

News Release

Jill DeCoste
+1 978 715 4670
jill.decoste@emdmillipore.com

October 21, 2015

EMD Millipore Introduces Millipore Express® PHF Hydrophilic Sterilizing-Grade Filters for Fast, Efficient and Economical Buffer Filtration

- **Faster flow rates than most sterilizing-grade filters, reducing footprint**
- **Ideal for buffers, other intermediate process fluids and cleaning solutions**
- **Offer broad chemical compatibility, high flow rates and extended throughput**

Billerica, Massachusetts, October 21, 2015 – [EMD Millipore](#), the Life Science business of [Merck KGaA](#) of Darmstadt, Germany, today introduced Millipore Express® PHF (process protection, high-flux) hydrophilic filters for fast, efficient and economical buffer filtration. The single layer, fast-flowing 0.2 µm PES membrane filters provide sterilizing-grade performance and are ideal for buffers, pH adjusters and other process additives and intermediate fluids as well as cleaning fluids. The single-use, gamma ready filters are available in a fully scalable range of sizes from 25 mm to 30 inch cartridges.

The filters are designed to offer high-flux performance and improved process economics. Superior process efficiency and economy result from broad chemical compatibility, high flow rates and extended throughput. Offering faster flow rates than most sterilizing-grade filters, Millipore Express® filters allow users to accelerate their processes with the same size filter or reduce their process footprint, using a smaller filter.

Millipore Express® PHF filters are compatible with a wide range of buffer chemistries including acids and sodium hydroxide across the entire pH range. The filters can withstand multiple steam-in-place or autoclave sterilization cycles.

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“Improving process economics is always an imperative for our customers,” said Andrew Bulpin, Vice President, Process Solutions, EMD Millipore. “With a fast flowing membrane design, Millipore Express® PHF filters can be used to accelerate current processes or run the same process with a smaller filter footprint. And with a comprehensive range of sizes, these filters can support scale up and technology transfer with ease.”

For more information, please visit www.emdmillipore.com/bufferfilter.

About EMD Millipore

EMD Millipore is the U.S. Life Science subsidiary of Merck KGaA, Darmstadt, Germany. As part of the global Life Science business of Merck KGaA, Darmstadt, Germany, EMD Millipore offers a broad range of innovative, performance products, services and business relationships that enable our customers' success in research, development and production of biotech and pharmaceutical drug therapies. Through dedicated collaboration on new scientific and engineering insights, and as one of the top three R&D investors in the life science tools industry, the Life Science business of Merck KGaA, Darmstadt, Germany, serves as a strategic partner to customers and helps advance the promise of life science. Headquartered in Billerica, Massachusetts, the global business has around 10,000 employees, operations in 66 countries and 2014 revenues of €2.7 billion.

For more information, please visit www.emdmillipore.com.

About Merck KGaA, Darmstadt, Germany

Merck KGaA, Darmstadt, Germany, is a leading company for innovative and top-quality high-tech products in healthcare, life science and performance materials. The company has six businesses – Biopharmaceuticals, Consumer Health, Allergopharma, Biosimilars, Life Science and Performance Materials – and generated sales of € 11.3 billion in 2014. Around 39,000 employees work in 66 countries to improve the quality of life for patients, to foster the success of customers and to help meet global challenges. Merck KGaA, Darmstadt, Germany, is the world's oldest pharmaceutical and chemical company – since 1668, the company has stood for innovation, business success and responsible entrepreneurship. Holding an approximately 70% interest, the founding family remains the majority owner of the company to this day. Merck KGaA, Darmstadt, Germany holds the global rights to the Merck name and brand. The only exceptions are Canada and the United States, where the company operates as EMD Serono, EMD Millipore and EMD Performance Materials.

For more information, please visit www.emdgroup.com.