

# **NUOSPERSE® FX 610**

**Pigment Dispersing Agent** 

## **GENERAL INFORMATION**

**NUOSPERSE FX 610** is a highly effective pigment dispersing agent for use primarily in waterborne architectural coatings, pigment pastes, colorants and printing inks. The product is a liquid, multi-functional polymer and is VOC-free.

## **CHEMICAL & PHYSICAL PROPERTIES**

Appearance 20 °C	clear or slightly hazy liquid
Active content	ca. 25 %
Density, 20 °C (ISO 2811-2)	ca. 1078 kg/m³
Viscosity, 20 °C (ASTM D 2196)	<100 mPa.s
pH (ASTM D 1172)	8.5 - 10.0
Colour	colourless to light yellow

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

## **APPLICATIONS**

- NUOSPERSE FX 610 is suitable for use with a wide variety of binders for decorative as well as industrial applications. It is also the product of choice for waterborne alkyd formulations.
- NUOSPERSE FX 610 can be used in pigment concentrates for tinting paints, leather finishes, textiles, plastics, inks, and other similar coatings systems.

#### **KEY PROPERTIES**

• The multi-functional structure of NUOSPERSE FX 610 ensures strong interaction with a wide range of pigments. NUOSPERSE FX 610 dispersant is not only efficiently adsorbed onto inorganic pigments such as titanium dioxide and iron oxides (yellow, red or black) but also onto organic pigments such as fast red, quindo magenta, phthalo blue and phthalo green. Further, it is very effective with carbon black and extenders. The strong interaction and the unique polymer structure of NUOSPERSE FX 610 result in optimised stabilisation of pigments in aqueous systems.

- NUOSPERSE FX 610 dispersant can also be used together with a suitable wetting agent such as the NUOSPERSE FN 265 if required.
- The main features of NUOSPERSE FX 610 are:

Feature	Consequence
No VOC	- can be used in VOC-
	compliant coatings
Optimised stabilisation	<ul> <li>high gloss levels</li> </ul>
against pigment	<ul> <li>optimal opacity</li> </ul>
flocculation	<ul> <li>consistent quality</li> </ul>
Improved pigment	<ul> <li>shorter grinding times</li> </ul>
wetting	<ul> <li>energy savings</li> </ul>
	<ul> <li>reduced pigment</li> </ul>
	costs
Strongly adsorbed	<ul> <li>optimises stability</li> </ul>
onto pigment surface	<ul> <li>optimal opacity</li> </ul>
Excellent compatibility	- high gloss levels
with a wide range of	<ul> <li>improved film</li> </ul>
binders	appearance
	<ul> <li>high water resistance</li> </ul>

#### INCORPORATION

For maximum efficiency, **NUOSPERSE FX 610** is added prior to the grinding stage. The ideal procedure is to incorporate **NUOSPERSE FX 610** in the aqueous medium before the addition of the pigments and extenders.

## **LEVELS OF USE**

We recommend the following dosage of **NUOSPERSE FX 610** as a starting point:

as a dispersant/vehicle in pigment concentrates: 1 to 10 % on total weight of the pigment concentrate.

as a pigment dispersant in paint: 0.5~% to 2.0~% on total formulation.

**as a pigment dispersant in printing inks:** 0.5 to 3.0% on total formulation.

As the composition and production procedures of coatings vary enormously, it is recommended to check applicability in each case individually.



## **NUOSPERSE® FX 610**

## **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.

## STORAGE RECOMMENDATIONS

Store away from excessive heat or open flame. Keep container closed when not in use.

#### SHELF LIFE

**NUOSPERSE FX 610** 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.

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