Technical Data Sheet

APPLICATION: PERSONAL CARE



Tylose® MOBS 4070 P4

INCI: Hydroxypropyl Methylcellulose

Product properties

Tylose MOBS 4070 P4 is a medium viscosity hydroxypropyl methylcellulose. It is soluble in cold water.

Typical data	
Viscosity *	3000 - 5600 mPas
Degree of Etherification	very high
Moisture:	max. 5 %
Particle size	powder
Surface treated	no

^{*} Brookfield RV, 2.0% dry basis, 20°C, deion. water

Recommended fields of application

- Skin Care
- Hair Care
- Cosmetics
- Hair Styling

Application performance	
Thickening effect	medium
Shear thinning	low
Clarity of solution	very clear
Foam enhancement	very strong
Foam stability	strong
Surfactant compatibility	good
Emulsion stabilisation	very good

Application properties

Tylose MOBS 4070 P4 is highly purified and efficient thickener recommended for a wide range of personal care applications. Furthermore, it provides foam enhancement (volume and texture) and contributes to the stabilisation of foams.

As a non-ionic polymer, it offers good compatibility with a large variety of surfactants and other formulation ingredients such as salts and gums. It ensures the required consistency for the application by providing a pseudoplastic rheological profile.

Tylose MOBS 4070 P4 is typically used in formulations within a pH range of 4-10 and in a concentration of 0.5-2 %.

Dissolution

Tylose MOBS 4070 P4 can be dissolved in cold water. However, to dissolve this non surface treated grade safely in a water based formulation and to avoid lumps, it is recommended to follow one of the following procedures.

Either a). Suspend Tylose in one of the liquid components of the formulation, in which Tylose is non-soluble or the least soluble (such as surfactant, glycerol, vegetable oil), then add to water under agitation.

Or b). Create a powder dry-blend with other solid components of the formulation, then add this blend to the water under agitation

Or c). The hot/cold technique. Tylose is dispersed in 1/3 of the total volume of water required, which has been heated to 90 °C. The remaining 2/3 of the water is then added to this hot suspension as cold water or ice under agitation. When the mixture reaches around 60 °C, Tylose MOBS 4070 P4 starts to swell.

Or d). The powder dry-blend can be suspended in the total volume of water heated up to 90 °C and then

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cooled down under agitation. When the mixture reaches around 60 $^{\circ}$ C, Tylose MOBS 4070 P4 starts to swell.

Packaging, storage and safety instructions

This Tylose type is supplied in multilayer paper bags with polyethylene intermediate layer and/or in big bags. When kept in clean, dry conditions in its original packing, Tylose can be stored for a long time. During storage a slow loss of viscosity can be measured.

Tylose absorbs water from moist air. Once opened, container must be resealed and kept tightly closed. Like all fine particle organic substances, cellulose ethers constitute a dust explosion hazard. Dust formation and deposits must be kept to a minimum so that no ignitable dust/air mixtures can form. Ignition sources such as naked flames, hot surfaces, sparks and static electricity should be avoided.

Please refer to Safety Data Sheet (SDS) for more information.

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