performing technologies for end use markets in food packaging, personal hygiene, infrastructure, consumer goods and transportation. P&SP is one of the world's largest producers of polyethylene resins, functional polymers, and adhesives, and enabled by Pack Studios, is a leading innovator and collaborator across the value chain on sustainable application development and circular economy life-cycle design for plastics. www.dowpackaging.com

About Dow

Dow (NYSE: DOW) combines global breadth; asset integration and scale; focused innovation and materials science expertise; leading business positions; and environmental, social and governance (ESG) leadership to achieve profitable growth and deliver a sustainable future. The Company's ambition is to become the most innovative, customer centric, inclusive and sustainable materials science company in the world. Dow's portfolio of plastics, industrial intermediates, coatings and silicones businesses delivers a broad range of differentiated, science-based products and solutions for its customers in high-growth market segments, such as packaging, infrastructure, mobility and consumer applications. Dow operates 104 manufacturing sites in 31 countries and employs approximately 35,700 people. Dow delivered sales of approximately \$55 billion in 2021. References to Dow or the Company mean Dow Inc. and its subsidiaries. For more information, please visit <u>www.dow.com</u> or follow <u>@DowNewsroom</u> on Twitter.

For further information please contact:

Ana Braga	Valeska Haux	Timo Lindemann
Communications Manager	VP Strategic Marketing	Spokesperson
Dow	Südpack	Sartorius
+41 44 728 21 54	+49 7352 925 1676	+49 551 308 4724
abbraga@dow.com	valeska.haux@suedpack.com	timo.lindemann@sartorius.com

^{®TM} Trademark of The Dow Chemical Company ("Dow") or an affiliated company of Dow