Carboset® AMO 400 is a patented, acrylic-modified oil copolymer dispersion with 50% renewable content, and as supplied is APEO and solvent-free¹. It has a unique self-crosslinking mechanism imbedded in the polymer. Carboset AMO 400 can be formulated to <50 g/l VOC US (<25 g/l EU) for wood coatings applications. It brings a blend of properties of traditional resins while achieving lower VOC levels than is typically possible from typical urethane dispersions or acrylic emulsions traditionally used in wood finishes.

**Physical Characteristics**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance (wet)</td>
<td>Translucent Amber Dispersion</td>
</tr>
<tr>
<td>Total Solids by Weight, %</td>
<td>40.0 ± 1.0</td>
</tr>
<tr>
<td>Total Solids by Volume, %</td>
<td>37.5 ± 1.0</td>
</tr>
<tr>
<td>Density, lb/gal (g/ml)</td>
<td>8.75 (1.05)</td>
</tr>
<tr>
<td>MFFT °C</td>
<td>12</td>
</tr>
<tr>
<td>Brookfield Viscosity, cps</td>
<td>&lt; 500</td>
</tr>
<tr>
<td>pH</td>
<td>7.5 – 8.5</td>
</tr>
<tr>
<td>Volatile Organic Compounds, wt. %</td>
<td>0.89, TEA</td>
</tr>
</tbody>
</table>

Property values represent typical results only and are not to be considered specifications.

**SUPERIOR WATER-BORNE STAINS**

Carboset AMO 400’s unique acrylic-modified oil chemistry combined with an imbedded self-crosslinking chemistry offers a blend of extended open time with quick through-dry capability. This provides longer working time with less lapping while allowing rapid sanding or application of a second coat. The unique embedded self-crosslinking chemistry allows Carboset AMO 400 to be overcoated by brush or roller with a topcoat with less concern of smearing or color drift. Stains made from Carboset AMO 400 show more uniform color development. Its unique composition comprised of a high level of bio-based materials² enhances the “warm” look of wood.

¹ Ingredients not intentionally contained in the composition nor used in manufacture.

² Bio-based materials are derived of plant, animal, or microbial biomass, which are based on the photosynthetic primary production and are used by man outside the food and feed area for material or energy production.
FEATURES & BENEFITS

- BETTER SANDABILITY
- EXTENDED OPEN TIMES
- CAPABLE OF VOC FORMULATIONS <50 G/L (US EPA METHOD 24)
- BRINGS OUT THE “WARM” LOOK OF WOOD
- 50% RENEWABLE CONTENT

Carboset® AMO 400 water-borne stains maintain open time

OUTSTANDING SANDING SEALERS

Carboset® AMO 400 provides protection to melt degradation at higher temperatures than traditional acrylic polymers used for sanding sealers due to its unique melt point temperatures. As a result, finishes sand to a fine powder with less opportunity to melt, reducing the tendency to damage coatings or clog screens. With its imbedded self-crosslinking chemistry, sealers containing Carboset AMO 400 can be sanded faster than traditional water-borne sealers. Its unique composition comprised of a high level of bio-based materials enhances the “warm” look of wood.

BETTER TOPCOATS

Carboset AMO 400 enables finishes with great clarity and high gloss as a result of carefully controlled particle size distribution. Blending Carboset AMO 400 with other resins can improve clarity and gloss of the overall system, while reducing VOC content and adding renewable content. Carboset AMO 400 has good exterior durability, and can bring that durability into blends. Testing with Carboset AMO 400 blended with select Lubrizol resins for wood coatings has proven to bring synergistic improvement to key film properties and performance.

Carboset® AMO 400 water-borne stains maintain open time

Competing Resin 1
Competing Resin 2
Competing Resin 3
Commercial Finish 1
Commercial Finish 2
Commercial Finish 3
Commercial Finish 4

Higher melt temperature of Carboset® AMO 400 results in less melting upon sanding compared to other industry alternatives

Lubrizol Advanced Materials, Inc.
9911 Brecksville Road, Cleveland, OH 44141
800.380.5397

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