# Borchi® Gel Thixo 2



## Thickener for solvent-based lacquers and paints

#### Description

**Borchi® Gel Thixo 2** is a thixotropic agent and thickener for paints containing solvents of a mainly non-polar or weakly polar nature. **Borchi® Gel Thixo 2** is suitable for use in binder systems based on drying oils, alkyd resins, epoxy resin esters, unsaturated polyesters, polyurethanes, chlorinated rubber, etc.

Borchi® Gel Thixo 2 is supplied as a fine white powder and is used in gloss, silk finish and matt paints.

#### Characteristic data

Appearance: fine white powder

 Acid value:
 < 4</td>
 DIN 53402

 Hydroxynumber, mg KOH/g:
 150 – 160
 DIN 53420

 Melting range, °C:
 approx. 80 - 86 (typical)
 DIN 53181

Saponification value: approx. 180
Active substance, %: 99 (typical)

Bulk density, g/l: 275 – 325 (typical)

Compatibility: non-polar or weakly polar solvents

### **Properties**

Borchi® Gel Thixo 2 is a thickener which enhances the thixotropic character of paints.

Borchi® Gel Thixo 2 reduces settling and floating of pigments and promotes pigment dispersion during manufacture.

**Borchi® Gel Thixo 2** improves the properties of the finished paint (e.g. spreadability, rheological behaviour), permits the application of thicker layers, reduces curtaining and increases the depth of color of the paint.

# **Applications**

**Borchi**<sup>®</sup> **Gel Thixo 2** is effective in gloss to matt paints containing solvents of a non-polar or weakly polar nature. Polar solvents are unsuitable although a small amount of polar solvent in a non-polar or weakly polar solvent combination does not adversely affect the efficiency of **Borchi**<sup>®</sup> **Gel Thixo 2**.

The nature of the binder to be used with **Borchi® Gel Thixo 2** is of secondary importance. Suitable film-forming agents include alkyd resins, drying oils, chlorinated rubber, epoxy resin esters, unsaturated polyesters and polyurethanes. The choice of pigment has hardly any effect on use of **Borchi® Gel Thixo 2**.



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# Use and Dosage

**Borchi® Gel Thixo 2** can be added in the supply form as a powder or (with prior preparation) as a paste. Its addition in the form of a paste is preferable for the sake of optimum efficiency.

When being incorporated in powder form, **Borchi® Gel Thixo 2** is added during preparation of the pigment paste which is then milled in the usual milling unit.

The temperatures reached during this process should be between 35 and 55 °C. With insufficient milling, however, this type of mixing may lead to agglomeration and subsequently to grain formation in the paint.

It is therefore a good idea to formulate **Borchi® Gel Thixo 2** into a paste using a suitable solvent before incorporating it into the pigment paste. This should preferably be performed at a high temperature of 70 to 80°C by gentle stirring, resulting in a homogeneous, clear paste. This paste is then added to the pigment paste prior to milling.

The optimum dosage of Borchi® Gel Thixo 2 is dependent on the paint system and the desired effect and must therefore be determined beforehand in trials. Excessive dosages should be avoided as too high quantities of Borchi® Gel Thixo 2 may adversely affect the properties of the paint (gloss, suitability for sanding). We recommend an addition of between 0.1 and 2.0 % Borchi® Gel Thixo 2 relative to the total paint formulation, depending on the paint system.

#### 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.

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