

NUOSPERSE® FX 9086

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 solventborne coatings and inks.

CHEMICAL & PHYSICAL PROPERTIES

Appearance 20 °C	clear liquid
Active content	approx. 50%
Density 20°C (ISO 2811-2)	approx. 1015 kg/m ³
Viscosity 25°C (ASTM D 2196)	max. 300 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

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

APPLICATIONS

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

KEY PROPERTIES

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

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.

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LEVELS OF USE

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

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 9086 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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