**PRODUCT PROFILE**

**GENERIC DESCRIPTION**
Polyurethane Modified Concrete

**COMMON USAGE**
Ultra-Tread V is a low-odor mortar designed for troweling vertical surfaces such as trenches and equipment pads, and for building cove base. It should be used for vertical application needs in conjunction with horizontal applications of Series 242 Ultra-Tread S, Series 244 Ultra-Tread M or Series 245 Ultra-Tread S. Designed for use in food and beverage facilities, pharmaceutical and processing areas, commercial and restaurant kitchens or anywhere a durable floor topping is required. Provides excellent chemical resistance and withstands thermal shock due to hot liquids and aggressive cleaning procedures. Areas may be quickly returned to service within hours of installation, depending on temperature and humidity.

**COLORS**
Gray and Red. Note: Additional lead times may apply when ordering Beige, Black, Blue, Green, Off White and Yellow. Aromatic urethanes chalk and yellow with age, extended exposure to UV and artificial lighting.

**FINISH**
Matte

**SPECIAL QUALIFICATIONS**
Formulated with antimicrobial properties. Does not support bacteria or fungal growth. Contact your Tnemec representative for specific test results.

Series 243 was tested in accordance with, and passed, the California Dept. of Public Health (CDPH) Standard Method v1.2 and meets the requirements of LEED v4.1 Low-Emitting Materials. Collaborative for High Performance Schools-Paints & Coatings, Living Building Challenge Materials Petal 10, and WELL Building Standard v2 X06 VOC Restrictions.

**COATING SYSTEM**

**PRIMERS**
Self-priming (liquid only) or Series 201.

**TOPCOATS**

**SURFACE PREPARATION**

**CONCRETE**
Prepare surfaces by method suitable for exposure and service. Allow new poured-in-place concrete to cure a minimum of 10 days at 75°F (24°C). Verify concrete dryness in accordance with ASTM F 1869 “Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride” (moisture vapor transmission should not exceed 20 pounds per 1,000 square feet in a 24 hour period), F 2170 “Standard Test Method for Determining Relative Humidity in Concrete using in situ Probes” (relative humidity should not exceed 99%), or D 4263 “Standard Test Method for Indicating Moisture in Concrete by the Plastic Sheet Method” (no moisture present). Note: The testing listed above cannot guarantee avoidance of future moisture related problems particularly with existing concrete slabs. This is especially true if the use of an under slab moisture vapor barrier cannot be confirmed or concrete contamination from oils, chemical spills, unreacted silicates, chlorides or Alkali Silica Reaction (ASR) is suspected.

Prepare concrete surfaces in accordance with NACE No. 6/SSPC-SP13 Joint Surface Preparation Standards and ICRI Technical Guidelines. Abrasive blast, shot-blast, water jet or mechanically abrade concrete surfaces to remove laitance, curing compounds, hardeners, sealers and other contaminants and to provide a minimum ICRI-CSP 5 surface profile. Large cracks, voids and other surface imperfections should be filled with a recommended filler or surfacer.

Must be clean, dry and free of oil, grease and other contaminants. Note: Substrate conditions which can adversely affect the adhesion of Series 243 Ultra-Tread V include: concrete that is structurally unsound, wet, damp, contaminated, or inadequately profiled at the time of application, absent or inadequate under slab moisture vapor barrier, hydrostatic pressure, Alkali Silica Reaction (ASR), and migration of oils, chemicals, and other contaminants.

**ALL SURFACES**

**TECHNICAL DATA**

<table>
<thead>
<tr>
<th>VOLUME SOLIDS</th>
<th>100% (mixed)</th>
</tr>
</thead>
</table>

**RECOMMENDED DFT**
3/16” (minimum of 1/8”)

**CURING TIME**

<table>
<thead>
<tr>
<th>Temperature</th>
<th>75°F (24°C)</th>
<th>Min. Recoat</th>
<th>Light Traffic</th>
<th>Place in Service †</th>
</tr>
</thead>
<tbody>
<tr>
<td>8 hours</td>
<td>6 hours</td>
<td>8 hours</td>
<td>12 hours</td>
<td></td>
</tr>
</tbody>
</table>

Curing time varies with surface temperature, air movement, humidity and film thickness.

† For full resistance to chemicals and steam cleaning, 24 hour cure is needed.

