

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 resin used in coatings.

The special properties and recommended systems for AFCONA – 4010 as below:

- 1) AFCONA – 4010 is a very good 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, constant gloss level after storage and soft feel matting appearance. The guide formulation of matting agent paste as below:

Resin (50-60%solid)	30 – 35%
Matting agent	20 – 30%
AFCONA 4010	4 – 6%
Solvents combination	the rest
- 3) AFCONA – 4010 can be used as co-grinding dispersant in mill bases. It also can act as post adding additive for correction of flooding and floating effects.
- 4) Mostly, AFCONA – 4010 is used as dispersant for inorganic pigments and some organic pigments. In case, AFCONA – 4010 fail with organic pigments, other more effective and higher molecular weight AFCONA polymeric dispersants must be used. It is always possible to mix combinations of pigments stabilized with AFCONA-4010 and organic pigments stabilized with higher molecular weight dispersants.

Note: AFCONA – 4010 will become slightly hazy at temperature 5°C and below, but this will not influent the quality.

Product Specification

Non-volatile matter	50 - 54% (150°C,0.5h)
Solvent	Butylacetate/PMA/ Sec-butanol/Xylene
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

Titanium dioxide : 2 - 4% (as supplied)
 Inorganic pigments : 5 - 10% (as supplied)
 Organic pigments : 20 - 40% (as supplied)
 Carbon blacks : 30 - 60% (as supplied)

Incorporation

AFCONA-4010 should be incorporated in the mill base before adding the pigments.

Storage

AFCONA-4010 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

25kg and 200 kg non-returnable containers

AFCONA ADDITIVES

Web Site : www.afcona.com

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This version replaces all previous ones.