

AFCONA-4011



Chemical Composition

Modified polyurethane polymer.

Product general description

Polymeric dispersant mainly for inorganic pigments and some organic pigments.

Product Properties

AFCONA-4011 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-4011 has very good compatibility with almost all resins used in coatings. AFCONA-4011 is a cost effective version of AFCONA-4010.

The characteristics and recommended systems for AFCONA-4011 are as follows:

- 1) AFCONA-4011 is an excellent dispersant for TiO₂, as it gives better whiteness and hiding power.
- 2) AFCONA-4011 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-4011 can be used as co-grinding dispersant in mill bases. It also can be used as a post-additive to correct flooding and floating effects.
- 4) Mostly, it can be used to stabilize inorganic pigments and, by mixing with other higher molecular weight AFCONA dispersants, to stabilize organic pigments.
- 5) AFCONA-4011 has become a universal dispersant for all kinds of solvent-based paints, ranging from high-performance industrial coatings to general decorative paints. It has excellent stability for inorganic pigments.

Note: AFCONA-4011 may become slightly hazy when stored at or below 5°C, but this will not influence the quality.

Product Specification

Non-volatile matter	50 - 54%(150°C,0.5h)
Solvent	Butyl acetate/Xylene/ Propylene glycol methyl ether acetate/Sec-butanol
Density	0.96 - 1.00 g/cm ³ (20°C)
Acid Value	8 - 18 mg KOH/g
Amine Value	6 - 16 mg KOH/g
Gardner color	Max.6
Flash point	39°C
Appearance	Clear yellowish/slightly hazy 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-4011 should be incorporated in the mill base before adding the pigments.

Storage

AFCONA-4011 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

This information and all further technical advice are based on our present knowledge and experience. In particular, no warranty, whether express or implied, or guarantee of product properties in the legal sense is intended or implied. Performance of the product described herein should be verified by testing, which should be carried out only by qualified experts in the sole responsibility of a customer. However, it implies no liability or other legal responsibility on our part, including with regard to existing third party intellectual property rights, especially patent rights. Reference to trade names used by other companies is neither a recommendation, nor does it imply that similar products could not be used. We reserve the right to make any changes according to science and technological progress or further developments.

This version replaces all previous ones.

AFCONA ADDITIVES

Web Site : www.afcona.com

This information and all further technical advice are based on our present knowledge and experience. In particular, no warranty, whether express or implied, or guarantee of product properties in the legal sense is intended or implied. Performance of the product described herein should be verified by testing, which should be carried out only by qualified experts in the sole responsibility of a customer. However, it implies no liability or other legal responsibility on our part, including with regard to existing third party intellectual property rights, especially patent rights. Reference to trade names used by other companies is neither a recommendation, nor does it imply that similar products could not be used. We reserve the right to make any changes according to science and technological progress or further developments.

This version replaces all previous ones.