AFCONA – 4403



Chemical Composition

Modified polyacrylic polymer

Product general description

High molecular weight polymeric dispersant for defloculation of all type of pigments

Product Properties

AFCONA-4403 is an effective polymeric dispersant for stabilizing inorganic and organic pigments. It has very good stability performance, through effective steric hindrance, on all type of pigments.

This results in:

- improved gloss and DOI
- reduced flooding problems
- high colour strength

AFCONA-4403 is a better compatibility version of AFCONA – 4401. With the special modification it gives lower surface tension on the polymer. This character will allow the dispersant easier to penetrate to the surface of the pigment, thus this gives better wetting and faster grinding.

It has very wide compatibility from low polar to high polar systems, including nitrocellulose and Thermoplastic Acrylic. However care must be taken when used in combination with chlorinated polymers and/or epoxies systems, because in these systems it has a tendency to yellowing or gelling

AFCONA-4403 can be used in all kinds of high quality solvent-based industrial coatings including automotive topcoats. The best performance is given in the following resin systems:

- Oil free Polyesters
- Thermosetting Acrylics
- Thermoplastic acrylics

Note1: Due to the linear and symmetry structure, the viscosity reduction property of AFCONA – 4403 is much less than the AFCONA polyurethane type of dispersants.

Note2: AFCONA – 4403 will become slightly hazy at temperatures below 5° C. This will not influence the quality.

Product specification

Active ingredients 54 - 56%

Density at 20 °C $0.94 - 0.96 \text{g/cm}^3$

Solvents Butylacetate /

Sec. butanol/Xylene

Amine value 34 - 44 mg KOH/g

Flashpoint 24°C

Colour max. 5

Addition and dosage

Calculation method for the required amount of active ingredient on pigment:

TiO2 : 2 - 3%
Other inorganic pigments : 2 - 4%
Organic pigments : 20 - 40%
Carbon blacks : 20 - 60%

Incorporation

AFCONA-4403 should be incorporated in the mill base before adding the pigments.

Storage

AFCONA-4403 should be stored in a cool dry place. When kept in an original unopened container, it will keep up to 5 years from the date of manufacture. The expiry date is indicated on the container.

Packaging

25 kg and 190 kg non-returnable containers.