

New 3M™ Polisher™ ST reduces the number of biopharma manufacturing process steps

ST. PAUL, Minn., Feb. 9, 2021 /PRNewswire/ -- 3M Health Care launched 3M™ Polisher™ ST,* an advanced, single-use AEX solution designed to replace reusable AEX polishing column for biologic drug manufacturing. Polisher ST improves the biopharma manufacturing workflow by reducing the number of processing steps thereby helping to improve process economics. The new product was developed by 3M scientists who passionately create solutions to manufacture biologic drugs more efficiently.

3M Polisher ST is a synthetic, fully encapsulated, single-use membrane chromatography solution containing two complementary AEX-functional media: a quaternary ammonium ("Q") functional nonwoven and a guanidinium-functional membrane. The Q-functional nonwoven provides reduction of turbidity (when present), DNA, and endotoxin, as well as a portion of the product's AEX capacity for HCP and virus reduction. The novel guanidinium functionality in the guanidinium-functional membrane of 3M Polisher ST provides HCP and virus reduction in a salt tolerant (ST) manner.

"3M Polisher ST is designed as a next-generation bioprocessing solution for process intensification in both large, dedicated product sites and small multi-product manufacturing facilities," said Robert Befidi, Jr., division vice president, 3M Separation and Purification Sciences. "This product will be particularly suitable for facilities of the future which will be smaller in size and capable of producing significantly higher product volumes. This new innovation demonstrates the power of 3M material science to improve biologics manufacturing."

The new product can be used in continuous bioprocessing which can enable facilities to reduce both their size and cycle times. It is a single-use technology designed as a cost-efficient option to increase biomass production in therapeutic recombinant protein processes in all operating conditions; and to replace downstream AEX polishing column in fed batch and/or continuous manufacturing. The new product is a compact, small footprint, higher capacity solution for delivering higher purity and yield in the downstream polishing unit operation in a connected continuous downstream operation for the flexible facility of the future.

3M Separation and Purification Sciences Division utilizes cutting edge 3M material science that pushes the boundaries of purification, filtration, and separation to support production, processes that change lives, and deliver quality water where it matters most. For more information on 3M Polisher ST, visit www.3M.com/PolisherST.


*Production capsules will be available at a later date.

About 3M

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