KEM CATI-COAT® HS EPOXY FILLER/SEALER

PRODUCT INFORMATION

KEM CATI-COAT HS EPOXY FILLER/SEALER is a high performance, interior/exterior, epoxy block filler. Designed for tenacious adhesion to masonry substrates while filling voids and crevices to smooth the surface. Excellent resistance to moisture, humidity, impact, and abrasion.

- Chemical resistant
- Long pot life
- Resurfaces spalled and deteriorated concrete

PRODUCT CHARACTERISTICS

| Finish: | Flat |
| Color: | Off White |
| Volume Solids: | 72% ± 2%, mixed |
| Weight Solids: | 84% ± 2%, mixed |
| VOC (EPA Method 24): | Unreduced: <250 g/L; 2.08 lb/gal |
| | Reduced 12½%: <320 g/L; 2.66 lb/gal |
| Mix Ratio: | 2 components, 1:1 by volume |

Recommended Spreading Rate per coat:

| Minimum | Maximum |
| Wet mils (microns) | 14.0 (350) | 28.0 (700) |
| Dry mils (microns) | 10.0 (250) | 20.0 (500) |
| Coverage sq ft/gal (m²/L) | 60 (1.48) | 115 (2.8) |
| Theoretical coverage sq ft/gal (m²/L) | 1152 (28.2) |

NOTE: Brush or roll application may require multiple coats to achieve maximum film thickness and uniformity of appearance.

Drying Schedule @ 15.0 mils wet (375 μm):

| Test Method | Results |
| Adhesion | ASTM D3359, Method B | 5B, 100% retention |
| Nuclear Decontamination | ASTM D4256/ANSI N 5.12 | 98% Water Wash; 96% Overall |
| Direct Impact Resistance | TTC-555B, 4.4.4 | Minimum resistance at 6 in. lbs. |
| Dry Heat Resistance | ASTM D2485 | 250°F (121°C), 275°F (135°C) intermittent |
| Flame Spread Rating | ASTM E-84 Tunnel Test | Class A on noncombustible surfaces |
| Flexibility (cold rolled steel) | TTC-555B, 4.4.3, 1" mandrel | Passes |
| Freeze/Thaw | ASTM D2246, 20 cycles | Passes |
| Humidity Resistance | ASTM D2247, 100°F (38°C), 1000 hours | Passes, no blistering or loss of adhesion |
| Radiation Tolerance | ASTM D4082 / ANSI 5.12 | Pass at 40 mils (1000 microns) |
| Wind Driven Rain | TTC-555B, 4.4.7 | Passes |

Epoxy coatings may darken or yellow following application and curing.

Acceptable for use in Canadian Food Processing facilities (Confirm acceptance of specific part numbers/recipes with your SW Sales Representative).

Recommended Uses

Acceptable for use in immersion service with recommended topcoat.

For use over prepared concrete and masonry surfaces, in areas such as:

- Secondary containment
- Tunnels
- Prisons
- Nuclear Power Plants
- Nuclear fabrication shops
- Nuclear weapons facilities
- Suitable for use in USDA inspected facilities
- This product meets specific design requirements for non-safety related nuclear plant applications in Level II, III and Balance of Plant, and DOE nuclear facilities*.

* Nuclear qualifications are NRC license specific to the facility.
**PRODUCT INFORMATION**

**Recommended Systems**

<table>
<thead>
<tr>
<th>Condition of Surface</th>
<th>ISO 8501-1</th>
<th>Swedish Std.</th>
<th>SSPC</th>
<th>NACE</th>
</tr>
</thead>
<tbody>
<tr>
<td>White Metal</td>
<td>Sa 3</td>
<td>Sa 3</td>
<td>SP 5</td>
<td>1</td>
</tr>
<tr>
<td>Near White Metal</td>
<td>Sa 2.5</td>
<td>Sa 2.5</td>
<td>SP 10</td>
<td>2</td>
</tr>
<tr>
<td>Commercial Blast</td>
<td>Sa 2</td>
<td>Sa 2</td>
<td>SP 6</td>
<td>3</td>
</tr>
<tr>
<td>Brush-Off Blast</td>
<td>Sa 1</td>
<td>Sa 1</td>
<td>SP 7</td>
<td>4</td>
</tr>
<tr>
<td>Hand Tool Cleaning</td>
<td>Si 2</td>
<td>Si 2</td>
<td>SP 2</td>
<td>-</td>
</tr>
<tr>
<td>Power Tool Cleaning</td>
<td>Si 1</td>
<td>Si 1</td>
<td>Si 2</td>
<td>SP 2</td>
</tr>
</tbody>
</table>

Dry Film Thickness / ct.

