

Berol® 185

A wetting and dispersing agent for water borne paints and coatings

An efficient compatibilizer

Berol 185 is a nonionic, readily biodegradable surfactant that offers improved surface wetting, paint stability and color acceptance properties in water borne paints. It is a non label product, easy to handle and with good foam control.

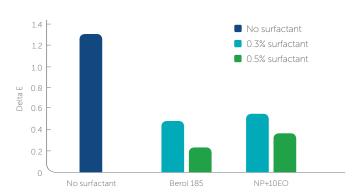
Key benefits

- 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.

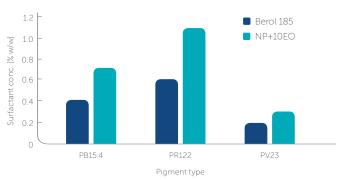
Color acceptance, colanyl black pigment



Results in color acceptance evaluation using Berol 185 in comparison with standard nonionic surfactant NP+10EO $\,$

Wetting performance

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



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

August 2021

Product data

Active content	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

Surfactants in paint

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 facilitates 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.

Contact us directly for detailed product information and sample request. website | nouryon.com email | paintsandcoatings@nouryon.com

Nouryon

Nouryon is a global, specialty chemicals leader. Markets and consumers worldwide rely on our essential solutions to manufacture everyday products, such as personal care, cleaning goods, paints and coatings, agriculture and food, pharmaceuticals, and building products. Furthermore, the dedication of more than 7,900 employees with a shared commitment to our customers, business growth, safety, sustainability and innovation has resulted in a consistently strong financial performance. We operate in over 80 countries around the world with a portfolio of industry-leading brands. Visit our website and follow us @Nouryon and on LinkedIn.

This document contains select information relating only to the product(s) and/or end use(s) identified. All information contained herein is offered in good faith and are believed to be reliable. Nouryon, however, makes no warranty as to the accuracy and/or sufficiency of such information, as to the merchantability or fitness of the product(s) listed for any particular purpose, or that any suggested use will not infringe any patent. Any person using the product(s) must determine for themselves, by preliminary tests or otherwise, the suitability of the product(s) for their purposes. This disclaimer is effective to the extent allowed by law and any provisions ruled not recognized or deemed unsuitable are considered severed from the disclaimer and the remaining provisions shall continue to have the full force and effect.

Products mentioned are trademarks of Nouryon and registered in many countries.