Data Sheet Issue 08/2015

TIXOGEL-MP

Gellant

Product Data

Special Features and Benefits

TIXOGEL-MP is a product of the Maximum Performance organoclay series. It is a highly efficient thixotropic agent. TIXOGEL-MP is optimized for low to medium polarity solvent based coating systems.

TIXOGEL-MP is a new generation high performance organoclay which exhibits excellent rheology and efficiency. Due to its high efficiency, TIXOGEL-MP can often be utilized at lower loading levels than competitive organoclays of the same family.

Recommended Use

TIXOGEL-MP can be used in low and medium polarity solvent-based coating systems.

Suitable Solvents/Resins

Rule 66 mineral spirits, VM&P naphtha, aromatic naphthas, toluene, xylene, kerosene, 140 solvent, heptane.

Composition

organophilic smectite

Typical Properties

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

Form: free flowing powder

Colour: cream

Specific weight: approx. 1,8 g/cm 3 Bulk density: 400-650 g/l Dry sieve residue on 90 μ m: max. 30 % Primary particle size at complete dispersion: 1-5 μ m Moisture content: max. 3 %

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Incorporation and Processing Instructions

For maximum efficiency TIXOGEL-MP must be subjected both to shear and polar activation. TIXOGEL-MP is effective over a wide range of solvent systems and has no processing temperature requirements. TIXOGEL-MP can be dispersed using a high speed disperser. Suggested polar activators are:

Methanol/H₂O (95/5)

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Propylene carbonate/H₃O (95/5)

33 % relative to dry TIXOGEL-MP

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It is recommended that TIXOGEL-MP be utilized in the grind portion of a paint. It is not necessary to pregel TIXOGEL-MP.

In-situ incorporation can be accomplished via the following procedure:

- 1) Charge solvent and portion of resin to mill
- 2) Slowly add TIXOGEL-MP under agitation
- 3) Mix at high speed for 5 minutes
- 4) Add polar activator
- 5) Further mix at high speed for 5 minutes
- 6) Continue with grind phase

Special Note

Wetting agents should be added only after the TIXOGEL-MP has been activated.

Recommended Levels

TIXOGEL-MP is typically used at levels of 0.2-0.1%. To control sag 0.4-0.6% are typically needed.

The above recommended levels can be used for orientation. Optimal levels are determined through a series of laboratory tests.

Storage and Transportation

Two years if stored dry in unopened, original packing at temperatures between 0 °C and 30 °C.