

# Borchers® Dry 0411 HS



Cobalt-free primary drier with particularly high drying activity for oxidatively drying coating systems and printing inks with reduced VOC content

## Description

**Borchers® Dry 0411 HS** is a new cobalt-free primary drier for VOC-reduced alkyd resin coatings and *high-solids* coatings, as well as for oxidatively drying printing ink systems. The activity of the siccative metal is enhanced by its combination with an organic drying accelerator.

The product can be used as a surface drier either in clear coats or pigmented coating systems, where it replaces other primary driers, especially cobalt siccatives.

## Characteristic data

Appearance:	clear, reddish brown solution of medium viscosity	
Density (20 °C), g/cm <sup>3</sup> :	1.00 – 1.04	DIN 51757 (A)
Flash point, °C:	> 100	
Solvent:	VOC-free fatty acid esters	
Solubility:	soluble in common organic solvents such as white-spirit, alcohols, glycols; immiscible with water	

## Properties

**Borchers® Dry 0411 HS** provides rapid surface drying and very good through-drying properties, thus enabling even drying of the applied film.

Coatings and inks siccated with **Borchers® Dry 0411 HS** continue to exhibit very good drying behavior with no degradation of drying ability even after extended storage. Drying results are comparable to those obtained with cobalt-siccated systems.

## Applications

**Borchers® Dry 0411 HS** is suitable for conventional air-drying alkyd resin coatings, as well as for *high-solids* coating systems and oxidatively drying printing inks. Because it contains a VOC-free solvent based on renewable raw materials, the product contains only a slight amount of VOC.

Due to the combination with an organic drying accelerator, **Borchers® Dry 0411 HS** exhibits an enhanced drying activity compared to common cobalt-free primary driers.



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## Use and Dosage

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**Borchers® Dry 0411 HS** can be added to the system as a finished preparation in any formulation step. Pre-thinning is not required. We recommend its addition at the end after the dispersing process prior to adding an anti-skinning agent.

The dosage of **Borchers® Dry 0411 HS** depends on the type and quantity of the binder used. Usual amounts are approx. 0.1 – 0.5 % by weight based on solid binder. It is recommended to start at the low end and increase addition rates in order to find the optimal dose.

To optimize the quality of the coating system, **Borchers® Dry 0411 HS** can be combined with all other Octa-Soligen® driers. *Octa-Soligen® Strontium* or *Octa-Soligen® Zirconium* have proven effective for increasing film hardness and improving through-drying of the applied film. *Octa-Soligen® Calcium* can be used to improve storage stability and stabilize drying ability. For alkyd resin coatings, the addition of 0.1 – 0.3 % by weight metal based on solid binder is recommended.

In printing ink systems, we recommend the combination with our phenol- and oxime-free antioxidant *Ascinin® Anti Skin VP 0444*. This can be incorporated into the ink, where it replaces the corresponding phenolic antioxidant, or applied instead of butanone oxime to the surface of printing inks in the container.

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## Storage

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Protect from the effects of weather and store at temperatures between 5 and 30 °C.  
Once opened, containers should be resealed immediately each time product is removed.

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## Safety

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Appropriate protection clothing must be worn while working.  
Please refer to our safety data sheet for additional information relating to safe handling and product safety.

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