

Nouryon

Berol[®] 185

Paint, Coatings & Inks



Berol 185 offers improved paint stability and colour acceptance properties in waterborne paints. It is a non label product, easy to handle and with good foam control.

A wetting and dispersing agent for water borne paints and coatings

Berol 185 - an efficient compatibilizer

Berol 185 is a nonionic readily biodegradable surfactant that offer improved surface wetting, paint stability and colour acceptance in waterborne paints.

Benefits when using Berol 185

- Efficient and versatile compatibilizer, useful to create stable colloidal systems, to avoid agglomeration of pigments and/or coagulation of the binder
- Effective in providing for good color acceptance when adding a colorant to the white base
- Capable of increasing the gloss of the paint
- Can improve the freeze-thaw stability
- Non toxic and readily biodegradable according to regulation (EC) No. 1272/2008
- Very low content of VOC
- A non label and non irritant product according to the European directive 1999/45/EC and EC 1272/2008
- Compatible with all other surfactant types, i.e. nonionic, anionic and cationic
- Stable under alkaline and acidic conditions

Applications

When used in a white base paint, the starting recommendation for dosage is 0.2% based on the total weight of the paint. Recommendation is to add the Berol 185 in the grind, as to facilitate an improved wetting and distribution of the various surface active ingredients on the pigments. For enhanced color acceptance, Berol 185 works especially well in formulations based on anionic stabilized systems.

Color acceptance, colanyl black pigment

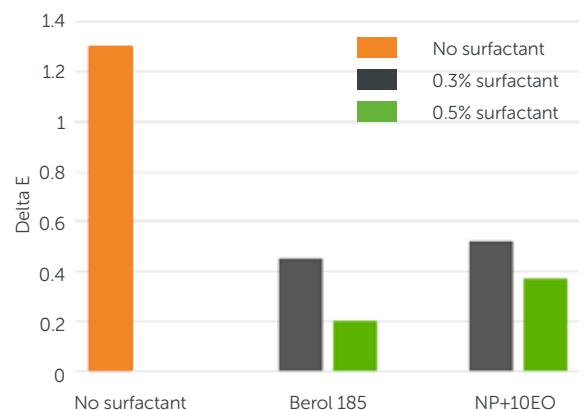


Fig 1. Results in color acceptance evaluation using Berol 185 in comparison with standard nonionic surfactant NP+10EO



Berol 185 - our label free, biodegradable option

Wetting performance

Berol 185 is a very efficient wetter and less dosage is needed to wet pigments compared to other wetting agents.

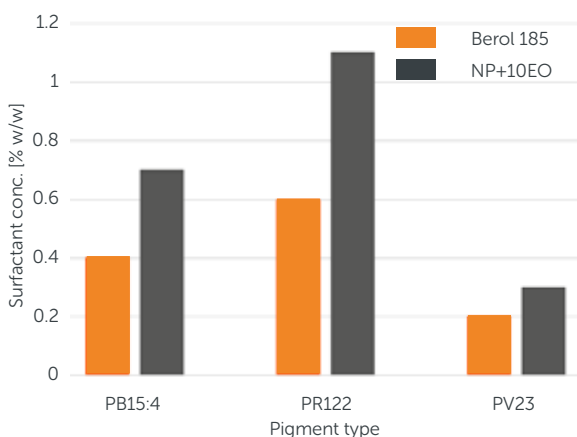


Fig 2. Amount of surfactant needed for wetting 2.5 wt% pigment in aqueous solution, comparison of Berol 185 with standard nonionic surfactant NP+10 EO

Product data

Active content in water	90%
Color	max 100 Hazen
Cloud point (1% in water)	64-70°C
HLB	13.5
Pour point	0°C
Surface tension Du Noüy, 25°C, 0.1% DIN 53914	30 mN/s
Wetting power Draves, 25°C, 0.1%	10 sec

Berol 185 is a very efficient wetter with superior performance compared to NP+10EO

For more information visit surfacechemistry.nouryon.com

How surfactants work

Surfactants are surface active compounds, having a water soluble and an oil soluble part. The water soluble part of the molecule may be charged (negative: anionic or positive: cationic) or uncharged (nonionic). The oil soluble part can either be derived from natural origin (fatty) or from a fossil source (synthetic).

The paint is from a surface chemistry point of view a very complex system. In order to make all these components form a stable colloidal suspension, a 'compatibilizer' is often required.

The use of a surfactant as compatibilizer facilitate the use of having multiple sourcing of polymer emulsions, colorants /pigments and rheology modifiers, as the surfactants and surface chemistry properties of these components usually differ between producers.

In the formulation of water borne paints, nonionic surfactants are often preferred. One main reason is that their action is less impacted by the presence of salts and other electrolytes, as are anionic surfactants.



Your global partner
for high performance
surfactants, enabling
sustainable formulations

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