AFCONA – 4009

**Chemical Composition**
Modified polyurethane polymer

**Product general description**
Polymeric dispersant for the deflocculation of pigments

**Product Properties**
AFCONA-4009 is a polymeric dispersant primarily used for stabilizing inorganic and select organic pigments. This product offers compatibility with a wide range of coating chemistries. AFCONA – 4009 is compatible with almost all solvent-based systems: long, medium and short oil alkyds, NC, polyurethanes, certain thermoplastic acrylics, epoxy and all the resins for heat-cured paint.

Compared to other AFCONA PU grade dispersants, the viscosity reduction effect of AFCONA – 4009 is not as strong (this is due to its more polar structure). However, this is not necessary a disadvantage, because not all mill bases require viscosity reduction.

The special properties and recommended systems for AFCONA–4009 include:
1) Due to its combination of price and performance, AFCONA – 4009 is a very attractive product to substitute for conventional wetting and dispersing agents in all kinds of coating systems.
2) AFCONA – 4009 may be post-added to correct flooding and floating in all solvent-based paints. It also prevents flooding and floating when used in mill bases as a co-grinding dispersant.
3) Pigment concentrates based on AFCONA–4009 give very unique properties like:
   - very wide compatibility
   - lower cost

Note: AFCONA – 4009 will become slightly hazy at temperatures of 5°C and below, but this will not influence the performance of the product.

**Product specification**

<table>
<thead>
<tr>
<th>Active ingredients</th>
<th>58 – 61%</th>
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<tbody>
<tr>
<td>Solvents</td>
<td>Butylacetate / Methoxy Propyl Acetate/ sec-butanol</td>
</tr>
<tr>
<td>Density at 20 °C</td>
<td>1.00 - 1.02 g/cm³</td>
</tr>
<tr>
<td>Amine value</td>
<td>8 - 15 mg KOH/g</td>
</tr>
<tr>
<td>Acid value</td>
<td>10 - 17 mg KOH/g</td>
</tr>
<tr>
<td>Flashpoint</td>
<td>24°C</td>
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<tr>
<td>Color</td>
<td>max.5</td>
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</tbody>
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**Addition and dosage**
Add AFCONA-4009 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 – 5%
- Organic pigments : 20 – 40%
- Carbon blacks : 20 – 50%

**Incorporation**
AFCONA-4009 should be incorporated in the mill base before adding pigments.

**Storage**
AFCONA-4009 should be stored in a cool, dry place. When kept in its original, unopened container, it will keep up to 5 years from the date of manufacture. The expiration date is indicated on the container.

**Packaging**
55 lb and 419 lb non-returnable containers