AFCONA – 4401

Chemical Composition
Modified polyacrylic polymer

Product general description
High molecular weight polymeric dispersant for deflocculation of all types of pigments

Product Properties
AFCONA-4401 is an effective polymeric dispersant used to stabilize inorganic and organic pigments. Steric hindrance gives it very good stability performance with all type of pigments. This results in:
- improved gloss and DOI
- reduced flooding problems
- higher color strength

AFCONA-4401 offers wide compatibility with a variety of polarities of systems, including nitrocellulose and thermoplastic acrylic.

Care must be taken with AFCONA-4401 as it has a tendency to yellow or gel when used in combination with chlorinated polymers and/or epoxies.

AFCONA-4401 gives high thixotropy milling pastes, which also results in higher milling viscosity.

AFCONA-4401 may be used in all kinds of high quality solvent-based industrial coatings, including automotive topcoats. The best performance is seen in the following resin systems:
- Oil free polyesters
- Thermosetting acrylics
- Thermoplastic acrylics
- Nitrocellulose combinations
- CAB mixtures

Note: AFCONA – 4401 will become slightly hazy at temperatures below 5°C. This will not influence the performance of the product.

Product specification

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
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<tbody>
<tr>
<td>Active ingredients</td>
<td>50 – 54%</td>
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<tr>
<td>Solvents</td>
<td>Butylacetate / Sec. butanol / PMA</td>
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<tr>
<td>Density at 20 °C</td>
<td>0.94 – 0.96 g/cm³</td>
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<tr>
<td>Amine value</td>
<td>45 – 60 mg KOH/g</td>
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<tr>
<td>Flashpoint</td>
<td>24°C</td>
</tr>
<tr>
<td>Color</td>
<td>max. 4</td>
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Addition and dosage
Add AFCONA-4401 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-4401 should be incorporated in the mill base before adding the pigments.

Storage
AFCONA-4401 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