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Product Fact Sheet GENAPOL® PF 20

Low-foaming, nonionic surfactant for the chemical industry

COMPOSITION

Block copolymer of propylene oxide and ethylene oxide, containing 20% w/w ethylene

| PRODUCT PROPERTIES*) | | |
|-------------------------------|--|---|
| Molecular weight | About 2500 g/mol | |
| Active substance content | about 100 % | |
| Appearance at 20°C | Slightly cloudy, colorless liquid | |
| Ionicity | Nonionic | |
| Density at 20°C (DIN 51757) | About 1.04 g/cm ³ | |
| Viscosity at 20°C (DIN 53015) | About 700 mPas | |
| pH of a 1% aqueous solution | About 7 | |
| Solubility at 20°C | 1% in water 10% in mineral oil 10% in xylene | clear solution cloudy solution slightly cloudy solution |
| Pour point (DIN/ISO 3016) | Below -6 °C | |
| Flash point (DIN/ISO 2592) | > 250°C | |
| Cloud point (DIN 53917) | (5g in 25 ml 25% BDG solution) about 56°C | |
| HLB value | About 4 | |
| Compatibility | Genapol PF 20 can be used in combination with other nonionic, anionic and cationic surfactants. Genapol PF 20 is resistant to water hardness salts and to acids and alkalis in the concentrations normally used. Preliminary tests are required. | |
| FDA / BfR** Listing | FDA Chapter 21 § 181.30, § 176.200, § 176.210 BfR Teil A XIV, XXXIV | |

These characteristics are for guidance only and are not to be taken as product specifications. The tolerances are given in the product specification sheet. For further information on product properties, toxicological, ecological and safety data, please refer to the safety data sheet.

***) Bundesinstitut für Risikobewertung (formerly BgVV)

Genapol PF 20 is used as a low-foaming surfactant and defoamer in detergents and cleaning agents.

Genapol PF 20 has good wetting and dispersing action coupled with low foaming tendency. Within the Genapol PF series, the products with a lower degree of ethoxylation have a better foam-suppressing effect than the products with a higher degree of ethoxylation.

Typical applications include rinsing aids, detergents for dishwashers and bottle-rinsing machines and industrial cleaning formulations.

Genapol PF 20 is also used as a low-foaming emulsifier in emulsion polymerization and as a dispersing agent for pigment pastes and preparations.

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Other applications include reactions in the chemical industry.

USE IN PAINTS AND COATINGS

Genapol PF 20 is used as a low foaming wetting agent in aqueous coatings. The addition of 0.1 - 0.3 % reduces the surface tension of the coating formulation, improves the stability and shelf life and the adhesion of the coating onto the coated surface.

USE IN EMULSION POLYMERIZATION

Genapol PF 20 is used as a low foaming emulsifier in emulsion polymerization to improve the emulsion stability and prevents foam during spray drying of dispersion powders.

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