

NUOSPERSE® FA 601

Pigment Wetting and Dispersing Agent

GENERAL INFORMATION

NUOSPERSE FA 601 is a liquid wetting and dispersing agent which has been especially formulated for use in organic solvent based paint systems. **NUOSPERSE FA 601** is effective for both organic and inorganic pigments. Properties such as opacity, gloss, colour strength and brightness can be considerably improved at lower cost.

CHEMICAL & PHYSICAL PROPERTIES

Appearance 20 °C	clear liquid
Active content	50 %
pH 2 %m solution in water (ASTM D 1172)	6.0 - 7.0
Density, 20 °C (ISO 2811-2)	approx. 1010 kg/m ³
Viscosity, 25 °C (ASTM D 2196)	max. 100 mPa.s
Colour, 10% in 50% IPA (DIN-EN 1557)	max. 50 Apha
Solubility	soluble in many organic solvents; dispersible in water
Flash point (ASTM D 65)	40 - 42°C
Composition	combination of surface active agents in solution
Ionic character	anionic

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

APPLICATIONS

- **NUOSPERSE FA 601** improves and accelerates the preparation of stable dispersions by ensuring optimum and uniform pigment wetting. In the wetting process the solid/air interface is replaced by the solid/liquid interface.
- **NUOSPERSE FA 601** molecules are strongly adsorbed onto the pigment surface. The dispersed pigment particles are stabilised by entropic repulsion, thereby considerably reducing the risks of re-agglomeration and flocculation.

- **NUOSPERSE FA 601** increases the colouring power of pigments enabling substantial raw material cost savings to be achieved. Gloss properties of paints are also improved, particularly in systems using poor wetting binders.
- **NUOSPERSE FA 601** stabilises viscosity without exhibiting any detrimental effect on hardness, adhesion and elasticity. The addition of the product to pigment pastes generally reduces viscosity, which allows for a higher solids content.
- An increase in viscosity is observed with very high pigment concentrations, therefore tests are recommended in order to establish the acceptable optimum adjustment.
- **NUOSPERSE FA 601** increases the pigment covering power and assists in preventing flocculation, flooding and pigment sedimentation.
- Using the product also improves the compatibility of colorants in white base paint.
- **NUOSPERSE FA 601** is also successfully used to disperse iron oxide and chromium dioxide in polymers used in magnetic audio-visual tapes.

KEY PROPERTIES

FEATURE	CONSEQUENCE
• Strong adsorption on pigment surface	- improved colour development - better and faster dispersion - reduced rub-up and colour float - improved compatibility with universal colorants
• Multi-functional	- adsorbs onto a wide variety of pigments paints
• Low molecular weight	- fast adsorption - lower process viscosity of the milling paste - best cost/performance ratio

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INCORPORATION

NUOSPERSE FA 601 should be added to the milling paste prior to dispersion and is suitable for all organic solvent based paint systems, especially air drying and physically drying paints.

LEVELS OF USE

The product is generally added at a concentration of 1.0 %, based on the weight of the milling paste. However, due to variations in pigments, extenders and binders, it is recommended to undertake laboratory trials in order to establish the exact quantity required for optimum results.

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 FA 601 has a shelf life of 3 (three) 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.

NOTE: The information herein is currently believed to be accurate. We do not guarantee its accuracy. Purchasers shall not rely on statements herein when purchasing any products. Purchasers should make their own investigations to determine if such products are suitable for a particular use. The products discussed are sold without warranty, express or implied, including a warranty of merchantability and fitness for use. Purchasers will be subject to a separate agreement which will not incorporate this document.

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