

## NUOSPERSE® FN 211

### Pigment Wetting & Dispersing Agent

#### GENERAL INFORMATION

**NUOSPERSE FN 211** is a nonionic pigment wetting and dispersing agent primarily for use in waterborne coating formulations. **NUOSPERSE FN 211** is alkyl phenol ethoxylate-free and replaces traditionally used nonionic surfactants.

**NUOSPERSE FN 211** is labelling-free in the E.U.

#### CHEMICAL & PHYSICAL PROPERTIES

Appearance 20°C	Clear liquid
Cloud point 1 %m in H <sub>2</sub> O	23 - 26°C
Active content %m	99 - 100%
pH 1% sol.	5 - 7
HLB value	approx. 12, 5

These are typical properties not to be used for specification purposes.

#### APPLICATIONS

- **NUOSPERSE FN 211** can be used in practically all types of aqueous coatings and dispersions. It is particularly effective for dispersing talc pastes.
- **NUOSPERSE FN 211** is used in emulsion paints to optimise pigment wetting. Best performance is obtained by using **NUOSPERSE FN 211** in conjunction with a polymeric anionic dispersant, such as **NUOSPERSE FX 504**.
- **NUOSPERSE FN 211** also improves the storage stability of the paint, including freeze/thaw.
- **NUOSPERSE FN 211** is composed of a non-ionic surfactant with polyether segments and a hydrophobic backbone.
- The unique composition accounts for the strong affinity of **NUOSPERSE FN 211** for various surfaces including hydrophilic pigments and extenders, and results in excellent pigment wetting and dispersing properties.

- Since **NUOSPERSE FN 211** is nonionic it can be used in combination with anionic, nonionic or even cationic surfactants.
- **NUOSPERSE FN 211** gives very low foam formation, also compared to other nonionic wetting agents.

#### KEY PROPERTIES

FEATURE	CONSEQUENCE
• Labelling free, APE-free	- replaces APE
• Non-ionic	- optimises colour development - reduces flocculation - highest pigment loading
• Low-VOC, low odour	- used in Low-VOC, low odour paints and pigment concentrates

#### INCORPORATION

The product is preferably added prior to the dispersion stage.

The quantity is strongly dependent on the composition of the coating or pigment paste formulation and should be determined experimentally.

#### LEVELS OF USE

For use in emulsion paints, a concentration between 0.2 to 1.0 % on total weight of the formulation is recommended. A typical dose is 0.4%.

The dosage in pigment dispersions (including tinting aids and colorants) may be as high as 15% on total weight of the pigment dispersion. A typical dosage is 5%.

As the composition of systems varies enormously it is highly recommended to check applicability in each case separately.

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# RHEOLATE<sup>®</sup> FN 211

## HEALTH AND SAFETY

Before using this product please consult our Safety Data Sheet (SDS) for information on safe handling and storage. The SDS can be found on the company website.

## SHELF LIFE

**NUOSPERSE FN 211** has a shelf life of 3 (three) years from date of manufacture.

## QUALITY ASSURANCE

Quality system at the site manufacturing this product complies with and is certified to ISO 9001 quality standards

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