EPOTUF® 38-694 is an aqueous dispersion of an epoxy ester resin designed to formulate with lower co-solvent demand than standard water reducible epoxy ester resins. EPOTUF® 38-694 is an extremely stable water soluble resin giving up to 20 plus weeks in a white enamel at 120°F. This resin can be used in high gloss enamels or primers.

APPLICATIONS

- Industrial maintenance coatings
- Baking enamels
- Latex modifier
- Concrete sealer
- Printing inks
- Industrial primers and enamels

FEATURES

- VOCs of 1.4 to 1.8 in primers and enamels
- HAPs free solvents
- Excellent hydrolytic stability
- Very fast dry
- Excellent corrosion resistance

PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent Solids, by Weight</td>
<td>40</td>
</tr>
<tr>
<td>Percent Solids, by Volume</td>
<td>36 approx.</td>
</tr>
<tr>
<td>Viscosity at 25°C, Centipoise</td>
<td>3500</td>
</tr>
<tr>
<td>Particle Size, Microns</td>
<td>0.06</td>
</tr>
<tr>
<td>Volatiles, Percent of Product as Supplied</td>
<td>Water/n-Propoxy Propanol/TEA (47.67%/9.53%/2.75%)</td>
</tr>
<tr>
<td>Pounds per Gallon, Solution</td>
<td>8.41 avg.</td>
</tr>
</tbody>
</table>

STORAGE

Store in a cool, dry place, preferably under 80°F to ensure a useful shelf life of six months.

*Read the EPOTUF® 38-694 Material Safety Data Sheet before handling, storing, or using this product.*
### Suggested Formulations

#### EPOTUF® 38-694 Black Gloss Enamel

<table>
<thead>
<tr>
<th>Lbs.</th>
<th>Gals.</th>
<th>Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>382.25</td>
<td>45.13</td>
<td>EPOTUF® 38-694, 40% NVM</td>
</tr>
<tr>
<td>24.75</td>
<td>1.38</td>
<td>Raven 1255 Powder</td>
</tr>
<tr>
<td>3.16</td>
<td>0.40</td>
<td>Byk P104or 104S</td>
</tr>
<tr>
<td>410.16</td>
<td>50.39</td>
<td>TOTAL</td>
</tr>
</tbody>
</table>

Steel ball mill to a 7 Hegman grind:

354.72 41.88 EPOTUF® 38-694, 40%NVM WD

74.8 8.98 Water

7.27 0.97 Cobalt Hydrocure II

0.88 0.15 Activ-8

2.17 0.29 2-Butoxy Ethanol

850.00 100.00 TOTAL

**Analysis:**

- 4.15 Pigment Volume Concentration, Percent
- 0.089/1 Pigment/Binder Ratio
- 37.25 Percent Solids, Weight
- 33.92 Percent Solids, Volume
- 35 – 45 Viscosity at 25°C, Ford #4, Seconds
- 8.50 Pounds per Gallon
- 8 – 9 pH
- 192 VOC, Grams per Liter, Excluding Water
- 1.6 VOC, Pounds per Gallon, Excluding Water

**Suppliers:**

1. Columbian Chemical Co. 2. Byk Chemie

#### EPOTUF® 38-694 Red Iron Oxide Primer

<table>
<thead>
<tr>
<th>Lbs.</th>
<th>Gals.</th>
<th>Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>374.88</td>
<td>44.26</td>
<td>EPOTUF® 38-694, 40% MVM</td>
</tr>
<tr>
<td>5.77</td>
<td>0.77</td>
<td>2-Butoxy Ethanol</td>
</tr>
<tr>
<td>82.8</td>
<td>1.93</td>
<td>Red Iron Oxide 5098D</td>
</tr>
<tr>
<td>221.3</td>
<td>6.11</td>
<td>Barytes</td>
</tr>
<tr>
<td>2.92</td>
<td>0.37</td>
<td>Byk P104S</td>
</tr>
<tr>
<td>770.07</td>
<td>57.1</td>
<td>TOTAL</td>
</tr>
</tbody>
</table>

Steel ball mill to a 7 Hegman grind:

349.73 41.29 EPOTUF® 38-694, 40% MVM

7.57 0.99 Cobalt Hydrocure II

1.36 0.17 Activ-8

1.22 0.45 2-Butoxy Ethanol

1129.95 100.0 TOTAL

**Analysis:**

- 29.67 Pigment Volume Concentration, Percent
- 1.52/1 Pigment/Binder Ratio
- 57.0 Percent Solids, Weight
- 41.2 Percent Solids, Volume
- 20 – 30 Viscosity at 25°C, Ford #4, Seconds
- 8 – 10 pH
- **VOC**
- 226.93 VOC, Grams per Liter, Excluding Water
- 1.89 VOC, Pounds per Gallon, Excluding Water

**Suppliers:**

1. Harcross Pigments (Elementis) 2. E. C. C., Inc. 3. Elementis