**VOLATILE ORGANIC COMPOUNDS**
Parts A & B: 0.2 lbs/gallon (25 grams/litre)
Parts A, B & C: 0.05 lbs/gallon (6 grams/litre)

**THEORETICAL COVERAGE**
14.0 sq ft per small kit at 3/16”

**NUMBER OF COMPONENTS**

**PACKAGING**

<table>
<thead>
<tr>
<th></th>
<th>Part A</th>
<th>Part B</th>
<th>Part C (Aggregate)</th>
<th>Mixed Yield</th>
<th>Small Kit Equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large Kit</td>
<td>1-5 gallon pail</td>
<td>1-5 gallon pail</td>
<td>20-25 lb. bags</td>
<td>32.7 gallons (118.7 L)</td>
<td>20</td>
</tr>
<tr>
<td>Medium Kit</td>
<td>1-1 gallon jug</td>
<td>1-1 gallon can</td>
<td>4-25 lb. bags</td>
<td>6.5 gallons (24.6 L)</td>
<td>4</td>
</tr>
<tr>
<td>Small Kit</td>
<td>1-1 quart jug</td>
<td>1-1 quart can</td>
<td>1-25 lb. bag</td>
<td>1.6 gallons (6.05 L)</td>
<td>1</td>
</tr>
</tbody>
</table>

**NET WEIGHT PER GALLON**
18.21 ± 0.25 lbs (8.26 ± 0.11 kg) (mixed)

**STORAGE TEMPERATURE**
Minimum 35°F (2°C) Maximum 110°F (43°C)

Material should be stored at temperatures between 70°F and 90°F (21°C and 32°C) for at least 48 hours prior to use.

**TEMPERATURE RESISTANCE**
Continuous 235°F (112°C)

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This product contains chemical ingredients which are considered hazardous. Read container label warning and Material Safety Data Sheet for important health and safety information prior to the use of this product.

Keep out of the reach of children.

**APPLICATION**

**MIXING**

When mixing Small Kits use a mortar mixer or variable speed 850-RPM drill and four-inch (4") dispersion blade, slowly mix the entire contents of both the A and B components for a minimum of one minute. Continue agitation and slowly add the Part C aggregate and mix until material is uniform and no dry aggregate is present. The entire mixing procedure should take approximately three minutes. **Note:** Part B is moisture sensitive. Do not open until ready to mix.

When mixing Medium and Large kits, mix one quart (0.2500 gallons) of Part A component with one quart (0.2500 gallons) of Part B component. Slowly mix the measured amount of both the part A and B components for a minimum of one minute. Continue agitation and slowly add one Part C aggregate and mix until material is uniform and no dry aggregate is present. The entire mixing procedure should take approximately three minutes. **Note:** Part B is moisture sensitive. Do not open until ready to mix.

The Medium Kits break down to equal four (4) Small Kits or units and the Large Kits break down to equal twenty (20) Small Kits or units. Single batch mixes equal to one (1) Small Kit or unit are frequently mixed in mortar mixers or pails. Multiple batch mixes can be mixed in an appropriate size mortar mixer or pail.

**FINISH**

A high quality synthetic or nylon bristle brush or short nap roller is often used to help eliminate trowel marks and draw resin to the surface and seal. The cured surface of the Series 243 must be cleaned and thoroughly abraded by grinding prior to topcoating.

**APPLY**

This unique mortar system is applied by trowel vertically and a margin trowel or coving trowel when building cove base. For optimum application, handling and performance, the material temperature during application should be between 60°F and 80°F (16°C and 27°C). Temperature will affect the workability. Cool temperatures increase viscosity and decrease workability. Warm temperatures will decrease viscosity and significantly shorten pot life and working time.

**COVERAGE RATES**

<table>
<thead>
<tr>
<th>Small Kit Coverage</th>
<th>13 sq ft (1.2 m²)</th>
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<tbody>
<tr>
<td>At 3/16” (4.8 mm)</td>
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</table>

Four inch rolled radius base, approximately 18-20 lineal feet per small kit. Application below minimum or above maximum recommended thicknesses may adversely affect performance. Above rates are based on theoretical coverage. Actual coverage will vary based on condition of substrate.

**HEALTH & SAFETY**

Flush and clean all equipment immediately after use with xylene or MEK.

**PARTS:**

**A** | **B** | **C**

**44-304** | **44-814** | **54-112**

**PROPERTIES OF THE MIXED MATERIAL:**

**Thickening**

15 minutes at 75°F (24°C)

Higher material temperatures will significantly reduce the pot life and working time.

**POT LIFE**

**DO NOT THIN.**

Material will set up quickly if not applied immediately after mixing.

**APPLICATION EQUIPMENT**

Mortar:

Trowel, margin trowel or coving trowel.

**Finish:** High quality synthetic or nylon bristle brush or short nap roller.

**Note:** For detailed instructions, refer to the StrataShield Application Guide for Polyurethane Modified Concrete.

**SURFACE TEMPERATURE**

Minimum of 60°F (16°C), optimum 65°F to 80°F (18°C to 27°C), maximum of 85°F (29°C). The substrate temperature should be at least 5°F (3°C) above the dew point. Coating will not cure below minimum surface temperature.

**MATERIAL TEMPERATURE**

For optimum application, handling and performance, the material temperature during application should be between 60°F and 80°F (16°C and 27°C). Temperature will affect the workability. Cool temperatures increase viscosity and decrease workability. Warm temperatures will decrease viscosity and significantly shorten pot life and working time.

**AMBIENT HUMIDITY**

Humidity must be below 85%.

**CLEANUP**

Flush and clean all equipment immediately after use with xylene or MEK.

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