

AFCONA-4531



Chemical Composition

Modified polyacrylic polymer.

Product general description

High molecular weight dispersant for anti-flocculation of various pigments; it can also be used in water-based coating systems after neutralization.

Product Properties

AFCONA-4531 is a highly efficient high molecular weight dispersant. It provides excellent stability for inorganic and organic pigments, as well as carbon blacks. Its effective steric hindrance effect provides outstanding stabilizing performance for all types of pigments.

AFCONA-4531 offers the following advantages:

- Improved gloss and DOI, reduced haziness
- Prevention of floating and flooding
- Higher colour strength

AFCONA-4531 is a grade developed based on AFCONA-4401 technology by incorporating high-polarity groups, thereby offering even broader compatibility across resin systems ranging from low to high polarity. In particular, it further enhances adaptability to nitrocellulose and thermoplastic acrylic resins. As a result, AFCONA-4531 is also suitable as the main dispersant for universal colorant systems. After neutralization with conventional organic amines such as AMP-95, it can be used as a water-based dispersant.

Care must be taken when used in combination with chlorinated polymers and/or epoxy systems as it might have tendency toward yellowing or gelling.

AFCONA-4531 also offers resistance to acid catalysts, a property that is not found in typical amine-terminated dispersants.

AFCONA-4531 is recommended for:

- Oil-free polyester resin
- Thermoplastic acrylic resins
- Thermosetting/high hydroxyl value acrylic resins
- Nitrocellulose
- Cellulose acetate butyrate
- After neutralization, used in water-based systems
- Other resin systems that are incompatible with conventional polyurethane-type dispersants

Product Specification

Non-volatile matter	48 - 52% (150°C, 0.5h)
Solvent	Propylene glycol monomethyl ether
Density	0.96 - 1.00 g/cm ³ (20°C)
Acid value	30 - 40 mg KOH/g
Amine value	20 - 30 mg KOH/g
Gardner color	Max.6
Flash point	35°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-4531 should be incorporated in the mill base before adding the pigments.

Storage

AFCONA-4531 shall be stored in cool and dry place away from direct sunlight. Shelf-life is 3 years from the date of manufacturer, if kept in original and unopened container. The expiring date is indicated on the package.

Packaging

25kg and 190kg 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.