

# NUOSPERSE® FX 605

## Pigment Dispersing Agent

### GENERAL INFORMATION

**NUOSPERSE FX 605** is a low-foaming pigment dispersing agent for aqueous systems. It counter-acts pigment flocculation in weak acid, neutral and strongly alkaline media. The product is also stable against hydrolysis and thus retains its activity even after extended storage of the coating system.

### CHEMICAL & PHYSICAL PROPERTIES

Appearance 20 °C	clear liquid
Active content	approx. 45%
pH, 5% m solution in water (ASTM D 1172)	8 - 9
Density, 20°C (ISO 2811-2)	approx. 1310 kg/m <sup>3</sup>
Viscosity, 30°C (ASTM D 2196)	max 500 mPa.s
Colour (DIN-EN 1557)	max. 5 Gardner
Chemical Composition	sodium salt of a polymeric carboxylic acid
Solubility	soluble in water

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

### APPLICATIONS

- **NUOSPERSE FX 605** is a low viscosity, easy-to-handle liquid, and is used as a dispersing agent for various pigment types and fillers in aqueous media. Examples include titanium dioxide, calcium carbonate, talc, kaolin and modified clays.
- **NUOSPERSE FX 605** is a deflocculant and reduces the viscosity of the pigment paste. It can therefore even disperse highly concentrated pastes. The product also has a stabilising influence on the milled and de-agglomerated particles, as a result of which flocculation is avoided.
- **NUOSPERSE FX 605** is insensitive to hydrolysis and does not depolymerize, contrary to poly-phosphate types, for example.
- **NUOSPERSE FX 605** is suitable for various dispersion paint systems, e.g. those based on acrylic, polyvinyl acetate or terpolymers.

### KEY PROPERTIES

FEATURE	CONSEQUENCE
• NO-VOC	- can be used in NO-VOC paints
• Ammonia-free	- ensures low odour paints
• Narrow distribution of polymer molecular mass	- optimal efficiency - enhanced pigment dispersion - reduced flocculation - best opacity
• No foaming	- reduced demand of defoamer
• Insensitive to hydrolysis	- provides long term stability of the paint

### INCORPORATION

The quantity of **NUOSPERSE FX 605** to be added depends on the pigment type and the milling method. We suggest the dose is determined by a ladder study to monitor the influence of added quantity on viscosity. It is recommended to start by adding the **NUOSPERSE FX 605** to the water, and then incorporate the pigments and fillers.

The following dosages have been determined by in laboratory tests, but should still only be regarded as guideline figures. They represent the required quantity of **NUOSPERSE FX 605** as delivered calculated on the solid pigment or filler respectively.

Titanium dioxide, calcium carbonate, talc	: 0.05 ... 0.5% NUOSPERSE FX 605
China Clay	: 0.4 ... 0.8% NUOSPERSE FX 605
Satin White® China Clay mixture at a proportion of 3:4	: 2.5 ... 3.0% m of NUOSPERSE FX 605

*continued...*

## NUOSPERSE<sup>®</sup> FX 605

### 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 FX 605** has a shelf life of 2 (two) years from date of manufacture.

### QUALITY ASSURANCE

Since 1992 the company is a holder of the ISO 9001 / ISO 9002 certificates, which guarantees that all operations are conducted according to the stipulated standards.

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