

CLAYTONE-MPZ V

Thickening and Suspending Agent for medium to high polar Oil and Solvent Phases in Cosmetic Applications

Product Data

INCI Name

Stearalkonium Bentonite

Product Description

CLAYTONE-MPZ V is an organoclay, obtained by organic modification of natural bentonite. CLAYTONE-MPZ V is designed to impart a high degree of gelling efficiency over a wide range of medium to high polar fluids. It is ideally suited to increase viscosity, provide thixotropic flow behaviour and suspend pigments and particles in cosmetic and personal care products. It may also be used as an auxiliary emulsifier in water-in-oil emulsions. CLAYTONE-MPZ V is vegan and not irradiated.

Typical Properties

The values indicated in this data sheet are typical and do not constitute specification limits.

| | |
|--------------------------|-----------------------|
| Form: | Powder |
| Color: | Light Cream |
| Specific Density: | 1.7 g/cm ³ |
| Loose Bulk Density: | 250 - 400 g/l |
| D50 value: | 12 µm |
| Dry Sieve Passing 75 µm: | min. 70 % |
| Water Content: | max. 3 % |

Recommended Use

CLAYTONE-MPZ V may be used in all medium to high polar organic fluid systems.

Suitable solvents: Butyl Acetate, Ethyl Acetate, C12-15 Alkyl Benzoate, Isopropyl Myristate

Application areas:

| | |
|------------------|---|
| Personal Care: | Creams and Lotions Sun Care Products Antiperspirants |
| Color Cosmetics: | Liquid Make-up Lipsticks Cream Eye Shadows Nail Polishes |

Recommended Levels

Typically, 1-8 % loading (based upon total formulation weight) is a good starting point to increase viscosity, control syneresis and provide thixotropic flow behavior. These levels are suggested as a guideline; optimum levels can be determined by laboratory tests.

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Data Sheet
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Incorporation and Processing Instructions

CLAYTONE-MPZ V is effective in a wide range of organic fluid systems and has no processing temperature requirements. For maximum efficiency, CLAYTONE-MPZ V requires a polar activator and very high shear, e.g. dissolver, rotor-stator system or homogenizer.

Suggested polar activators are:

- Propylene Carbonate/H₂O (95:5) 15 - 40 % *
- Ethanol/H₂O (95:5) 15 - 60 % *

*(based on weight of CLAYTONE-MPZ V)

It is recommended to incorporate CLAYTONE-MPZ V into the solvent phase using a concentrated pre-gel. This is the preferred option for nail Lacquers in order to obtain ultra-high gloss. In some cases, CLAYTONE-MPZ V can also be incorporated directly as a powder into the oil phase (in-situ incorporation).

Pre-gels can be prepared by the following procedure:

1. Add the organic solvent to the dispersion vessel.
2. Slowly add CLAYTONE-MPZ V (5-10 % by weight of total pre-gel) to mixer under agitation.
3. Mix at very high shear for approx. 15 minutes.
4. Add the polar activator.
5. Mix at very high shear for approx. 15 minutes.
6. Incorporate the other formulation ingredients into the gel.

Special Note

CLAYTONE-MPZ V is compatible with surfactants and emulsifiers. To obtain optimum results, these should be added after the CLAYTONE-MPZ V has been activated.

Storage and Transportation

CLAYTONE-MPZ V should be transported and stored dry in unopened, original packaging at temperature between 0°C and 30°C (32°F and 86°F)

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