



# FLOOR ARMOR CONCRETE COATING

## Technical Data Sheet

### PRODUCT DESCRIPTION

This two-component extreme high durability concrete coating is based upon our proprietary clear coat formulation using advanced moisture cured urethane technology. By using a clear base, our two-component coatings offer proven durability, flexibility, chemical and abrasion resistance over epoxy and acrylic coatings. These two-component products also offer unsurpassed resistance to UV with a track record proven performances in environments where the index is over 17.

### PHYSICAL CHARACTERISTICS

**COLORS:**

Light Grey, Dark Grey, Beige, Tan and White

**FINISH:** Gloss**BOILING POINT:** 284 F/ 140 C**VAPOR PRESSURE:** 5.9 PSIA @ 163\***VAPOR DENSITY:** (Air = 1) 3.70**SPECIFIC GRAVITY:** (Water =1) 1.02**VOC CONTENT:** Light Gray - 285 grams per liter

Clear - 309

Dark Grey - 291

White - 330

Beige - 279

Tan - 330

**CURE TIME:** Tack free: 2-5 hours, Recoat: 2- 72 hours, Full cure: 96 Hours

### TYPICAL APPLICATIONS

**Industrial maintenance and marine applications  
such as:**

- |                           |                       |
|---------------------------|-----------------------|
| - Garages                 | - Public utilities    |
| - Wastewater treatment    | - Chemical processing |
| - Storage & holding tanks | - Fleet services      |
| - Hangars                 | - Stadiums            |
| - Curbs                   | - Marine & coastal    |
| - Warehouses              |                       |

**Materials Classification Colors:**

N/A	
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**OSHA and ANSI Safety Identification Colors**

N/A	
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## APPLICATION DETAILS

**APPLICATION METHODS:** Brush, roller, spray

**THINNER:** Use only POR-15 Solvent. Can be reduced up to 15%.

**INDICATED FILM THICKNESS, WET:** 37 micron/1.9 mils

**INDICATED FILM THICKNESS, DRY:** 35 micron/1.4 mils

## PERFORMANCE DATA

**ASTM B-117 Salt Spray Test** - 1000 hours exposure – passed – NO CHANGE

**ASTM 4541 Adhesion to Concrete** – Mpa 4.1 PSI 595

**ASTM C-501 Taber Abraser** – Lost 20 mg after 500 cycles with 1250 grams of load

**ASTM D2134-93 Hardness Test**- 52%

**ASTM D 2370** – PSI 3590 Elongation – 70%

**MIL-D-3134J, Sec 4.6.13 (b)** – Indentation – 2000 PSI @ 30 minutes – NONE

**ASTM D 1308** – Gas immersion -4M – Loss of adhesion after 21 days – 0B

**ASTM D 1308** – Kerosene & Diesel – NONE – Loss of adhesion after 21 days – 3B

**ASTM D 522, Method B(a)** – Flexibility – Elongation >32 % - Cone <0.125 in.

## PRODUCT COMPARISON

Resistance	Floor Armor	Acrylic	Epoxy
Abrasion	Excellent	Poor	Moderate
Acids	Excellent	Poor	Moderate
Adhesion	Excellent	Moderate	Excellent
Alkali	Excellent	Poor	Excellent
Flexibility	Excellent	Poor	Moderate
Heat	Moderate	Poor	Moderate
Solvents	Excellent	Poor	Excellent
UV Exposure	Excellent	Poor	Poor
Water Immersion	Excellent	Poor	Excellent

Floor Armor™ uses low VOC solvent based urethane technology as opposed to epoxy products that are widely available. In comparison:

- Epoxies are brittle and do not expand and contract with concrete
- Epoxies are not as impact and abrasion resistant
- Epoxies are not as UV resistant

## **SURFACE PREPARATION**

Surface preparation and repair are the most important prerequisites for durability and protection for any coating system. All surfaces must be examined thoroughly to determine surface conditions. Examinations should include checking for peeling and faded paint, dirt, grease, cracking, surface pits, bare areas, mildew, rust, stains and compromised areas. Each surface requires its own preparation techniques.

If areas need patching or resurfacing see our POR-15 Concrete Repair Kit

Some concrete may need scarifying or shot blasting

Surface must be clean, dry, and in good working conditions. All oil, dirt, grease, dust, loose concrete, dust, other material and debris must be removed to provide adequate adhesion. The minimum recommended surface preparation methods for the following surfaces are:

**Concrete – SSPC-SP13, NACE 6**

## **SAFETY**

Material Safety Data Sheets must be read and understood by personnel responsible for supervision and installation of POR-15 products. All applicable federal, state, local, and particular plant safety guidelines must be followed during the handling and installation and cure of these materials. Safe and proper disposal of excess materials shall be done in accordance with applicable federal, state, and local codes.

All work personnel should wear gloves, protective clothing, facial protection shield, mask and protective goggles.

## **CLEANUP**

Clean up mixing and application equipment immediately after use. Tools should be cleaned after work but before the paint hardens using a urethane thinner. Cleaning is not possible after hardening. Observe all fire and health precautions when handling or storing solvents. Use POR-15 Solvent or POR-Strip for cleanup.

## **MAINTENANCE**

Occasional inspection of the installed material and spot repair can prolong system life. For specific information, contact the Technical Service Department.

## **MATERIAL STORAGE**

Store materials in a temperature-controlled environment (45°F to 95°F) and out of direct sunlight. Two-year shelf life is expected for products stored between 45°F to 95°F.

APPLICATION	COMPATIBLE COATINGS		
<p>1. Using an airless sprayer, brush or roller, apply a first coat to the surface. Appropriate wet film thickness: 1.9 mils / 47µm.</p> <p>2. In order to form a complete anchor, apply the second coat immediately after verifying the dryness condition of the first coat by touch after 1-2 hours have passed. Appropriate layer thickness: 1.9 mils / 47µm. Observe when first coat is just dry enough to walk on without leaving prints.</p>	<table border="1" data-bbox="824 331 1380 369"> <tr> <td></td> <td></td> </tr> </table> <p data-bbox="829 411 1375 449"><b>QUALIFICATIONS</b></p> <p data-bbox="878 457 1326 512"><b>VOC Compliant (National Standards):</b> Anti-graffiti and Extreme High Durability Coating</p> <p data-bbox="930 543 1274 598"><b>USDA Inspected Facilities</b> USDA - FSIS Directive, No. 11,000.4</p>		

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