

September 26, 2017

## **New, First-of-its Kind Filters by MilliporeSigma Provide Twice the Filtration Capacity using Fully Synthetic Materials**

- **Millistak+<sup>®</sup> HC Pro eliminates risk of beta glucan interference**
- **Pre-use flushing requirements for acceptable Total Organic Carbon extractables reduced by 50 percent**

Billerica, Massachusetts, September 26, 2017 – MilliporeSigma today announced [Millistak+<sup>®</sup> HC Pro](#), the first portfolio of high- capacity, fully synthetic depth filters for non-treated Chinese Hamster Ovary (CHO) harvest clarification and downstream filtration applications. Millistak+<sup>®</sup> HC Pro filter media provides a cleaner and more consistent depth filtration process compared with traditional diatomaceous earth (DE) and cellulose-based filtration processes.

“Recent advancements in the productivity of upstream cell culture processes require higher filtration capacity than what can be offered by naturally derived filters currently available,” said Andrew Bulpin, Head of Process Solutions, MilliporeSigma. “As the first fully synthetic depth filters, the Millistak+<sup>®</sup> HC Pro portfolio provides as much as twice the filtration capacity versus commercial DE-based benchmarks, and offers customers improved consistency that will help them design a more robust and controlled clarification process.”

Made with purely synthetic materials, Millistak+<sup>®</sup> HC Pro filters eliminate naturally derived components from the clarification process, offering increased productivity with lower flushing recommendations. As an added benefit, the synthetic media shows higher levels of host cell protein (HCP) clearance compared with traditional depth filters.



## News Release

Millistak+<sup>®</sup> HC Pro filters reduce Total Organic Carbon (TOC) extractables and pre-use flush volume recommendations by 50 percent. The synthetic nature of the filter media eliminates beta glucans that interfere with limulus amoebocyte lysate testing for bacterial endotoxins.

[Millistak+<sup>®</sup> HC Pro Filters](#) are available in the disposable pod format for ease of use, and exist in three media grades for primary and secondary clarification, as well as downstream filtration applications. The flexible, modular filters offer scalability from the bench to commercial manufacturing scale.

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### **About the Life Science Business of Merck KGaA, Darmstadt, Germany**

The Life Science business of Merck KGaA, Darmstadt, Germany, which operates as MilliporeSigma in the U.S. and Canada, has 20,000 employees and 65 manufacturing sites worldwide, with a portfolio of more than 300,000 products enabling scientific discovery. Udit Batra is the global chief executive officer of MilliporeSigma.

Merck KGaA, Darmstadt, Germany completed its \$17 billion acquisition of Sigma-Aldrich in November 2015, creating a leader in the \$125 billion global life science industry.

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 €15 billion in 2016. Around 50,000 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 percent interest, the founding family remains the majority owner of the company to this day. The company holds the global rights to the name and the trademark "Merck" internationally except for the United States and Canada, where the company operates as EMD Serono, MilliporeSigma and EMD Performance Materials.