DISPERBYK-2152 TF

Emission-free, hyperbranched wetting and dispersing additive for solvent-free epoxy and other reactive systems; conforms to the German AgBB.

Product data

Composition
Polyglycol-polyester-modified polyakyleneimine

Emission-free
Tin-free

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

Density (20 °C):	1.07 g/ml
Non-volatile matter (10 min., 150 °C):	> 99 %

Special note
DISPERBYK-2152 TF is the tin-free version of DISPERBYK-2152.

Applications

Coatings industry

Special features and benefits
DISPERBYK-2152 TF is based on hyperbranched technology and specially developed for use in solvent-free epoxy systems, other reactive systems, 2-pack polyurethane, and acid-catalyzed systems. During grinding with pigments or fillers, the polyester side chains are compressed and the adhesive forces of the aminic groups toward the surface of the pigment or filler are increased. The pigment-affinic groups are then adsorbed onto the pigment or filler surface, while the polyester side chains continue to shield the aminic groups from the epoxy resin. This results in a significant reduction in viscosity and no reaction with the resin, allowing long-term storage stability. DISPERBYK-2152 TF features excellent pigment wetting and deflocculation. The additive is broadly compatible, with no negative effect on yellowing, adhesion of coatings to metals, or anti-corrosion properties. DISPERBYK-2152 TF complies with the criteria of the Committee for Health-related Evaluation of Building Products (AgBB).

Recommended use

Industrial coatings	■
Floor coatings	■
Wood and furniture coatings	■
Protective coatings	■
Automotive coatings	□

■ especially recommended □ recommended

Recommended levels
Amount of additive (as supplied) based upon pigment:

Inorganic pigments:	5-10 %
Titanium dioxide:	1-3 %
Organic pigments:	20-45 %
Carbon black:	20-80 %

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

Incorporation and processing instructions
For optimum performance, the additive must be incorporated into the millbase before addition of pigments. This enables the additive to achieve its full effectiveness. Pre-mix the resin and solvent components of the millbase and then the DISPERBYK-2152 TF is slowly incorporated while stirring. Do not add the pigments until the additive has been fully distributed.

Thermosets

Special features and benefits
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Adhesives & sealants

Special features and benefits
The additive improves the wetting and dispersion of mineral fillers such as calcium carbonate and aluminum trihydroxide (ATH). It is also suitable for aluminum powder and aluminum oxide. This achieves a lower viscosity and makes higher filler loading possible.

Recommended use
The additive is especially recommended for adhesives based on epoxy and polyurethane resins.

Recommended levels
0.5-1.5 % additive (as supplied) based upon the fillers.

Incorporation and processing instructions
For optimum performance, the additive should be added before the solids.

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