

## Pigment Dispersing Agent

### GENERAL INFORMATION

NUOSPERSE® FX 9086 pigment dispersing agent is designed for use in pigment pastes and provides extremely stable pigment dispersions for application in a wide range of solvent borne coatings and inks.

### PHYSICAL PROPERTIES

Appearance 20 °C	Clear liquid
Active content	Approx. 50%
Density 20°C (ISO 2811-2)	Approx. 1015 kg/m <sup>3</sup>
Viscosity 25°C (ASTM D 2196)	Max. 200 mPa.s
Solubility	Soluble in xylene, butanol, white spirit and various aromatic and aliphatic solvents. Insoluble in water
Flash point (ASTM D93)	Approx. 42°C
Composition	Polymeric surfactant dissolved in methoxy propyl acetate

### APPLICATION AND PROPERTIES

NUOSPERSE® FX 9086 is a unique AB-copolymer, specially designed for use as a pigment dispersing agent with maximum stabilising properties against flocculation. These properties make NUOSPERSE® FX 9086 of special interest for applications in pigment dispersions, tinters or colorants used in a broad spectrum of paints.

The polymeric character of NUOSPERSE® FX 9086 and the presence of multifunctional adsorbing anchoring groups in the same molecule guarantee a strong interaction with the pigment surface.

NUOSPERSE® FX 9086 is adsorbed onto a large range of pigment surfaces. The presence of its aliphatic chains also prevent flocculation by entropic repulsion.

The NUOSPERSE® FX 9086 structure is compatible with practically all binder systems, aliphatic as well as aromatic, and has been designed for use in high quality pigment pastes.

### FEATURE CONSEQUENCE

- reactive anchoring groups - irreversible adsorption onto pigments
- polymer backbone - provides longterm tinter stability
- optimal colour development - reduced raw material costs
- reduced sedimentation - easy handling
- optimised gloss and opacity - high quality
- maximum pigment loading - also applicable for full tones

For the production of pumpable tinters it is not necessary to use a resin or other dispersing agent in conjunction with NUOSPERSE® FX 9086.

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The tinters can be used in the following coating systems:

- long oil alkyds
- alkyd melamines
- epoxy polyamides
- acrylics
- polyurethanes
- nitrocellulosics

Multifunctional active groups coupled with the overall molecular structure enable **NUOSPERSE® FX 9086** to disperse and stabilise both inorganic and organic pigments.

## INCORPORATION

**NUOSPERSE® FX 9086** should be added to the solvent or binder/solvent mixture before pigment addition. The quantity to be used should be determined experimentally and depends on several factors like the pigment surface characteristics, the solvent and in some cases the binder and the required coating performance.

As a dispersing agent for pigment pastes or tinters **NUOSPERSE® FX 9086** should be used in concentrations between 5 and 35% (calculated on the total weight of paste or tinter).

### EXAMPLES

1. Organic red  
40% White Spirit  
30% **NUOSPERSE® FX 9086**  
30% Irgazinred DPP BO  
100%
2. Phtalocyaninblue  
45% White Spirit  
30% **NUOSPERSE® FX 9086**  
25% Heliogen Blue L 6910 LF  
100%

3. Iron Oxide Yellow  
28% White Spirit  
12% **NUOSPERSE® FX 9086**  
60% Bayferrox 3920  
100%

Additional starting formulations can be supplied on request.

## HEALTH AND SAFETY DATA

Before using this product please consult our Material Safety Data Sheet (MSDS) for information on safe handling and storage.

## SHELF LIFE

**NUOSPERSE® FX 9086** has a shelf life of 2 (two) years from date of manufacture.

## QUALITY ASSURANCE

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

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