

Klucel™ HPC – versatile binder for oral solids pharmaceutical formulation

We at Ashland know that the success of your product is based not only on its effectiveness, but also its ease of use for consumers.

Smaller tablets tend to have greater consumer acceptance and adherence. For this, Klucel™ HPC binder has allowed many of our customers to significantly reduce their final tablet size, often by as much as 20%, especially for those with high active pharmaceutical ingredient content.

Klucel™ HPC is widely used in oral pharmaceutical technology formulations. It is a versatile product, primarily used as a binder in tableting, being also used as film coating and extended-release-matrix former. Blends of Klucel™ HPC and other cellulosic polymers have been used in wet and dry granulation processes, and direct compression, exhibiting exceptional tableting and flow characteristics. Its concentration usage, in weight, differs depending on the final application, such as binder for direct compression tableting process or either for immediate or controlled release formulations.

In recent years, due to the many advantages they offer generating value and creating new active associations, multi-layer tablets have gained more interest as an incremental innovation tool for pharmaceutical companies.

However, the bonding and adhesion at the interface between tablet layers are the most common quality complaints. The addition of Klucel™ HPC binder improves considerably the plastic deformation characteristics and increases the interfacial bonding between particles of both layers, assuring formulation predictability, reliability, and robustness.

Klucel™ HPC provides enhanced tablet strength and low friability with the most difficult active pharmaceutical ingredients to compress, even at low usage levels.

In summary, the versatility of use of Klucel™ HPC, due to its combination of thermoplastic and mechanical properties, makes it the binder of choice for the most diverse challenges of solid pharmaceutical formulations for oral use.

Contact our solvers to learn more about the benefits of our Klucel™ HPC binder and explore our solutions to your developments!

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