

# AFCONA-4016



## Chemical Composition

Modified polyurethane polymer.

## Product general description

Polymeric dispersant mainly for inorganic pigments and some organic pigments.

## Product Properties

AFCONA-4016 is a polymeric dispersant principally developed for stabilizing inorganic pigments like TiO<sub>2</sub>, iron oxides and matting agents. It can also stabilize organic pigments and carbon black, with superior performance than that of AFCONA-4010 and AFCONA-4009. It can be used in almost all solvent-based coating systems because of the AFCONA-4016 broad compatibility with almost all resins used in coatings.

The characteristics and recommended systems for AFCONA-4016 are as follows:

- 1) Due to its lower price compared to AFCONA-4050, AFCONA-4016 is often used in price-sensitive systems like drum coatings, NC and unsaturated polyester.
- 2) AFCONA-4016 also has good compatibility with CAB and thermoplastic acrylic resins. It is also suitable for refinish paints where price is a concern. However, for this system, our AFCONA-4200 or AFCONA-4077 are better choices.
- 3) AFCONA-4016 can be used as a co-grinding dispersant in mill bases. It also can act as a post-additive to correct flooding and floating effects.
- 4) AFCONA-4016 has been developed as a general dispersing agent for all solvent-based paints, from high-performance industrial coatings to conventional decorative paints. It has very good pigment stability for inorganic pigments and some selected organic pigments.

Note: AFCONA-4016 may become slightly hazy when stored at or below 5°C, but this will not influence the quality.

## Product Specification

|                     |                                                                         |
|---------------------|-------------------------------------------------------------------------|
| Non-volatile matter | 49 - 54% (150°C,0.5h)                                                   |
| Solvent             | Butyl acetate/Alkylbenzene/<br>Propylene glycol methyl<br>ether acetate |
| Density             | 0.96 - 1.00 g/cm <sup>3</sup> (20°C)                                    |
| Acid Value          | 16 - 32 mg KOH/g                                                        |
| Amine Value         | 8 - 14 mg KOH/g                                                         |
| Gardner Color       | Max.5                                                                   |
| Flash point         | 43°C                                                                    |
| Appearance          | Clear to slightly hazy, pale<br>yellowish liquid (25°C)                 |

## Addition and dosage

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

|                            |        |
|----------------------------|--------|
| TiO <sub>2</sub> :         | 2-4%   |
| Other inorganic pigments : | 5-10%  |
| Organic pigments :         | 20-40% |
| Carbon blacks :            | 30-60% |

## Incorporation

AFCONA-4016 should be incorporated in the mill base before adding the pigments.

## Storage

AFCONA-4016 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](http://www.afcona.com)

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This version replaces all previous ones.