DISPERBYK-2152

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

Product Data

Composition
Hyperbranched polyester

Emission-free

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

Density (20 °C):	1.08 g/ml
Non-volatile matter (10 min., 150 °C):	>99 %

Food Contact Legal Status
For the current food contact legal status, please contact our product safety department or visit www.byk.com for further information.

Applications

Liquid coatings

Special Features and Benefits
DISPERBYK-2152 is based on hyperbranched technology, and was specially developed for use in solvent-free epoxy systems and other reactive systems as well as for two-pack polyurethane and acid-catalyzed systems. During grinding with pigments or fillers its polyester side chains are compressed, and the adhesion forces of the aminic groups toward the surface of the pigment or filler are increased. The pigment affinic group is then adsorbed onto the surface of the pigment or filler, while the polyester side chains still shield the aminic groups from the epoxy resin. This results in a strong reduction in viscosity and no reaction with the resin, allowing long-term storage stability. DISPERBYK-2152 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 meets the criteria of the German Committee for Health-related Evaluation of Building Products (AgBB).

Recommended Use

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

■ especially recommended □ recommended

Recommended Levels
% additive (as supplied) based upon pigment:

Inorganic pigments:	5-10 %
Titanium dioxide:	1-3 %
Organic pigments:	20-45 %
Carbon blacks:	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 allows it to attain full effectiveness. The resin and solvent components of the millbase are pre-mixed and then the additive is slowly incorporated while stirring continuously. Do not add the pigments until the additive has been fully distributed.

Ambient Curing Systems

Special Features and Benefits
DISPERBYK-2152 is based on hyperbranched technology, and was specially developed for use in solvent-free epoxy systems and other reactive systems as well as for two-pack polyurethane and acid-catalyzed systems. During grinding with pigments or fillers its polyester side chains are compressed, and the adhesion forces of the aminic groups toward the surface of the pigment or filler are increased. The pigment affinic group is then adsorbed onto the surface of the pigment or filler, while the polyester side chains still shield the aminic groups from the epoxy resin. This results in a strong reduction in viscosity and no reaction with the resin, allowing long-term storage stability. DISPERBYK-2152 features excellent pigment wetting and deflocculation. The additive is broadly compatible, with no negative effect on yellowing, adhesion of coatings to metals, or protective coating properties.

DISPERBYK-2152 meets the criteria of the German Committee for Health-related Evaluation of Building Products (AgBB).

Recommended Levels
% additive (as supplied) based upon pigment:

Inorganic pigments:	5-10 %
Titanium dioxide:	1-3 %
Organic pigments:	20-45 %
Carbon blacks:	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
Wetting and dispersing additives should always be added to the millbase, which is the only way to attain full effectiveness. The resin and solvent components of the millbase are pre-mixed and then the additive is slowly incorporated while stirring continuously. Do not add the pigments until the additive has been fully distributed.

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 lowers viscosity and allows higher filling levels.

Recommended Use
The additive is particularly recommended for adhesives on the basis of epoxy and polyurethane resins.

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

Incorporation and Processing Instructions
For optimal performance, the additive should be incorporated before solids are added.

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BYK-Chemie GmbH
P.O. Box 10 02 45
46462 Wesel
Germany
Tel +49 281 670-0
Fax +49 281 65735

info@byk.com
www.byk.com/additives