**PRODUCT DESCRIPTION**

**ArmorSeal 1K Waterbased Urethane Floor Enamel** is a gloss, high performance, one component polyester waterbased urethane, formulated specifically for industrial floor applications. Provides outstanding abrasion resistance, good chemical resistance, with excellent color and gloss retention.

- May exhibit "tire tracking"
- Resistant to "hot tire" pick-up
- Performance comparable to two component WB urethane
- Impact and abrasion resistant
- Chemical resistant
- Excellent color and gloss retention
- Fast dry
- Excellent color and gloss retention.

**Recommended Uses**

For use over prepared concrete floors or previously painted floor surfaces in sound condition.

- Manufacturing plants
- Laboratories
- Schools
- Hospitals
- Aircraft hangars
- Interior high maintenance areas
- Exterior floors-helipads
- Suitable for use in USDA inspected facilities
- Acceptable for use in Canadian Food Processing facilities, categories: D2 (Confirm acceptance of specific part numbers/rexes with your SW Sales Representative)

**Performance Characteristics**

- **Substrate**: Concrete
- **Surface Preparation**: Clean, dry, sound
- **System Tested**:
  - 1 ct. ArmorSeal Floor Plex 7100 Primer @ 2.0 mils (50 microns) dft
  - 1 ct. ArmorSeal 1K WB Urethane Floor Enamel @ 3.0 mils (75 microns) dft
  - *unless otherwise noted below

<table>
<thead>
<tr>
<th>Test Name</th>
<th>Test Method</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abrasion Resistance</td>
<td>ASTM D4060, CS10 wheel, 1000 cycles, 1 kg load</td>
<td>145 mg loss</td>
</tr>
<tr>
<td>Adhesion</td>
<td>ASTM D4541</td>
<td>350 psi, 100% Concrete Failure</td>
</tr>
<tr>
<td>Direct Impact Resistance</td>
<td>ASTM D2794</td>
<td>160 in. lb.</td>
</tr>
<tr>
<td>Dry Heat Resistance</td>
<td>ASTM D2485</td>
<td>150°F (66°C), intermittent 250°F (121°C)</td>
</tr>
<tr>
<td>Flexibility</td>
<td>ASTM D522, 180° bend, 1/4” mandrel</td>
<td>Passes</td>
</tr>
<tr>
<td>Hot Tire Pick-up</td>
<td>ITM @ 140°F (60°C)</td>
<td>Passes</td>
</tr>
<tr>
<td>Pencil Hardness</td>
<td>ASTM D3363</td>
<td>2H</td>
</tr>
<tr>
<td>Reverse Impact Resistance</td>
<td>ASTM D2794</td>
<td>100 in. lb.</td>
</tr>
<tr>
<td>Scrub Resistance</td>
<td>ASTM 141-6192, 10,000 cycles</td>
<td>TBD</td>
</tr>
<tr>
<td>Slip Resistance, Floors</td>
<td>ASTM C1028**; 0.60 minimum Static Coefficient of Friction</td>
<td>Pass dry with and without SharkGrip Additive; Pass wet with SharkGrip Additive</td>
</tr>
</tbody>
</table>

**Drying Schedule @ 4.0 mils wet (100 microns):**

- **At 55°F/13°C 77°F/25°C @ 120°F/49°C 50% RH**
  - To dry: 1.5 hours 45 minutes 25 minutes
  - Foot traffic: 18 hours 8 hours 6 hours
  - Heavy traffic: 24 hours 18 hours 10 hours

- **To recoat:**
  - Minimum: 8 hours 6 hours 3 hours
  - Maximum: 30 days 30 days 30 days

- **To cure:**
  - 14 days 14 days 14 days

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

- **Shelf Life:** 24 months, unopened at 77°F (25°C)
  - Store indoors at 40°F (4.5°C) to 100°F (38°C)

- **Flash Point:** >200°F (93°C), Seta Flash, mixed
  - Reducer/Clean Up: Water
**ArmorSeal® 1K**

