AFCONA – 4550

Chemical Composition
Modified polyacrylate polymer

Product general description
High molecular weight, pH-independent polymeric dispersant for deflocculation of pigments in water-based decorative and industrial paints

Product Properties
AFCONA-4550 is a polymeric dispersant for stabilizing inorganic and organic pigments in water-based systems. Steric hindrance and electron repulsion offer very good stability performance with all types of pigments.

This results in:
- better gloss
- color strength
- flocculation stability
- anti-flooding behavior

AFCONA-4550 is pH-independent and offers wide compatibility with most chemistries commonly used in industrial coatings. AFCONA-4550 does not influence the water resistance of the coating.

AFCONA-4550 is also recommended for manufacturing of resin-free pigment concentrates for industrial paints.

At standard operating temperatures, AFCONA-4550 is completely water-soluble and does not require neutralization. However, neutralization will improve the viscosity reduction performance of this product.

AFCONA-4550 is not water-soluble above 60°C (but the solubility will return once the temperature falls below 60°C). Therefore, keep milling temperatures below 60°C.

Note: AFCONA – 4550 will become slightly hazy at temperatures below 5°C. This will not influence the performance of the product.

Product specification
| Active ingredients | 48 – 52% |
| Solvent            | Water    |
| Density at 20 °C   | 1.03 – 1.07 g/cm³ |
| Amine value        | 20 – 35 mg KOH/g |
| Color              | max. 6   |

Addition and dosage
Add AFCONA-4550 according to the dosages listed below, which should be calculated based on the percent of active ingredient in the dispersant and the weight of pigment in the formula:

- TiO2 : 2 - 3%
- Other inorganic pigments : 2 - 4%
- Organic pigments : 20 - 40%
- Carbon blacks : 20 - 60%

Incorporation
AFCONA-4550 should be incorporated in the mill base before adding the pigments.

Storage
AFCONA-4550 should be stored in a cool, dry place. When kept in its original, unopened container, it will keep up to 3 years from the date of manufacture. The expiration date is indicated on the container.

Packaging
55 lb and 397 lb non-returnable containers