

NUOSPERSE[®] 2006

Multi-purpose wetting agent for solvent- and waterborne coating systems



Key Benefits

- ❖ Multi-purpose wetting agent
- ❖ Excellent color acceptance improver/compatibilizer
- ❖ Improves excellently flow and levelling

Introduction

NUOSPERSE® 2006 is an APE- and solvent-free, anionic, multi-purpose wetting and dispersing agent. It is used in aqueous and non-aqueous coating systems.

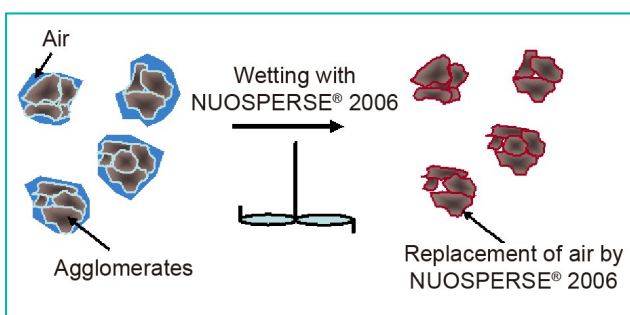
Composition	Anionic surface active compound
Appearance	Low viscosity clear liquid
Active solids, [%]	62 - 65

Features

- Wetting agent and compatibiliser
- Improves flow and levelling
- Organic solvent free
- Low VOC
- APE free
- Universal

Key benefits

- Improved pigment stabilisation and reduced pigment flooding and floating
- Improved homogenisation between universal colorant and non-aqueous base system
- Improved color acceptance and color development
- Improved wetting of difficult-to-wet pigments
- Reduced surface tension to allow better substrate wetting



Incorporation and levels of use

NUOSPERSE® 2006 is typically added into the pigment grind prior to the pigment addition.

Post addition of NUOSPERSE® 2006 is an alternative when compatibility of a colorant with a base paint needs to be improved.

The required loading level for NUOSPERSE® 2006 is typically between 0.1 - 1.0% when incorporated into the grind. Post addition typically requires a higher loading level of 0.5 - 2.0%.

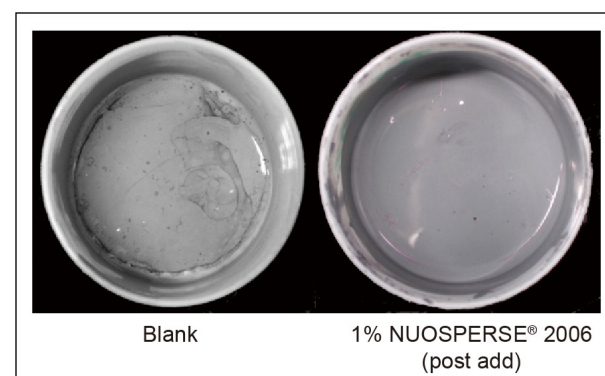
Products tested

Flooding and floating

Flooding and floating problems of pigments in latex emulsion paints can be significantly reduced by using the multi-purpose wetting agent NUOSPERSE® 2006.

The example below shows the strongly reduced flooding of a black colorant in a waterborne white latex paint on addition of 1% NUOSPERSE® 2006.

Figure 1

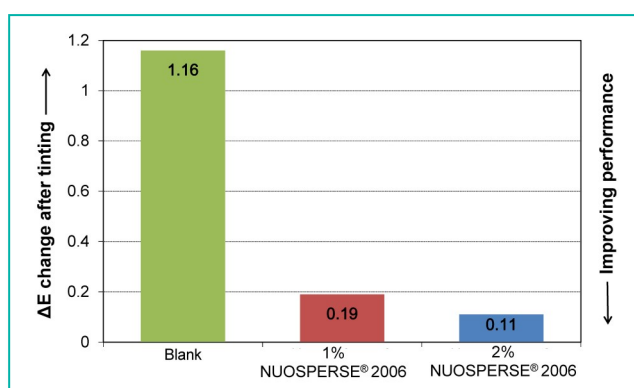


Color acceptance and development

NUOSPERSE® 2006 greatly improves the compatibility of a universal colorant in a water- or solventborne base system. The addition of the wetting agent significantly improves color development and color acceptance.

The figure 2 shows the improvement of the color acceptance and color development achieved when post-adding NUOSPERSE® 2006 to an aromatic-free, low VOC, decorative alkyd paint tinted with a universal black colorant.

Figure 2



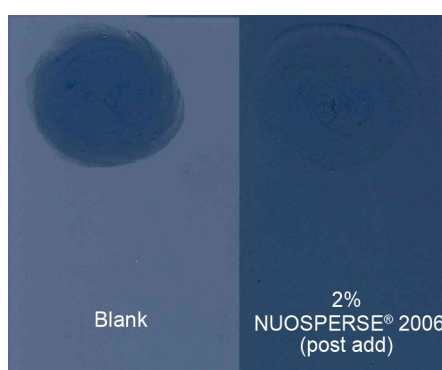
1% NUOSPERSE® 2006 post-added with reduced mixing time and forces provides significantly improved color acceptance. 2% addition of the wetting agent improves the color acceptance further and the system is stable even after only 2 minutes mixing time. When incorporated into the grind, typically much lower addition levels are required, for example 0.3 - 0.5%.



Color development can also be significantly improved using NUOSPERSE® 2006 as a compatibilizer. Use of the wetting agent gives a more rapid and constant color development compared to the blank sample without NUOSPERSE® 2006.

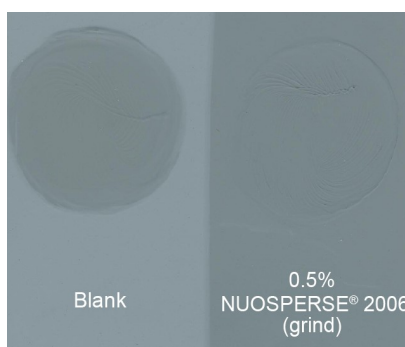
The improved compatibility between the universal colorant and the solventborne base paint results in a more reproducible and stable color development as shown in figure 3.

Figure 3



Color acceptance and color development can also be significantly improved using NUOSPERSE® 2006 as compatibilizer in this standard styrene acrylic based latex paint.

Figure 4



HSE statement

As with any new chemical substance, it is recommended that the Material Safety Data Sheet be reviewed prior to use.

Further information can be obtained from the Technical Data Sheet of each individual grade.

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