

TIXOGEL-VP

Gellant

Product Data

Recommended Use

TIXOGEL-VP is a thixotropic and anti-settling agent for the following fields of application:

Non-polar to low polar systems

- Alkyd resin varnishes
- Anti-fouling coatings
- Oil varnishes
- Polyacrylate paints
- Epoxy varnishes
- Bitumen paints
- Standard boat paints
- Chloride and cyclo rubber paints

Special Systems

- Road traffic paints
- Printing Inks (mineral oil base)
- Dip-coating varnishes
- Surfacer
- Putty
- Pickling agents
- Lubricants

Suitable solvents

Aromatic hydrocarbons such as toluene, xylene, solvent naphtha, styrene, aliphatic hydrocarbons such as white spirit, turpentine oil. To improve gelation of TIXOGEL-VP, aliphatic benzenes should contain approx. 5 % aromatic compounds.

Typical Properties

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

Colour:	cream
Specific weight:	1.8 g/cm ³
Bulk weight:	400-600 g/l
Residue on 90 µm screen:	max 15 %
Primary particle size at complete dispersion:	1-5 µm
Water content:	max. 3 %
Temperature resistance:	200-250 °C

Incorporation and Processing Instructions

For optimum gelation, TIXOGEL-VP must be dispersed in the solvents using high shearing forces. An agitator operating at 1.000 to 3.000 rpm will generally be sufficient. First, an 8-10 % parent batch is prepared, e.g. in solvent naphtha. After dispersion in this solvent (approx. 5-10 min. at 1.800 rpm), polar solvents are added for optimum gelation, e.g.:

Methanol/H ₂ O (95/5)	30 % relative to dry TIXOGEL-VP
Ethanol/H ₂ O (95/5)	30 % relative to dry TIXOGEL-VP
Acetone	60 % relative to dry TIXOGEL-VP
Glycoether	60 % relative to dry TIXOGEL-VP

Depending on the consistency required, 2-8 % of the parent batch (equivalent TIXOGEL-VP content 0.2-0.8 %) are worked into the paint system. These preparations are then processed by cylinder mills, ball mills or agitators.

If TIXOGEL-VP is to be worked directly into a paint system then the product is first moistened with the above mentioned quantity of a polar solvent and then homogenized. The moistened TIXOGEL-VP is then stirred into the organic system by means of an agitator and subsequently is processed in a cylinder mill, ball mill or bead mill, or directly dispersed by an agitator producing high shear. Surface-active agents such as ANTI-TERRA-U can assist the working-in of TIXOGEL-VP. It must be ensured, however, that the surface-active agent used is compatible with the paint system and does not cause any perturbation. TIXOGEL-VP is resistant to dilute acids and alkalines.

Storage and Transportation

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