**WATERBASED URETHANE FLOOR ENAMEL**

**B65W775**
**B65T775**
**B65A775**
**B65C775**

**Extra White/Tint Base**
**Clear Tint Base**
**Haze Gray**
**Clear**

**Product Information**

**Recommended Systems**

<table>
<thead>
<tr>
<th>Concrete floors, unpainted:</th>
<th>Dry Film Thickness / ct.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 ct. ArmorSeal 8100</td>
<td>2.0-4.0 (50-100)</td>
</tr>
<tr>
<td>(reduced with one pint of water per gallon)</td>
<td></td>
</tr>
<tr>
<td>1-2 cts. ArmorSeal 1K WB Urethane Floor Enamel</td>
<td>2.0-4.0 (50-100)</td>
</tr>
</tbody>
</table>

| Concrete floors, unpainted: Clear Only (B65C775) | 2.0 (50) |
| 1 ct. ArmorSeal 1K Urethane Clear, Reduced 10% by volume with water (minimum) | 2.0 (50) |

**Concrete floors, previously painted:**

| Painted Surfaces in Sound Condition: | 2.0-4.0 (50-100) |
| 1-2 cts. ArmorSeal 1K WB Urethane Floor Enamel | 2.0-4.0 (50-100) |

**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.

Do not use hydrocarbon solvents for cleaning.

Minimum recommended surface preparation:

- **Concrete Masonry**: SSPC13/NACE 6 (or) ICRI No. 310.2R, CSP 1-2

**Surface Preparation Standards**

<table>
<thead>
<tr>
<th>Condition of Surface</th>
<th>ISO 8501-1</th>
<th>BS7079:1</th>
<th>Swedish Std.</th>
<th>SSPC NACE</th>
</tr>
</thead>
<tbody>
<tr>
<td>White Metal</td>
<td>Sa 3</td>
<td>Sa 3</td>
<td>Sa 3</td>
<td>SP 1</td>
</tr>
<tr>
<td>Near White Metal</td>
<td>Sa 2.5</td>
<td>Sa 2.5</td>
<td>Sa 2.5</td>
<td>SP 10</td>
</tr>
<tr>
<td>Commercial Blast</td>
<td>Sa 2</td>
<td>Sa 2</td>
<td>Sa 2</td>
<td>SP 6</td>
</tr>
<tr>
<td>Brush-Off Blast</td>
<td>Sa 1</td>
<td>Sa 1</td>
<td>Sa 1</td>
<td>SP 7</td>
</tr>
<tr>
<td>Hand Tool Cleaning</td>
<td>C St 2</td>
<td>C St 2</td>
<td>C St 2</td>
<td>SP 2</td>
</tr>
<tr>
<td>Rusted</td>
<td>D St 2</td>
<td>D St 2</td>
<td>D St 2</td>
<td>SP 2</td>
</tr>
<tr>
<td>Power Tool Cleaning</td>
<td>D St 3</td>
<td>D St 3</td>
<td>D St 3</td>
<td>SP 3</td>
</tr>
</tbody>
</table>

**Tinting**

Tint with CCE or EnviroToner colorants at 100% strength. Do not use BAC.

Five minutes minimum mixing on a mechanical shaker is required for complete mixing of color.

**Application Conditions**

Temperature: 50°F (10°C) minimum, 120°F (49°C) maximum (air, surface, and material)
Relative humidity: 85% maximum

Refer to product Application Bulletin for detailed application information.

**Ordering Information**

Packaging: 1 gallon (3.78L) and 5 gallon (18.9L) containers

Weight: 8.7 ± 0.2 lb/gal : 1.04 Kg/L (Clear)
9.7 ± 0.2 lb/gal : 1.16 Kg/L (White, Haze Gray), may vary by color

**Safety Precautions**

Refer to the SDS 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.

**Disclaimer**

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**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.

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Surface Preparations

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.

Do not use hydrocarbon solvents for cleaning.

