PRODUCT PROFILE

GENERIC DESCRIPTION
Aliphatic Moisture Cured Urethane

COMMON USAGE
Extremely hard, chemical-resistant urethane floor coating with superb wear characteristics. Excellent resistance to abrasion, wet conditions, corrosive fumes and chemical contact. Excellent gloss and color retention. Low odor characteristic allows for use near occupied space.

COLORS
Supplied as a clear coat. May be tinted with available Series 821 color pack in the 16 standard StrataShield colors and limited custom colors. Color packs sold separately. Contact Tnemec Company for availability. **Note:** Certain colors may require multiple coats of application and finish coat color. When feasible, the preceding coat should be the same color as the topcoat. **Note:** Series 44-600 UV Blocker may be added to Series 248 (clear) for increased resistance to ultra-violet light. Refer to the Series 44-600 product data sheet for more information.

FINISH
Semi-gloss. **Note:** The gloss level can be reduced by adding two Part C filler components to each kit.

SPECIAL QUALIFICATIONS
Series 248 was tested in accordance with, and passed, the California Department of Public Health CDPH/EHLB/Standard Method Version 1.1, 2010 emissions testing and meets qualifications of LEED v4, Collaborative for High Performance Schools, and Living Building Challenge.

PERFORMANCE CRITERIA
Additional test data available. Contact your Tnemec representative for specific test results.

COATING SYSTEM

PRIMERS
Concrete: Series 66, 66HS, 161, 161HS, 201, 205, 237, 238, 256, 280, 281, 287. **Note:** Series 248 can be applied directly to concrete if a single coat urethane sealer is desired.

INTERMEDIATE
Series 66, 66HS, 161, 161HS, 210, 237, 238, 256, 280, 281, 284, 285, 287
**Note:** Applying Series 248 to one of the listed primers or intermediate coats does not require sanding if the maximum recoat window for the primer or intermediate coat has not been exceeded. However, when applying Series 248 over smooth, slick, glossy surfaces it is good practice to uniformly degloss the surface by power sanding with 100 grit sandpaper, a 60 mesh sanding screen or a coarse stripping pad to eliminate surface tension and any potential for possible contamination in the surface that may lead to fisheyes and/or poor adhesion. Sanding is not required when topcoating textured coatings (i.e. aggregate or colored quartz broadcast to refusal) with Series 248 if the maximum recoat window for the primer or intermediate coat has not been exceeded. **Note:** When applying Series 248 over a broadcast or mortar system, a 100% solids epoxy grout coat or Series 256 is required.

SURFACE PREPARATION

CONCRETE
Prepare surfaces by method suitable for exposure and service. Refer to the appropriate primer data sheet for specific recommendations.

Allow new poured-in-place concrete to cure a minimum of 28 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 three 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 80%), 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. Mechanically abrade concrete surfaces to remove laitance, curing compounds, hardeners, sealers and other contaminants and to provide a minimum ICRI-CSP 2 surface profile. Large cracks, voids and other surface imperfections should be filled with a recommended filler or surfacer.

ALL SURFACES
Must be clean, dry and free of oil, grease and other contaminants. Existing coatings require thorough scarification using a power sander with 100 grit sandpaper and compatibility testing.

TECHNICAL DATA

VOLUME SOLIDS
92 ± 2.0% (clear mixed) †

RECOMMENDED DFT
2.0 to 3.0 mils (50 to 75 microns) per coat. **Note:** Number of coats will vary depending on color, substrate (surface) and other variables. Contact your Tnemec representative.

CURING TIME
<table>
<thead>
<tr>
<th>Temperature</th>
<th>Min. Reccoat ‡</th>
<th>To Service</th>
<th>Chemical Resistance</th>
</tr>
</thead>
<tbody>
<tr>
<td>75°F (24°C)</td>
<td>12 hours</td>
<td>24 hours</td>
<td>7 days</td>
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</table>

† When recoating, the surface must be thoroughly scarified using 60 grit sandpaper.
‡ Curing time varies with surface temperature, movement, humidity and film thickness.

