Data sheet Issue 06/2024

BYK-SILCLEAN 3701

Silicone-containing surface additive for epoxy resin systems to improve cleanability (easy-to-clean effect). Permanent effect as a result of cross-linking in the system.

Product data

Composition

Epoxy-functional polysiloxane

Typical properties

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

Density (20 °C): 0.99 g/ml
Active substance: 100 %
Flash point: > 100 °C
Epoxy equivalent weight: 1,600 g/eq%

Storage and transportation

To be stored and transported at a temperature below 50 °C.

Applications

Coatings industry

Special features and benefits

BYK-SILCLEAN 3701 has an epoxy functional group and cross-links permanently with the epoxy resin system. This sustainably and extremely effectively increases the hydrophobic and oleophobic properties, which reduces dirt adhesion and simultaneously improves cleanability (easy-to-clean effect).

BYK-SILCLEAN 3701 has no foam-stabilizing properties, which means there is no need to use defoamers. In addition, the additive improves substrate wetting, leveling, surface slip and water resistance (reduction in carbamate formation) of epoxy resin systems. For this reason, we recommend first testing BYK-SILCLEAN 3701 in your formulation without the prior addition of surface additives. If improved leveling is also required, the leveling additives should be added in a second step.

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Recommended use

Conventional epoxy systems	
High-solids epoxy systems	
Solvent-free epoxy systems	
2K-PUR	
Aqueous systems	_
especially recommended — not recommended	

Recommended levels

0.05–2 % additive (as supplied) based upon the total formulation.

The above recommended levels can be used for orientation. The optimum dosage should be determined by application-related test series.

Incorporation and processing instructions

The additive can be added at any time during production. Sufficient shear forces must be applied.

Special note

When using this additive, it is important that the coating is evenly and thoroughly sanded before any recoating or retouching in order to ensure sufficient adhesion.









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