



Thickener for emulsion paints and aqueous paint systems

glycol ether-free, VOC-free according to the European Directives 1999/13/EC and 2004/42/EG

## Description

**Borchi® Gel L 75 N** is a polyurethane based, non-ionic liquid thickener. It acts as a flow promoter in emulsion paints and stabilizes pigmented aqueous paints.

Co-solvent free

## 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, %:	48 - 52	DIN EN ISO 3251 (1g, 1h, 125 °C)
Viscosity (23 °C), mPa·s:	< 9,000	DIN EN ISO 3219 (A.3 rotation)
Flash point, °C:	> 100 (typical)	

## Properties

The particular molecular structure of **Borchi® Gel L 75 N** allows its adsorption at the surface of dispersed particles formed as a result of emulsion polymerisation. It is characterised by good efficiency. It improves the rheological properties of emulsion paints, making the end-products easier to apply with a roller or a brush despite a considerable increase in viscosity. The product can be combined with other thickeners to achieve special effects.

Since it improves the flow properties of emulsion paints, **Borchi® Gel L 75 N** has proved particularly useful for thickening acrylic gloss paints and anti-corrosion coatings. At the recommended addition rate, **Borchi® Gel L 75 N** does not adversely affect the water resistance of the films.

**Borchi® Gel L 75 N** is manufactured using aliphatic isocyanates; it has thus no negative influence on yellowing and chalking of coating film.

## Applications

On the basis of our observations, **Borchi® Gel L 75 N** is more effective in finely dispersed than in coarsely dispersed emulsions. Suitable emulsion systems include pure acrylic, styrene-acrylic and styrene-butadiene. **Borchi® Gel L75 N** is also used in water-emulsifiable 2-component epoxy resin systems and other water-emulsifiable air- and oven-drying binders.



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## Use and Dosage

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The recommended dosage is 0.1 – 2.0 % thickener, relative to the total formulation. Because of its low intrinsic viscosity, **Borchi® Gel L 75 N** can also be used for subsequent correction of viscosity without predilution.

Higher dosages are generally necessary for the production of gloss paints. We recommend that **Borchi® Gel L75 N** is added directly to the mill base.

The thickening action of **Borchi® Gel L 75 N** may be reduced by polar, water-soluble film-forming agents, e.g. alcohols and glycols. Butyl diglycol acetate and Texanol®, on the other hand, bring about an increase in viscosity.

Since some formulations contain alcohol, it is advisable to test their effect on the viscosity of emulsion paints beforehand. In the case of gloss and silk-finish gloss paints, use of *Borchi® Gen DFN* or *Borchi® Gen SN 95* as the dispersing agent is recommended to achieve good stability and prevent sedimentation and floating.

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## Storage

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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.

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## Safety

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

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