AFCONA – 4400

Chemical Composition

Modified polyacrylic polymer

Product general description

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

Product Properties

AFCONA-4400 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-4400 is a higher molecular weight version of AFCONA – 4401. With the higher molecular weight, it shows better pigment stability performance (deflocculation) especially with organic pigments.

It has very wide compatibility from low polar to high polar systems, including nitrocellulose and Thermoplastic Acrylic. However for those systems we have better products like AFCONA – 4200 and AFCONA – 4000.

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-4400 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 – 4400 is much less than the AFCONA polyurethane type of dispersants. Note2: AFCONA – 4400 will become slightly hazy at temperatures below 5° C. This will not influence the quality.

Product specification		
Active ingredients		
Solvents	Butylacetate / Sec. butanol	
Density at 20 °C	$0.95 - 0.97 \text{ g/cm}^3$	
Amine value	40 – 55 mg KOH/g	
Flashpoint	24°C	
Colour	max. 4	

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-4400 should be incorporated in the mill base before adding the pigments.

<u>Storage</u>

AFCONA-4400 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 180 kg non-returnable containers.

AFCONA ADDITIVES SDN BHD (711366-U) 10, Jalan Anggerik Mokara, 31/63, Kota Kemuning, 40460, Shah Alam, Selangor, Malaysia. Tel : +603-5122 2289 Fax : +603-5122 8289 Web Site : www.afcona.com / www.afcona.com.my This datasheet is intended to give technical guidance without any obligation