

AFCONA - 4011



Chemical Composition

Modified polyurethane polymer.

Product general description

Polymeric dispersant mainly for inorganic pigments and some organic pigments.

Product Properties:

AFCONA-4011 is a polymeric dispersant principally developed for stabilizing inorganic pigments like TiO₂, Iron oxides and matting agents. It can be used in almost all solvent-based coating systems, because AFCONA – 4011 has very good compatibility with almost all resin used in coatings. AFCONA-4011 is a cost effective version of AFCONA-4010.

The special properties and recommended systems for AFCONA – 4011 as below:

- 1) AFCONA – 4011 is a very good dispersant for TiO₂ as it gives better whiteness and hiding power.
- 2) AFCONA – 4011 is widely used in preparation of matting agent pastes. It gives better matting agent orientation, constant gloss level after storage and soft feel matting appearance.
- 3) AFCONA – 4011 can be used as co-grinding dispersant in mill bases. It also can act as post adding additive for correction of flooding and floating effects.
- 4) Mostly, AFCONA – 4011 is used as dispersant for inorganic pigments and some organic pigments. In case, AFCONA – 4011 fail with organic pigments, other more effective and higher molecular weight AFCONA polymeric dispersants must be used. It is always possible to mix combinations of pigments stabilized with AFCONA-4011 and organic pigments stabilized with higher molecular weight dispersants.
- 5) AFCONA-4011 has been the universal dispersant for all kinds of solvent based enamel. From high performance industrial coatings to normal decorative paints. It has excellent stability for inorganic pigments.

Note: AFCONA – 4011 will become slightly hazy at temperature 5°C and below, but this will not influence the quality.

Product Specification

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|---------------------|--|
| Non-volatile matter | 50 - 54%(150°C,0.5h) |
| Solvent | Butylacetate/PMA/ Sec-butanol/Xylene |
| Density | 0.96 – 1.00 g/cm ³ (20°C) |
| Acid Value | 8 - 18 mg KOH/g |
| Amine Value | 6 – 16 mg KOH/g |
| Flash point | 39°C |
| Gardner color | Max.6 |
| Appearance | Clear to slight hazy, yellow liquid(25°C) |

Addition and dosage

Titanium dioxide : 2 - 4% (as supplied)
Inorganic pigments : 5 - 10% (as supplied)
Organic pigments : 20 - 40% (as supplied)
Carbon blacks : 30 - 60% (as supplied)

Incorporation

AFCONA-4011 should be incorporated in the mill base before adding the pigments.

Storage

AFCONA-4011 should be stored in a cool dry place. When kept in an original unopened container, it will keep up to 5 years from the date of manufacture. The expiry date is indicated on the container.

Packaging

25kg and 200 kg non-returnable containers

AFCONA ADDITIVES

Web Site : www.afcona.com

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This version replaces all previous ones.