

AFCONA-4015



Chemical Composition

Modified polyurethane polymer.

Product general description

Polymeric dispersant mainly for co-grinding.

Product Properties

AFCONA-4015 is a polymeric dispersant mainly developed for co-grinding purposes. It contains strong acid and amine functional groups to provide good co-grinding performance.

Due to its functional groups, it performs very well only in high polar systems like polyurethane, epoxy, nitrocellulose and acid-curing systems. In medium to low polarity systems like baking paints, 3-5% of high polar solvents like ketones (MEK, MIBK) are needed to improve the solubility of AFCONA-4015 in the system. Better solubility will bring out the true potential of this dispersant.

AFCONA-4015 also has very good dispersing ability for the preparation of PMMA color concentrates, which are widely used to tint PMMA sheets for advertising and signboards.

As mentioned above, AFCONA-4015 contains strong acid and amine groups, rendering the polymer itself highly polar. Generally, dispersants with a highly polar structure do not provide strong viscosity reduction. As a result, mill bases prepared with AFCONA-4015 as the main dispersant tend to exhibit thixotropy and higher viscosity. However, its thixotropic character is significantly lower than of the controlled flocculation type wetting and dispersing agents such as AFCONA-5065 and AFCONA-5066.

Note: AFCONA-4015 may become slightly hazy when stored at or below 5°C, but this will not influence the quality.

Product Specification

Non-volatile matter	34 - 36% (150°C, 0.5h)
Solvent	Xylene/Methyl Ethyl Ketone/ Butyl Acetate/Diisobutyl- ketone/Alkylbenzene
Density	0.89 - 0.93 g/cm ³ (20°C)
Acid Value	30 - 45 mg KOH/g
Gardner color	Max.7
Flash point	20°C
Appearance	Yellowish-brown to brown clear/slightly hazy liquid (25°C)

Addition and dosage

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

TiO ₂ :	6-8%
Other inorganic pigments:	5-10%
Organic pigments:	20-40%
Carbon blacks:	30-60%

Incorporation

AFCONA-4015 should be incorporated in the mill base before adding the pigments.

Storage

AFCONA-4015 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 180kg 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.