

Ashland announces Klucel Fusion[™] hpc pharmaceutical tablet binder for low temp melt granulation

October 23, 2023

Innovation helps eliminate solvents, reduces energy consumption, enhances throughput, reduces operating cost and shortens scaleup development time

Wilmington, Del., Oct. 23, 2023 - Ashland is introducing Klucel Fusion [™]hydroxypropyl cellulose (hpc), a new polymer expressly designed to optimize performance in twin screw melt granulation (TSMG) for pharmaceutical manufacturers. Klucel Fusion [™]hpc offers stellar tablet binding at a significantly lower melt processing temperature. It is the only purpose-designed melt granulation binder on the market. Conducted at lower temperatures (50°C-80°C), Klucel Fusion [™]hpc melt granulation binding enables many advantages, such as less degradation of the API, stronger tablets, lower binder levels, and trouble-free extrusion.

"Klucel Fusion [™]hpc tablet binder is an enabling element with the potential for widespread adoption of TSMG because it offers improved tabletability as well as process efficiency," said Thomas Durig, head of life sciences R&D and innovation, Ashland. "TSMG is a continuous process that can eliminate the need for solvents and rate-limiting drying, thus significantly reducing energy consumption, enhancing throughput, reducing operating cost, and shortening scaleup development time by approximately 60 percent." Continuous manufacturing via extrusion is on the path forward for pharmaceutical production. Ashland scientists are paving the way for these manufacturing processes and collaborating with pharma customers to improve product quality, reduce production time, enable greater flexibility, and reduce manufacturing costs while increasing process yields. This will result in more sustainable solutions with fewer manufacturing steps for pharmaceutical manufacturers, and better product attributes for enhanced tablet performance for consumers.

"Ashland Klucel [™]hpc is the leading high performance tablet binder, and it just got better," said Brandt Giffin, senior director strategic marketing and new business development, life sciences, Ashland. "Klucel Fusion [™]hpc enables melt granulation that is considered to be a simpler, cheaper, faster, and more consistent drug manufacturing process than wet granulation."

To visit the Klucel Fusion [™]hpc web page, please click <u>here</u>.

About Ashland

Ashland Inc. (NYSE: ASH) is a global additives and specialty ingredients company with a conscious and proactive mindset for environment, social, and governance (ESG). The company serves customers in a wide range of consumer and industrial markets, including architectural coatings, construction, energy, food and beverage, nutraceuticals, personal care, and pharmaceutical. Approximately 3,900 passionate, tenacious solvers – from renowned scientists and research chemists to talented engineers and plant operators – thrive on developing practical, innovative, and elegant solutions to complex problems for customers in more than 100 countries. Visit <u>ashland.com</u> and <u>ashland.com/ESG</u> to learn more.

[™]Trademark, Ashland, or its subsidiaries, registered in various countries.

FOR FURTHER INFORMATION: Media Relations: Nancy H. Pitts +1 (412)628-8791 nancy.pitts@ashland.com