Concrete and Masonry

For surface preparation, refer to SSPC-SP13/NACE 6, or ICRI No. 310.2R, CSP 1-2. 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 Steel-Seam FT910. Primer required.

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.

Previously Painted Surfaces

If in sound condition, clean the surface of all foreign material. Smooth, hard or glossy coatings and surfaces should be dulled by abrading the surface. Apply a test area, allowing paint to dry one week before testing adhesion. If adhesion is poor, additional abrasion of the surface and/or removal of the previous coating may be necessary. Retest surface for adhesion. If paint is peeling or badly weathered, clean surface to sound substrate and treat as a new surface as above.

Application Bulletin

Application Conditions

| Temperature: | 50°F (10°C) minimum, 120°F (49°C) maximum (air, surface, and material) | At least 5°F (2.8°C) above dew point |
| Relative humidity: | 85% maximum |

Application Equipment

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 ............ Water

Brush

- Brush.........................Nylon/Polyester
- Reduction...................As needed up to 10% by volume

Roller

- Cover .........................1/4"-3/8" woven with solvent resistant core
- Reduction...................As needed up to 10% by volume

If specific application equipment is not listed above, equivalent equipment may be substituted.
ARMORSEAL®1K
WATERBASED URETHANE FLOOR ENAMEL

B65W775  Extra White/Tint Base
B65T775  Clear Tint Base
B65A775  Haze Gray
B65C775  Clear

Application Bulletin

Application Procedures

Surface preparation must be completed as indicated.

Mixing Instructions: Mix paint thoroughly with low speed power agitation prior to use. Avoid vigorous agitation. Make certain no pigment remains on bottom of can.

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

Recommended Spreading Rate per coat:

<table>
<thead>
<tr>
<th>Clear Coat</th>
<th>Colors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Min.</td>
<td>Max.</td>
</tr>
<tr>
<td>Wet mils (microns)</td>
<td>4.0</td>
</tr>
<tr>
<td>Dry mils (microns)</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Coverage sq ft/gal (m²/L):

| ~Coverage sq ft/gal (m²/L) | 204 | 5.0 | 408 | 10.0 | 136 | 3.3 | 272 | 6.6 |

Theoretical coverage sq ft/m² @ 1 ml/25 micron dft: 544 (13.3)

Apply by brush or roller only.

Drying Schedule @ 4.0 mils wet (100 microns):

<table>
<thead>
<tr>
<th>To touch:</th>
<th>1.5 hours</th>
<th>45 minutes</th>
<th>25 minutes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foot traffic:</td>
<td>18 hours</td>
<td>8 hours</td>
<td>6 hours</td>
</tr>
<tr>
<td>Heavy traffic:</td>
<td>24 hours</td>
<td>18 hours</td>
<td>10 hours</td>
</tr>
</tbody>
</table>

To recoat (self):

| minimum: | 8 hours | 6 hours | 3 hours |
| maximum: | 30 days | 30 days | 30 days |

To cure: 14 days 14 days 14 days

If maximum recoat time is exceeded, abrade surface before topcoating.

Drying time is temperature, humidity, and film thickness dependent.

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

Clean Up Instructions

Clean spills and spatters immediately with soap and warm water. Clean hands and tools immediately after use with soap and warm water. After cleaning, flush spray equipment with mineral spirits to prevent rusting of the equipment. Follow manufacturer’s safety recommendations when using mineral spirits.

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Performance Tips

During the early stages of drying, the coating is sensitive to rain, dew, high humidity, and moisture condensation. Plan painting schedules to avoid these influences during the first 16-24 hours of curing.

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.

When using as a clear system (B65C775), please refer to the product data page: Recommended Systems. Three coats are required.

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

Drying time is temperature, humidity, and film thickness dependent.

Always test adhesion by applying a test patch of 2-3 square feet. Allow to dry one week before checking adhesion.

Do not use hydrocarbon solvent for cleaning.

Anti-slip additives, such as H&C SharkGrip®, may be added to the coating to provide some slip resistance. This product should not be used in place of a non-skid finish.

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

Safety Precautions

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