TECHNICAL INFORMATION

Rheology modifier for aqueous systems

Composition: Non-ionic polyurethane in butyltriglycol/water, APE- and VOC-free

Appearance: liquid

Colour: white, turbid

Typical Properties:

- Active ingredients: approx. 40%
- Density at 20°C: approx. 1.06 g/cm³
- Solubility in water: dispersible in water by strong mixing, results in turbid solutions
- pH (2% in dist. water): approx. 6.5

This information is intended as a guideline only and should not be used to issue specifications. Slight deviations do not affect application and capability of the product. For specifications please consult the Certificate of Analysis.

Properties/applications: TAFIGEL PUR 45 is designed as an “associative thickener” which builds up and stabilizes viscosity by forming a network between polyurethane, binder molecules and other paint ingredients. TAFIGEL PUR 45 can be used alone or in combination with other TAFIGEL thickeners, as well as with further thickener technologies. Aqueous gloss paints, thickened with TAFIGEL PUR 45 show minimal pseudoplasticity, similar to the rheology of solvent borne systems. TAFIGEL PUR 45 is recommended for use in following systems: Interior and exterior paints, latex paints, anticorrosive paints, emulsion plasters, adhesives, printing inks and joint fillers.

Advantages of using TAFIGEL PUR 45:

- thickening independent of pH
- excellent flow, leveling and gloss
- good spatter resistance
- excellent colour acceptance on tinting

The performance of polyurethane thickeners is affected by many factors including binder type, co-solvents, coalescing agents, surfactants/wetting agents, pigments and flattening agents. The interactions of TAFIGEL PUR 45 with these compounds allow varied possibilities for rheology adjustment.

Recommended levels/use: TAFIGEL PUR 45 can be added at any time during the manufacturing process. The predilution with water is possible but in most cases not necessary. Ladder studies are recommended to determine optimum level. Normal dosage ranges from 0.3 - 2 % on total formulation.

Storage/handling: TAFIGEL PUR 45 is not sensitive to freezing. The product should be stored cool and dry. During storage a creamy layer is formed on the surface. Consequently TAFIGEL PUR 45 has to be stirred properly before use. The minimum shelf life in closed containers is 15 months from the date of manufacture.

Packaging: Totes holding 1000 kg net, drums holding 145 kg net or kegs holding 25.5 kg net.