

AFCONA-5220



Chemical Composition

Polyester-modified polyphosphate ester compound.

Product general description

An ionic wetting and dispersing agent for inorganic pigments, mainly TiO₂, and extenders.

Product Properties

AFCONA-5220 is an upgraded version of AFCONA-5210. Due to its specially designed molecular structure, it does not experience crystallization issues during low-temperature storage while exhibiting excellent wetting capability for inorganic pigments.

AFCONA-5220 is a high-efficiency dispersant designed specifically for dispersing TiO₂ and fillers, offering good viscosity reduction properties. In high filler content systems such as unsaturated polyester artificial marble, it provides excellent viscosity reduction to allow high filler load.

AFCONA-5220 is highly recommended for use in pure white coating systems. In electrostatic spray painting systems for pure white coatings, it also delivers the highest gloss performance. If the white mill-base needs to be tinted with other colors, it is recommended to use AFCONA-4010 to prepare the white pigment paste.

When used in amino baking paints, AFCONA-5220 also exhibits a catalytic effect, which may lead to a slow increase in coating viscosity during storage.

AFCONA-5220 is recommended for:

- 1) Automotive paint (OEM and refinish)
- 2) General industrial coatings
- 3) Coil coatings
- 4) Acid-curing coatings
- 5) Unsaturated polyester coatings
- 6) Epoxy coatings
- 7) Polyurethane coatings

Note: AFCONA-5220 may become slightly hazy at temperature below 5°C. Even at -15°C the slight haziness remains unchanged. That will not affect the product quality.

Product Specification

Non-volatile matter	≥92% (120°C, 0.5h)
Density	1.12 - 1.16 g/cm ³ (20°C)
Acid value	80 - 100 mg KOH/g
Gardner color	Max.6
Flash point	>100°C
Appearance	Clear, pale yellow, slightly hazy liquid (25°C)

Addition and dosage

1.0 - 3.0% based on TiO₂ or extenders
5.0 - 10.0% based on other inorganic pigments.

Incorporation

AFCONA-5220 should be added to the base material and mixed thoroughly before dispersion of the pigment paste.

Storage

AFCONA-5220 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 210kg non-returnable containers

For product safety information: please refer to the product SDS.