

AFCONA-4050



Chemical Composition

Modified polyurethane polymer.

Product general description

A high molecular weight polymeric dispersant for de-flocculation of all types of pigments.

Product Properties

AFCONA-4050 is a highly effective polymeric dispersant for stabilizing inorganic and organic pigments as well as carbon black. Through effective steric hindrance, it provides very good stability for all types of pigments.

AFCONA-4050 offers the following advantages:

- Improved gloss and DOI, reduce haziness
- Reduced flooding problems
- Higher colour strength
- Lower viscosity

AFCONA-4050 was developed as a more cost-effective solution, offering pigment stabilizing performance comparable to that of AFCONA-4046 with minimal compromise.

The characteristics and recommended systems for AFCONA-4050 are as follows:

- 1) AFCONA-4050 is used in general industrial coatings, which do not require the high performance demanded by automotive OEM paints or coil coatings. It is suitable for polyurethane, epoxy, nitrocellulose and general industrial baking paints. It can also be used in high-quality topcoats, although AFCONA-4047 would be a better choice for such applications.
- 2) Although this product was developed for cost-saving purposes, tests show that it remains a high-quality dispersant with dispersing characteristics comparable to those of AFCONA-4046 and AFCONA-4047.
- 3) AFCONA-4050 also can be used as a dispersant in preparation of universal pigment concentrates. We recommend using it in combination with the universal resin, AFCONA-1102.

Note: AFCONA-4050 may become slightly hazy when stored at or below 5°C, but this will not influence the quality.

Product Specification

Non-volatile matter	43 - 47% (150°C, 0.5h)
Solvent	Butyl Acetate/Sec-butanol/ Propylene glycol methyl ether acetate
Density	0.975 - 0.995 g/cm ³ (20°C)
Amine Value	10 - 25 mg KOH/g
Gardner color	Max.10
Flash point	35°C
Appearance	Clear, yellow/slightly hazy, liquid (25°C)

Addition and dosage

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

TiO ₂ :	2-3%
Other inorganic pigments:	2-4%
Organic pigments:	20-40%
Carbon blacks:	20-60%

Incorporation

AFCONA-4050 should be incorporated in the mill base before adding the pigments.

Storage

AFCONA-4050 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 200kg 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.