

Pigment Dispersing Agent

GENERAL INFORMATION

Pigment dispersing agent NUOSPERSE® FX 609 is designed for use in filler/pigment concentrates. NUOSPERSE® FX 609 ensures extremely stable pigment dispersions for use in aqueous systems.

PHYSICAL PROPERTIES

Appearance 20 °C	Hazy liquid
Active content	approx. 45%
pH, 5% solution in water	7 – 8
Density 20 °C (ISO 2811-2)	approx. 1320 kg/m ³
Viscosity 30 °C (DIN 53015)	max. 5000 mPa.s
Solubility	Soluble in water
Composition	Basic salt of a polymeric carboxylic acid

APPLICATION AND PROPERTIES

NUOSPERSE® FX 609 is a neutralised salt of a poly-meric carboxylic acid, specially designed for use as a pigment dispersing agent with maximum stabilising properties against flocculation. These properties make NUOSPERSE® FX 609 of special interest for application in aqueous suspensions with mineral substances such as calcium carbonate and titanium dioxide. Using NUOSPERSE® FX 609 it is possible to obtain very fine yet stable suspensions.

NUOSPERSE® FX 609 is a deflocculant and reduces the viscosity of the pigment paste. It can therefore even disperse highly concentrated pastes.

The pastes remain stable and with low viscosity over time, even if left unstirred. NUOSPERSE® FX 609 is insensitive to hydrolysis and does not depolymerize. NUOSPERSE® FX 609 is intended for pigmented applications in which the particle size is at least 80 % less than one micron.

Feature

- highest pigment concentration
- insensitive to hydrolysis
- reduced sedimentation
- optimised rheological profile after storage
- optimised pigment dispersion

Consequence

- reduce quantity of loading water required
- provides long-term stability
- easy handling
- no gel effect
- maximum fineness
- protection against flocculation of the particles

INCORPORATION

The quantity of NUOSPERSE® FX 609 to be added should be determined experimentally and depends on the surface characteristics of the pigments, fillers and the milling method. We suggest a ladder study to monitor the influence of dose on viscosity. It is recommended to start by adding the NUOSPERSE® FX 609 with the water, and then add the pigment or filler.

The following dosages have been determined in laboratory tests but should still only be regarded as guidelines. They represent the required quantity of NUOSPERSE® FX 609 as delivered calculated on the solid pigment or filler.

Titanium dioxide	: 1.5...2.5% NUOSPERSE® FX 609
Iron oxide yellow	: 2.5...3.5% NUOSPERSE® FX 609
Chalk	: 0.1...1.0% NUOSPERSE® FX 609
Calcite	: 0.2...0.6% NUOSPERSE® FX 609
Dolomite	: 0.2...0.5% NUOSPERSE® FX 609
Synthetic calcium carbonate	: 0.2...0.5% NUOSPERSE® FX 609

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HEALTH AND SAFETY DATA

Before using this product please consult our Material Safety Data Sheet (MSDS) for information on safe handling and storage. MSDS can be found on the company website at www.elementis-specialties.com.

SHELF LIFE

NUOSPERSE® FX 609 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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