**Concrete/Masonry:**
1-2 cts. Kem Cati-Coat HS Epoxy Filler/Sealer

10.0-20.0 (250-500) as required to fill voids and provide a continuous substrate.

1-2 cts. Recommended topcoat

**Recommended Topcoats:**
- Acronol 218 HS Polyurethane
- Pro Industrial DTM Acrylic Coating
- Epo-Plex Multi-Mil Epoxy
- Hi-Solids Polyurethane
- Macropoxy HS Epoxy
- Sher-Cryl HPA
- Sherthane 2K Urethane
- Tile-Clad HS Epoxy
- Waterbased Catalyzed Epoxy
- Waterbased Tile-Clad Epoxy

**Recommended tocoats for secondary containment:**
- Cor-Cote E.N. 7000
- Phenicon HS
- Shelcote II

**Recommended tocoats for immersion service:**
* (water and wastewater only)*
- Dura-Plate 235
- Sher-Glass FF
- Tank Clad HS
- TarGuard Coal Tar Epoxy

The systems listed above are representative of the product's use, other systems may be appropriate.

**Surface Preparation**

Surface must be clean, dry, and in sound condition. Remove all oil, dust, grease, dirt, loose rust, and other foreign material to ensure adequate adhesion.

Refer to product Application Bulletin for detailed surface preparation information.

Minimum recommended surface preparation:
- Concrete/Masonry: SSPC-SP13/NACE 6, or ICRI No. 310.2R, CSP 3-5

**Surface Preparation Standards**

**Tinting**

Do not tint.

**Application Conditions**

Temperature: 45°F (7°C) minimum, 100°F (38°C) maximum

Relative humidity: 85% maximum

Refer to product Application Bulletin for detailed application information.

**Ordering Information**

Packaging:
- Part A: 5 gallon (18.9L) containers
- Part B: 5 gallon (18.9L) containers

Weight: 13.4 ± 0.2 lb/gal ; 1.6 Kg/L, mixed

**Safety Precautions**

Refer to the MSDS sheet before use.

Published technical data and instructions are subject to change without notice. Contact your Sherwin-Williams representative for additional technical data and instructions.

**Warranty**

The Sherwin-Williams Company warrants our products to be free of manufacturing defects in accord with applicable Sherwin-Williams quality control procedures. Liability for products proven defective, if any, is limited to replacement of the defective product or the refund of the purchase price paid for the defective product as determined by Sherwin-Williams. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY SHERWIN-WILLIAMS, EXPRESSED OR IMPLIED, STATUTORY, BY OPERATION OF LAW OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.
Surface must be clean, dry, and in sound condition. Remove all oil, dust, grease, dirt, loose rust, and other foreign material to ensure adequate adhesion.

Masonry and Block
Surfaces should be thoroughly clean and dry. Concrete and mortar must be cured at least 28 days @ 75°F (24°C). Remove all loose mortar and foreign material. Surface must be free of laitance, concrete dust, dirt, form release agents, moisture curing membranes, loose cement and hardeners.

Concrete and Masonry
For surface preparation, refer to SSPC-SP13/NACE 6, or ICRI No. 310.2R, CSP 3-5. Surfaces should be thoroughly clean and dry. Concrete and mortar must be cured at least 28 days @ 75°F (24°C). Remove all loose mortar and foreign material. Surface must be free of laitance, concrete dust, dirt, form release agents, moisture curing membranes, loose cement and hardeners. Fill bug holes, air pockets and other voids with Kem Cati-Coat.

Follow the standard methods listed below when applicable:
ASTM D4258 Standard Practice for Cleaning Concrete.
ASTM D4259 Standard Practice for Abrading Concrete.
ASTM D4260 Standard Practice for Etching Concrete.
ASTM F1869 Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete.
SSPC-SP 13/Nace 6 Surface Preparation of Concrete.
ICRI No. 310.2R Concrete Surface Preparation.

Concrete, Immersion Service:
For surface preparation, refer to SSPC-SP13/NACE 6, Section 4.3.1 or 1.3.2 or ICRI No. 310.2R, CSP 3-5.

Surface Preparation Standards

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<td>Brush-Off Blast</td>
<td>Sa 1</td>
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<td>SP 7</td>
<td>SP 7</td>
</tr>
<tr>
<td>Hand Tool Cleaning</td>
<td>Rusted</td>
<td>C St 2</td>
<td>C St 2</td>
<td>SP 2</td>
</tr>
<tr>
<td></td>
<td>Pitted &amp; Rusted</td>
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<td>SP 3</td>
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</table>

Temperature: 45°F (7°C) minimum, 100°F (38°C) maximum (air, surface, and material).
Relative humidity: 85% maximum

The following is a guide. Changes in pressures and tip sizes may be needed for proper spray characteristics. Always purge spray equipment before use with listed reducer. Any reduction must be compliant with existing VOC regulations and compatible with the existing environmental and application conditions.

