



Non-ionic, polyurethane-based thickener

Description

Borchi® Gel PW 25 is a non-ionic, polyurethane-based thickener dissolved in a 4:6 solution of water / propylene glycol. It is particularly suitable for increasing the viscosity of ready-mixed textured finishes, decorative and industrial coatings.

Characteristic data

| | | |
|---------------------------|--|---|
| Appearance: | colorless to slight yellowish, clear to slight cloudy liquid | |
| Free of swelling agents: | yes | Borchers test method 100-06: (spatula run-off test) |
| Non-volatile content, %: | 24 – 26 | DIN EN ISO 3251(1g, 1h, 105 °C) |
| Viscosity (23 °C), mPa·s: | < 15,000 | DIN EN ISO 3219 (A.3 rotation) |
| Flash point, °C: | > 100 (typical) | |

Properties

Borchi® Gel PW 25 is characterised by exceptionally good thickening properties in most dispersion binders. The thickening action is largely dependent on the type of dispersion and is generally more marked in fine-particle dispersions with low emulsifier content than in coarser-particle dispersions. **Borchi® Gel PW 25** has a very high water retention capacity. The water necessary to ensure even application is retained so well that the coating can be applied over long periods.

As a result of the low addition rates, the water and scrub resistance of coatings is not adversely affected. The thickening action of **Borchi® Gel PW 25** may be impeded by water-soluble polar film-forming aids such as alcohols. At addition rates of up to 0.8 % **Borchi® Gel PW 25** relative to the solids content to dispersion binders, the water resistance of decorative paints is not adversely affected. Blushing does not occur.

Borchi® Gel PW 25 is manufactured using aliphatic isocyanates; it has thus no negative influence on yellowing and chalking of coating film.

Applications

Borchi® Gel PW 25 is used mainly in ready-mixed decorative textured finishes (e.g. rollerable, spreadable and rough cast) and in highly filled decorative coatings as well as in industrial paints.

It can also be used in combination with other thickeners to achieve optimum thickening action and application properties. Whether used alone or in combination with other thickeners, **Borchi® Gel PW 25** facilitates application of rough cast and decorative coatings and improves the shelf life of these highly filled systems.

When used in industrial paints, **Borchi® Gel PW 25** has a beneficial effect on flow properties and gloss.



Use and Dosage

If sufficient water at a temperature of 50 to 60 °C is available for dispersion, **Borchi® Gel PW 25** can be incorporated in its supply form. In such cases the binder has to be added last. In the event of a lack of sufficient water, **Borchi® Gel PW 25** needs to be pre-diluted with water at a ratio of 1:4. This solution can then be added at any stage of production and even subsequently for correction of viscosity.

Recommended dosages vary between 0.1 and 2.0 % **Borchi® Gel PW 25** relative to total formulation, depending on formulation and desired thickening effect. The optimum amount needs to be determined beforehand in trials in each case.

Warning

Borchi® Gel PW 25 must not be added to the dispersion binder or the finished emulsion paint in its supply form. Since it is highly active, immediate and irreversible coagulation occurs.

Storage

Protect from the effects of weathering and store at temperatures between 5 and 30 °C. Once opened, containers should be resealed immediately after each removal of the product.

Safety

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

Updated: 25.02.2009

OMG Borchers GmbH
Berghausener Str. 100 / 40764 Langenfeld / Telephone: +49 (0) 2173 – 39 26 666
Fax: +49 (0) 2173 – 39 26 999 / Internet: www.borchers.com / E-Mail: info.borchers@eu.omgi.com

Our product information is given in good faith but without warranty. This also applies where proprietary rights of third parties are involved. This information does not release the customer from the obligation to test our products as to their suitability for the intended processes and uses. The application, use and

processing of our products and the products manufactured by the customer on the basis of our technical advice are beyond our control and, therefore, entirely the customer's own responsibility. Our products are sold in accordance with the current version of our General Conditions of Sale and Delivery.