



Wetting and Dispersing Additive

Description

Borchi® D-1152 is a wetting and dispersing additive with anti-settling properties for use with ambient cured unsaturated polyester and vinyl ester resins.

Characteristic Data

| | | |
|----------------------|---------------------------------|-----------------------|
| Non-volatile content | 50.00 - 54.00 % | ASTM D1644 |
| Density | 0.845 - 0.885 g/cm ³ | (25 °C) DIN 51757 (A) |
| Refractive index | 1.4440 - 1.4600 | (25°C) DIN 51423 |
| Turbidity | Max. 15.0 NTU | DIN EN ISO 7027 |

Properties

Borchi® D-1152 provides improved wetting and viscosity reduction for a wide range of the most commonly used fillers allowing shorter paste mixing times and higher filler loadings. Settling during storage and application is reduced in most cases.

Borchi® D-1152 is formulated specifically for use with ambient cured unsaturated polyester and vinyl ester resins by minimizing its affect on the pot life and gel time drift of the promoted resin. However, it is always good practice to confirm the pot life of a compounded resin when using the wetting and dispersing additive for first time in a new formulation. If necessary, gel time can be adjusted by reducing the amount of cobalt accelerator or by addition of inhibitor.

Borchi® D-1152 is a solution of amine and ester containing compounds. It is supplied as a 50-54% solution.

Applications

In the application example below, a commercial DCPD resin used for filled tub and shower applications was dosed with and without **Borchi® D-1152** (1.0 % based on filler) and then mixed with 175 phr (parts per hundred resin) alumina trihydrate and calcium carbonate. The results of the resin pastes formulated with **Borchi® D-1152** show a significant decrease in viscosity compared to the resin pastes with no wetting and dispersing additive.

| Test Resin System | Viscosity (mPa•s) |
|-------------------------------------|-------------------|
| Commercial DCPD resin | |
| + 175 phr ATH | 103.790 |
| No wetting and dispersing additive | |
| Commercial Formulated Gelcoat | |
| + 175 phr ATH | 21.400 |
| + 1.0 % Borchi® D-1152 (BOF) | |



| | |
|-------------------------------------|--------|
| Commercial DCPD resin | |
| + 175 phr CaCO ₃ | 72.150 |
| No wetting and dispersing additive | |
| Commercial DCPD resin | |
| + 175 phr CaCO ₃ | 15.540 |
| + 1.0 % Borchi® D-1152 (BOF) | |

Test Method: All measurements were performed at 25°C using a Brookfield viscometer with a vane spindle.

Dosage

0.5 - 1.5 % additive (as supplied) based on weight of filler for improved wetting and viscosity reduction. For optimum performance, mix wetting and dispersing additive into resin before addition of fillers or pigment.

Storage

Please refer to **Borchi® D-1152** product label for storage and handling instructions. Store and use material in cool, dry, well ventilated area away from heat, direct sunlight, hot metal surfaces and all sources of ignition. Container must be kept tightly closed immediately after use. Recommended shelf-life is two years from date of manufacture. Separation or turbidity may occur during storage and transportation. Mix well before use. If necessary, warm to 30-60 °C (86-140 °F) and mix well. The product efficiency is not affected.

Safety

Please refer to our safety data sheet for information relating to product safety.

Updated: 07.12.2017

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