

AFCONA - 4010



Chemical Composition

Modified polyurethane polymer.

Product general description

Polymeric dispersant mainly for inorganic pigments and some organic pigments.

Product Properties

AFCONA-4010 is a polymeric dispersant principally developed for stabilizing inorganic pigments like TiO₂, iron oxides and matting agents. It can be used in almost all solvent-based coating systems because AFCONA-4010 has very good compatibility with almost all resins used in coatings.

The special properties and recommended systems for AFCONA-4010 are as follows:

- 1) AFCONA-4010 is an excellent dispersant for TiO₂, as it gives better whiteness and hiding power.
- 2) AFCONA-4010 is widely used in preparation of matting agent pastes. It gives better matting agent orientation, consistent gloss levels after storage and a soft-touch matting appearance.
- 3) AFCONA-4010 can be used as co-grinding dispersant in mill bases. It also can be used as a post-add additive to correct flooding and floating effects.
- 4) Mostly, AFCONA-4010 is used as a dispersant for inorganic pigments and some organic pigments. In case AFCONA-4010 would be ineffective with certain organic pigments, other more effective and higher molecular weight AFCONA polymeric dispersants could be used. It is always possible to mix pigments stabilized with AFCONA-4010 and organic pigments stabilized with other higher molecular weight dispersants.

Note: AFCONA-4010 will become slightly hazy at temperature 5°C and below, but this will not influence its quality.

Product Specification

Non-volatile matter	50 - 54% (150°C,0.5h)
Solvent	Butylacetate/Xylene/ Sec-butanol/Propylene glycol methyl ether acetate
Density	0.96 - 1.00 g/cm ³ (20°C)
Acid Value	8 - 18 mg KOH/g
Amine Value	6 - 16 mg KOH/g
Flash point	39°C
Gardner color	Max.6
Appearance	Clear to slight hazy, yellow liquid (25°C)

Addition and dosage

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

- TiO₂ : 2 - 4%
- Inorganic pigments : 5 - 10%
- Organic pigments : 20 - 40%
- Carbon blacks : 30 - 60%

Incorporation

AFCONA-4010 must be incorporated into the mill-base before the addition of pigments.

Storage

AFCONA-4010 shall be stored in cool and dry place away from direct sunlight. Shelf-life is 5 years from the date of manufacturer, if kept in original and unopened container. The expiring date is indicated on the package.

Packaging

25kg and 200 kg non-returnable containers

For product safety information: please refer to the product SDS.

AFCONA ADDITIVES

Web Site : www.afcona.com

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This version replaces all previous ones.