

Evonik launches next-generation LIPEX® extruder for fast and effective liposomal drug manufacturing

- LIPEX® Flow offers higher throughput and faster batch production times for liposomal drug formulations
- Meets expanding demand for liposomal drug delivery systems with applications in oncology and vaccines
- Upgraded version of industry-standard device now available worldwide

Essen, Germany. Evonik has launched a new version of its industry renowned drug manufacturing equipment LIPEX® liposome extruders. LIPEX® Flow, which is available worldwide from November 2021, offers drug developers and manufacturers a superior device for bringing liposomal drug products to market. The new device meets the market need for more efficient nextgeneration high pressure extruders to produce drug products requiring conventional liposomal drug delivery. These include active ingredients that find application in oncology, antifungal, antibacterial, vaccine and many other applications.

LIPEX® Flow supports the scale-up of processes from drug discovery through to GMP (Good Manufacturing Practice) at lab, pilot, intermediate and commercial-scale volumes. The launch of LIPEX® Flow strengthens the portfolio of system solutions for advanced drug delivery at Evonik Health Care, which is part of the life sciences division Nutrition & Care. The division aims to increase the share of system solutions from 20 percent today, to more than 50 percent by 2030.

"LIPEX® Flow further reinforces our position as a fully integrated system solutions provider for the pharmaceutical industry and nicely complements our offering of products, technologies, and services for complex parenterals," said Paul Spencer, Vice President Drug Delivery & Medical Device Solutions at Evonik Health Care. "We look forward to seeing how LIPEX® Flow will provide an effective and versatile drug delivery platform for next-generation applications, spanning fields from oncology to vaccines."

15 October 2021

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Registered Office is Essen Register Court Essen Local Court Commercial Registry B 19474



Lipid-based particles, in particular conventional liposomes, provide a versatile and flexible drug delivery platform for several classes of active pharmaceutical ingredients (APIs) including small molecules, drug-lipid conjugates, proteins and peptides. Nearly 20 lipid-based drug products have already been FDA approved with many more in early and late clinical stages.

LIPEX® is the most widely used device for size reduction of liposomal drug formulations to achieve a specified vesicle size in a reproducible and scalable process. LIPEX® Flow is the next-generation extruder with a patent-pending design which maximises the effective filter area, resulting in lower extrusion pressures. Higher throughput, faster batch processing times and a broader operating range are also key advantages of the new design. The new extruder helps to minimize process risks such as contamination, product degradation or safety when working with highly potent substances. Evonik's platform of LIPEX® liposome extruders have been setting the industry standard for liposomal drug product manufacturing for nearly three decades.

As an integrated contract development and manufacturing organization (CDMO), Evonik Health Care has been a leader for advanced drug delivery for many decades, supporting pharmaceutical companies worldwide in the development and production of complex parenteral drug products that require an integrated offering of excipients, formulation technologies such as lipid nanoparticles, clinical and commercial manufacturing.

More Information

https://healthcare.evonik.com/en/pharmaceuticals/parenteral-drug-delivery/equipment

Company information

Evonik is one of the world leaders in specialty chemicals. The company is active in more than 100 countries around the world and generated sales of €12.2 billion and an operating profit (adjusted EBITDA) of €1.91 billion in 2020. Evonik goes far beyond chemistry to create innovative, profitable and sustainable solutions for customers. More than 33,000 employees work together for a common purpose: We want to improve life today and tomorrow.

About Nutrition & Care

The focus of the business of the Nutrition & Care division is on health and quality of life. It develops differentiated solutions for active pharmaceutical ingredients,

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medical devices, nutrition for humans and animals, personal care, cosmetics, and household cleaning. In these resilient end markets, the division generated sales of around three billion euros in 2020 with about 5,300 employees.

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