

## 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 alkyline mediums. The product is also stable to hydrolysis and thus retains its activity even after extended storage of the coating system.

### PHYSICAL PROPERTIES

Appearance	: clear liquid
Active matter	: approx. 45%
pH, 5% m solution in water (ASTM D 1172)	: 8 - 9
Density, 20°C (DIN 53217/3)	: approx. 1310 kg/m <sup>3</sup>
Viscosity, 30°C (DIN 53015)	: max 1000 mPa.s
Color (DIN-EN 1557)	: max. 5 Gardner
Solvent composition	: water
Chemical Composition	: sodium salt of a polymeric carboxylic acid
Solubility	: soluble in water

### APPLICATION AND PROPERTIES

NUOSPERSE® FX 605 is a low viscous, easily workable liquid, and is applied as dispersing agent to various pigment types and fillers in aqueous mediums, such as titanium dioxide, calcium carbonate, talc, China Clay and satin white.

NUOSPERSE® FX 605 has a deflocculating power and reduces the viscosity of the pigment paste and can therefore even disperse highly concentrated pastes. The product also has a stabilising influence on the particles already milled and de-agglomerated, as a result of which flocculation of these particles avoided.

NUOSPERSE® FX 605 is intensive to hydrolysis and does not depolymerize, contrary to e.g. poly-phosphate types.

NUOSPERSE® FX 605 is applicable to various dispersion paint systems, e.g. systems based on acrylic-, polyvinyl acetate- and polymer dispersion types.

Feature	Consequence
• NO-VOC	- Can be used in NO-VOC paints
• Ammonia-free	- Ensures low odour paints
• Narrow distribution of molecular mass of the polymer	- optimal effectivity - enhanced pigment dispersion - less flocculation - best opacity
• No foaming	- reduces required demand of defoamer
• Insensitive to hydrolysis-	- provides longterm stability of the paint

### DOSAGE

The quantity of NUOSPERSE® FX 605 to be added to a pigment type and the milling method. We suggest that you determine the maximum applicable quantity by means of laboratory trails, e.g. by determining the viscosity-course of the pastes at various percentages of NUOSPERSE® FX 605.

It is recommended to start by mixing NUOSPERSE® FX 605 with the water, and subsequently add the pigments and fillers. Whilst the following dosages have been determined by means of laboratory tests, they should still only be regarded as guideline figures, however, they do represent the required quantity of NUOSPERSE® FX 605 i.e., of the products as such, calculated on the solid pigment, respectively the solid filler.

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

(continued)

The information in this publication is intended to serve as guide but is not necessarily complete and is given without warranty. We recommend all users to determine the suitability of our products for their intended uses and caution them to comply with statutory obligations and to avoid infringing rights of third parties. We encourage users to contact us to discuss problems involving our products in order to facilitate their use.

NUOSPERSE@FX 605.doc161204

**Elementis Specialties**  
Pegasuspark  
De Kleetlaan 12A – Bus 3  
B-1831 Diegem • Belgium  
Tel +32 2 790 76 00  
Fax +32 2 790 76 60

**Elementis Specialties**  
P.O. Box 700  
Hightstown  
NJ 08520 • USA  
Tel +1 609 443 2000  
Fax +1 609 443 2422

**Elementis Specialties**  
No. 120 Jalan Kapar 27/89  
Section 27 • 40400 Shah Alam  
Selangor • Malaysia  
Tel +603 519 228 87  
Fax +603 519 238 87

## HANDLING AND SAFETY

More detailed information on handling and safety for each product is included in the relevant material safety data sheet, available for each product.

## QUALITY ASSURANCE

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

NUOSPERSE@FX 605.doc161204

The information in this publication is intended to serve as guide but is not necessarily complete and is given without warranty. We recommend all users to determine the suitability of our products for their intended uses and caution them to comply with statutory obligations and to avoid infringing rights of third parties. We encourage users to contact us to discuss problems involving our products in order to facilitate their use.

**Elementis Specialties**  
Pegasuspark  
De Kleetlaan 12A – Bus 3  
B-1831 Diegem • Belgium  
Tel +32 2 790 76 00  
Fax +32 2 790 76 60

**Elementis Specialties**  
P.O. Box 700  
Hightstown  
NJ 08520 • USA  
Tel +1 609 443 2000  
Fax +1 609 443 2422

**Elementis Specialties**  
No. 120 Jalan Kapar 27/89  
Section 27 • 40400 Shah Alam  
Selangor • Malaysia  
Tel +603 519 228 87  
Fax +603 519 238 87