Reducer/Clean Up
Reduction..............As needed up to 12½% by volume

Airless Spray
Pump..........................30:1
Pressure......................3000-3400 psi
Hose.........................3/8" ID
Tip...........................019" - .023"
Reduction...................As needed up to 12½% by volume

Brush
Brush..........................Natural Bristle
Reduction...................As needed up to 12½% by volume

Roller
Cover.........................3/8-1/2" woven with solvent resistant core
Reduction...................As needed up to 12½% by volume

Squeegee
Reduction...................As needed up to 12½% by volume

If specific application equipment is not listed above, equivalent equipment may be substituted.
**Application Procedures**

Surface preparation must be completed as indicated.

**Mixing Instructions:** Mix contents of each component thoroughly with low speed power agitation. Make certain no pigment remains on bottom of can. Then combine 1 part by volume of part A with 1 part by volume of Part B. Thoroughly agitate the mixture. Allow material to sweat-in as indicated. Re-stir before using.

If reducer solvent is used, add only after both components have been thoroughly mixed, after sweat-in.

Apply paint at the recommended film thickness and spreading rate as indicated below:

<table>
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<tr>
<th>Recommended Spreading Rate per coat:</th>
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<th>Maximum</th>
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<tr>
<td>Wet mils (microns)</td>
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<td>10.0 (250)</td>
<td>20.0 (500)</td>
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<td>Coverage sq ft/gal (m²/L)</td>
<td>60 (1.48)</td>
<td>115 (2.9)</td>
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<td>Theoretical coverage sq ft/gal (m²/L)</td>
<td>1152 (28.2)</td>
<td></td>
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</table>

*NOTE: Brush or roll application may require multiple coats to achieve maximum film thickness and uniformity of appearance.*

**Drying Schedule @ 15.0 mils wet (375 microns):**

<table>
<thead>
<tr>
<th>@ 55°F/13°C</th>
<th>@ 77°F/25°C 50% RH</th>
<th>@ 100°F/38°C</th>
</tr>
</thead>
<tbody>
<tr>
<td>To touch: 3 hours</td>
<td>1-3 hours</td>
<td>30 minutes</td>
</tr>
<tr>
<td>To recoat:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>minimum: 24 hours</td>
<td>18 hours</td>
<td>6 hours</td>
</tr>
<tr>
<td>maximum: 30 days</td>
<td>30 days</td>
<td>30 days</td>
</tr>
<tr>
<td>To cure: 4 days</td>
<td>1 day</td>
<td>12 hours</td>
</tr>
</tbody>
</table>

*If maximum recoat time is exceeded, abrade surface before recoating. Drying time is temperature, humidity, and film thickness dependent.*

**Pot Life:**

- 12 hours
- 8 hours
- 2 hours

**Sweat-in-time:**

- 60 minutes
- 30 minutes
- 15 minutes

Application of coating above maximum or below minimum recommended spreading rate may adversely affect coating performance.

**Performance Tips**

When using spray application, use a 50% overlap with each pass of the gun to avoid holidays, bare areas, and pinholes. If necessary, cross spray at a right angle.

Spreading rates are calculated on volume solids and do not include an application loss factor due to surface profile, roughness or porosity of the surface, skill and technique of the applicator, method of application, various surface irregularities, material lost during mixing, spillage, overthinning, climatic conditions, and excessive film build.

Excessive reduction of material can affect film build, appearance, and adhesion.

Excessive film build, poor ventilation, and cool temperatures may cause solvent entrapment and premature coating failure.

Do not apply the material beyond recommended pot life.

Do not mix previously catalyzed material with new.

Depending on condition of substrate, more than one coat may be required.

Do not apply under 50 sq ft/gal or mudcracking may occur.

Not recommended for previously painted surfaces.

Temperatures above 77°F (25°C) will shorten pot life.

For best results, apply by airless spray and immediately back roll.

Do not apply over moisture, or below 45°F (7°C).

Refer to Product Information sheet for additional performance characteristics and properties.

**Safety Precautions**

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**Disclaimer**

The information and recommendations set forth in this Product Data Sheet are based upon tests conducted by or on behalf of The Sherwin-Williams Company. Such information and recommendations set forth herein are subject to change and pertain to the product offered at the time of publication. Consult your Sherwin-Williams representative to obtain the most recent Product Data Information and Application Bulletin.

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