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. This product contains strong acid and amine functional groups in order to give good cogrinding effect.

Due to the strong acid and amine functional groups, it will only function very well in high polar systems like Polyurethane, Epoxy, NC and Acid Curing. In medium to low polar systems like baking paints, 3-5% of high polar solvents like ketonic solvent (MEK, MIBK) are needed to improve the solubility of AFCONA – 4015 in the system. A better solubility will bring out the true potential of the particular dispersant.

AFCONA-4015 also has very good dispersing ability in PMMA color concentrates preparation. PMMA color concentrations are used to tint PMMA sheets for advertising and signboards.

As mentioned earlier, AFCONA-4015 contains strong acid and amine value, thus the polymer itself is considered high polar. The viscosity reduction property of high polar dispersants is always not too strong. Therefore, mill bases based on AFCONA-4015 are more thixotropic and higher in viscosity. After the let down this effect is hardly noticeable.

Note: AFCONA – 4015 will become slightly hazy at temperature 5°C and below, but this will not influent the quality.

Product Specification

Non-volatile matter $34 - 36\%(150^{\circ}\text{C}, 0.5\text{h})$

Solvent Xylene/BAC/MEK/DIBK

Alkylbenzene

Density $0.89 - 0.93 \text{ g/cm}^3(20^{\circ}\text{C})$

Acid Value 30 - 45 mg KOH/g

Flash point 20°C

Gardner color Max.7

Appearance Clear, yellow to slightly

brown liquid(25°C)

Addition and dosage

Calculation method for the required amount of AFCONA-4015 on pigment:

TiO2: 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 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 180 kg non-returnable containers