

AFCONA-4200



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-4200 is a high-efficiency, high-molecular-weight dispersant specially designed by AFCONA. It incorporates AFCONA's latest steric hindrance long-chain structure and newly designed anchoring groups, offering excellent stability for inorganic pigments, organic pigments, and carbon black. AFCONA-4200 is supplied as nearly 100% active content.

AFCONA-4200 offers the following advantages:

- Compatibility with almost all solvent-based resin systems, including thermoplastic acrylic (TPA) and those containing cellulose acetate butyrate (CAB).
- Particularly suitable for dispersing high-grade carbon black, while also enhancing the whiteness of titanium dioxide. This advantage is especially pronounced in various acrylic-based resin systems.
- Significantly reduces the viscosity of pigment pastes.
- Exhibits excellent resistance to yellowing at high temperatures compared to certain earlier grades.

AFCONA-4200 is recommended for:

- 1) Universal primary dispersant, due to its good compatibility with solvent-based resin systems.
- 2) Thermoplastic acrylic resins (including those containing CAB) and all other high-performance industrial coating systems based on acrylic structures, such as automotive OEM coatings, automotive refinish coatings and plastic coatings. It is also suitable for high-solid / solvent-free coatings and ink systems, as well as polyurethane coatings and UV coatings.

Note: AFCONA-4200 may increase in apparent viscosity and develop slight, uniform haziness when stored at or below 5°C. This does not affect quality or dispensing accuracy.

Product Specification

Non-volatile matter	≥96% (150°C, 0.5h)
Density	1.05 - 1.08 g/cm ³ (20°C)
Amine Value	10 - 20 mg KOH/g
Gardner color	Max.6
Flash point	>100°C
Appearance	Clear/slightly hazy, viscous liquid (25°C)

Addition and dosage

Calculation method for the required amount of non-volatile matter on pigment:

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

Incorporation

AFCONA-4200 should be incorporated in the mill base before adding the pigments.

Storage

AFCONA-4200 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

30kg 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.