VOLATILE ORGANIC COMPOUNDS
Unthinned: 0.68 lbs/gallon (82 grams/litre) †

THEORETICAL COVERAGE
1.476 mil sq ft/gal (36.2 m²/L at 25 microns). See APPLICATION for coverage rates. †

NUMBER OF COMPONENTS
Three: Part A, Part B (clear) and Part C (powder)
PART A
(Partially filled)

Large Kit
3 gallon pail

Part B
1/2 gallon can

Part C
1 gal can-6.5460 lbs

When Mixed Yield
3.225 gallons (12.2L)

COLOR PACKS ARE SOLD SEPARATELY AS 821 FIELD COLORANT. ADD ONE PINT COLOR PACK PER SMALL KIT OR THREE PINT COLOR PACKAGES PER LARGE KIT.

NET WEIGHT PER GALLON
10.67 ± 0.25 lbs (4.84 ± .11 kg) (clear mixed) †

STORAGE TEMPERATURE
Minimum 20°F (-7°C) Maximum 110°F (43°C)

TEMPERATURE RESISTANCE
(Dry) Continuous 250°F (121°C) Intermittent 275°F (135°C)

SHELF LIFE
Part A: 12 months; Part B: 12 months; Part C: 24 months in unopened cans at recommended storage temperature.

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APPLICATION

COVERAGE RATES

<table>
<thead>
<tr>
<th>Suggested</th>
<th>Dry Mils (Microns)</th>
<th>Wet Mils (Microns)</th>
<th>Sq Ft/Gal (m²/Gal)</th>
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<tbody>
<tr>
<td>2.5 (65)</td>
<td>2.5 (65)</td>
<td></td>
<td>590 (54.8)</td>
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<table>
<thead>
<tr>
<th>Minimum</th>
<th>Dry Mils (Microns)</th>
<th>Wet Mils (Microns)</th>
<th>Sq Ft/Gal (m²/Gal)</th>
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</thead>
<tbody>
<tr>
<td>2.0 (50)</td>
<td>2.0 (50)</td>
<td></td>
<td>738 (68.5)</td>
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</table>

<table>
<thead>
<tr>
<th>Maximum</th>
<th>Dry Mils (Microns)</th>
<th>Wet Mils (Microns)</th>
<th>Sq Ft/Gal (m²/Gal)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.0 (75)</td>
<td>3.5 (90)</td>
<td></td>
<td>492 (45.7)</td>
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</tbody>
</table>

MIXING

Premix Part A for one minute. While under agitation slowly sift in Part C powder. If material is to be tinted, use one pint container of Series 821 color for a small kit and three pints for a large kit. Thoroughly combine the Parts A and C. Mix well before adding the Part B. Do not use mixed material beyond pot life limits. Part A is moisture sensitive and will react with atmospheric moisture. Mix in full kits only. Opened material should not be reused. Do not rescale containers of mixed material.

THINNING

None required or recommended.

POT LIFE

2 hours at 77°F (25°C)

APPLICATION EQUIPMENT

Roller: Use a 1/4" or 3/8" (6.4 mm or 9.5 mm) high quality and shed-resistant synthetic woven nap cover. Do not use long nap roller covers. Note: A 1/4" (6 mm) roller is recommended when applying Series 248 over a smooth or non-textured surface.

Brush: Use high quality natural or synthetic bristle brushes.

SURFACE TEMPERATURE

Minimum 40°F (4°C) Maximum 90°F (32°C)

The surface should be dry and at least 5°F (3°C) above the dew point. This product is moisture sensitive until cured.

AMBIENT HUMIDITY

Minimum 20% Maximum 80%

Humidity must be below 80%. Application of the coating above the maximum recommended dry film thickness or at relative humidities above 80% may cause bubbles or microfoaming to form in the cured film. Relative humidities below 20% will not allow the coating to properly cure.

CLEANUP

Flush and clean all equipment immediately after use with MEK.

† Values may vary with color.