



Anti-Blocking additive for all water-borne paints and coatings

**Borchi® Coll 30**  
**Borchi® Coll 20**  
**Borchi® Coll 20 M**  
**Borchi® Coll 10**

## Description

The **Borchi® Coll** additives are colloid dispersions of silica particles of variable particle size according to type.

## Characteristic data

Borchi® Coll	30	20	20 M	10	
Solids content, % :	29 - 32	29 - 32	29 - 32	29 - 32	
pH - value:	approx. 10	approx. 9	approx. 9	approx. 10	
Density (g/cm <sup>3</sup> ):	1.20 – 1.22	1.20 – 1.22	1.20 – 1.22	1.20 – 1.22	DIN 51757
Viscosity (mPa·s):	< 5	< 10	< 10	< 10	DIN 53015
Ionic character:	anionic	anionic	anionic	anionic	
Appearance:	milky	translucent	translucent	clear	
NA <sub>2</sub> O-content, %:	approx. 0.15	approx. 0.15	approx. 0.17	approx. 0.35	

Aqueous, low-viscosity, non-settling dispersions

## Properties

With its reactive groups, **Borchi® Coll** affects initial and through drying of synthetic resin dispersions, silicate paints and water-borne alkyd resin systems which dry by oxidation.

**Borchi® Coll** also improves adhesion to wood, plastic and metal surfaces. **Borchi® Coll** reduces the tendency towards under-rusting as a result of improved film quality and more uniform distribution of barrier properties on the substrate.



The various improvements attainable with **Borchi® Coll** are as follows:

- brushability
- increased hiding power
- shorter drying time-increased film hardness
- increased whiteness-blocking resistance
- increased resistance to water and alcohol
- ability to withstand high temperatures
- adhesion to plastic, non-ferrous metals and wood
- corrosion resistance

Depending on the water-borne binder used, a stable degree of gloss across the entire spectrum from matt to gloss is attainable with **Borchi® Coll**. To achieve the described effects, **Borchi® Coll** must always be incorporated during the dispersion process.

## Applications

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**Silk-finish and gloss emulsion paints** (based on copolymers, acrylic esters)

**Borchi® Coll** has proved particularly suitable for silk-finish and gloss dispersions based on copolymers or acrylic esters. At an addition rate of approximately 3 %, it improves blocking resistance, through-drying and final hardness. It has only a negligible effect on gloss. If added to excess, reduction in gloss may occur, depending on the system.

**Silk-finish and gloss paints** (based on waterborne isocyanate-modified alkyd resins)

**Borchi® Coll 20 M** and **Borchi® Coll 30** are particularly suitable for use in waterborne isocyanate-modified alkyd resins. They are highly compatible with these systems and accelerate drying of the films. They improve film strength and final film hardness. At addition rates of up to 2 %, hiding power is increased without any adverse effect on gloss.

**Interior and exterior paints based on polymer dispersions** (copolymers of vinyl acetate, ethylene and vinyl chloride)

Improvements in interior and exterior paints based on polymer dispersions, e.g. copolymers of vinyl acetate, ethylene and vinyl chloride, have been achieved by addition of **Borchi® Coll 20**. An addition rate of approximately 5 % increases film hardness and makes the films dirt-repellent.

**Water-borne paints physically or oxidatively drying** (based on modified linseed oil alkyds)

Water-borne paints which dry physically or by oxidation exhibit a known tendency towards surface tack. Surface tack can be considerably reduced through addition of **Borchi® Coll 20 M** by ensuring even and fine dispersion into the film.

## Use and Dosage

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**Borchi® Coll** can be incorporated during pigment dispersion or subsequently into finished systems. We recommend that **Borchi® Coll** is added to the milling stock and left to mature for 24 hours.

Addition: 1 - 3 % relative to total paint formulation, depending on system, area of application and desired effect.



## 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.

Unused product in opened containers must be protected against contamination or evaporation of water and should be used up quickly where possible.

## Safety

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No special protective measures are necessary when working with **Borchi<sup>®</sup> Coll**. The standard procedures for handling of chemicals should be followed. For further information on product safety, please refer to our safety data sheet.

Updated: 25.02.2009

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