ECCOPEL™ Z

CLASSIFICATION

Zirconium salts, semi-durable water repellent.

PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Smooth, white, liquid emulsion</td>
</tr>
<tr>
<td>Solubility</td>
<td>Completely soluble at room temperature water</td>
</tr>
<tr>
<td>pH (5%)</td>
<td>4.3 ± 0.3</td>
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<tr>
<td>Active Content</td>
<td>23.0 ± 0.5</td>
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<tr>
<td>Density</td>
<td>8.25 lbs/gallon</td>
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GENERAL COMMENTS

ECCOPEL™ Z is a one-package, zirconium base, high melting wax water repellent product designed to give excellent spray ratings to all textiles and is especially recommended for synthetic fabrics. Fabrics treated with ECCOPEL™ Z show considerable resistance to laundering and dry cleaning. In applications where ECCOPEL™ Z is applied with thermosetting resins with catalysts or acrylic type resins, the durability properties are even more outstanding, in addition to crease-proofing and shrinkage control derived from the resins present. Application by exhaustion on to woollen material results in excellent water repellency properties.

ECCOPEL™ Z imparts no stiffness of fabrics and no appreciable mark-off as well as exhibiting excellent running properties.

ECCOPEL™ Z is completely soluble in water at 100-120 °F to form white stable scum-free solutions. The freezing of ECCOPEL™ Z does not appear to cause any deterioration in the emulsion. However, frequent freeze and thaw cycles should be avoided.

APPLICATIONS

The recommended application of ECCOPEL™ Z is by padding or quetch with frame or can-drying @ 220-240 F. Where resins are present, temperatures of 300-320°F will be required. Padding temperatures of 120-130°F are suggested. No pre-dissolving of the ECCOPEL™ Z is required.

The suggested use of 5% - 6% of ECCOPEL™ Z is sufficient to obtain satisfactory water repellency on synthetic fabric. Slightly higher concentrations are recommended for cotton and rayon materials.

For thermosetting resins, the following is suggested:

- 12.0 % ECCOPEL™ Z
- 10.0 % ECCOPEL™ Z
- 7.0 % ECCOREZ S-1050
- 5.0 % ACRYLIC EMULSION
- 1.0 % CATALYST RD or MgCl₂ Type