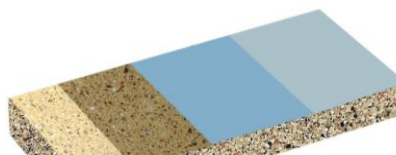


## Technical Data Sheet



### PRODUCT DESCRIPTION

**PUMA-CRETE PC103 EPOXY PRIMER** is an easy to apply, polyamide, waterborne primer. It has good hiding power, moisture tolerance/permeability, excellent adhesion to properly prepared new or old concrete, and previously epoxy coated surfaces. It is applied easily by roller, or combination of squeegee/roller. PUMA-CRETE PC103 EPOXY PRIMER may be thinned with up to 1 part water when needed. Non toxic and very low odor, this coating will seal the concrete, and provide a durable finish.

### ADVANTAGES

- Excellent adhesion to most substrates
- Can be tinted
- Gloss finish
- Long pot life but fast dry times
- Easy to apply, less roller lint
- Tough as epoxy but applies like a latex
- Breathable and tolerant of increased vapor emissions.
- Provides a durable, easily cleanable surface.
- Improved chemical resistance versus latex or acrylic paints

### TYPICAL USES

#### PUMA-CRETE PC103 EPOXY PRIMER

can be used in industrial production facilities which typically have rubber wheeled cart and lift traffic. When topcoated with the appropriated product, it shall provide medium or high gloss, easy to clean, abrasion resistant surface.

### LIMITATIONS

- Substrate must be structurally sound, cured and free of bond inhibiting contaminants.
- During installation and initial cure cycle substrate and ambient air temperature must be at a minimum of 50°F (10°C). Substrate temperature must be least 5°F (3°C) above the dew point (for lower temperature installation contact PUMA-CRETE's Technical Service Department).
- When required, adequate ventilation and proper clothing shall be provided.
- Extinguish all sources of ignition during the entire installation cycle.
- Strictly adhere to published coverage rates.

### SURFACE PREPARATION

Proper inspection and preparation of the substrate to receive resinous material is critical. Read and follow PUMA-CRETE's "Instructions for Concrete Surface Preparation" for details.

### PRODUCT CHARACTERISTICS

<b>Color:</b>	White Can be tinted (light to medium shades)
<b>Mix Ratio:</b>	3Hardener:1Resin
<b>Viscosity:</b>	20,000 cps
<b>Volume Solids:</b>	48% ± 2%, mixed
<b>Weight Solids:</b>	59% ± 2%, mixed
<b>VOC (EPA Method 24):</b>	Unreduced:mixed <100 g/L; 0.83 lb/gal

#### Recommended Spreading Rate per coat:

	Minimum	Maximum
<b>Wet mils (microns):</b>	<b>4.5</b> (100)	<b>8</b> (200)
<b>~Coverage sq ft/gal (m<sup>2</sup>/L):</b>	<b>350</b> (8.9)	<b>200</b> (5.1)

Coverage can vary from 4-8 mils .

#### Drying Schedule @ 6 mils (150 microns) wet:

	@ 73°F (23°C)
<b>To touch:</b>	2-4 hours
<b>To recoat:</b>	3-24 hours
<i>If maximum recoat time is exceeded, abrade surface before recoating. Drying time is temperature, humidity, and film thickness dependent.</i>	
<b>Pot Life:</b>	gallon mass 6 hours @ 73°F (23°C)

**Shelf Life:** Part A: 12 months, unopened  
Part B: 12 months, unopened  
Do not allow material to freeze  
Store indoors at 50°F (10°C) to 90°F (32°C)

**Flash Point:** >200°F (>93°C), ASTM D 93, mixed

### PERFORMANCE CHARACTERISTICS

Test Name	Results
<b>Adhesion to Concrete</b>	Excellent
<b>Resistance to Moisture</b>	Excellent
<b>Thermal Shock</b>	Excellent

## **APPLICATION**

### **APPLICATION INSTRUCTIONS**

1. Premix PC103 A (resin) and PC103part B (hardener) separately, using a low speed drill and Jiffy blade. Mix for one minute and until uniform exercising caution not to whip air into the materials.
2. Add 3 parts PC103 (hardener) to 1 part PC103 (resin), Mix with low speed drill and Jiffy blade for three minutes and until uniform. Apply material using a 3/8" nap roller at a spread rate of 300-350 sq. ft. per gallon to yield 4-5 mils WFT depending upon substrate.
3. Allow to cure for a minimum of 3-4 hours depending upon air movement before applying next coat.

\* PUMA-CRETE PC103 Epoxy performs best on an unpainted, porous surface. If the surface is painted with a well adhered epoxy coating, clean and abrade the surface thoroughly then apply the coat. Strictly follow mix ratio recommendations.

## **INSTRUCTIONS FOR TINTING**

Clear or may be tinted with WB pigment only.

## **ORDERING INFORMATION**

Packaging:	
Resin:	1 gallon (3.8L) and 5 gallon (18.9L) containers
Hardener:	1 gallon (3.8L) and 5 gallon (18.9L) containers
Weight:	10.4 ± 0.2 lb/gal; 1.25 Kg/L mixed, may vary by color

## **CLEANUP**

Clean up mixing and application equipment immediately after use with soap and water.

## **SAFETY**

Refer to the SDS sheet before use.

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

## **MAINTENANCE**

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

## **DISCLAIMER**

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

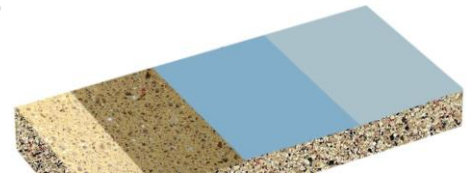
## **WARRANTY**

PUMA-CRETE CORP warrants our products to be free of manufacturing defects in accord with applicable PUMA-CRETE 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 PUMA-CRETE. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY PUMA-CRETE, EXPRESSED OR IMPLIED, STATUTORY, BY OPERATION OF LAW OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

# PUMA-CRETE® PC112 ESD

High Performance Industrial Flooring

rev. 11/15/21



## Technical Datasheet

### DESCRIPTION

PC-112 ESD is very low odor, static dissipative, high performance urethane coating. PC-112 ESD features a non-yellowing, satin finish, and is available in a variety of colors and textures. The PC-ESD system consists of a 2 or 3 coat system, including an insulative waterborne PC103 epoxy primer, optional intermediate coat, and a three-component, chemical-resistant, aliphatic polyester ESD urethane top coat (PC-112 ESD).

### USES:

PC-112 ESD can be installed in several different environments where the damaging effects of electrostatic discharge (ESD) cannot be tolerated. Primary industries that use ESD flooring include Electronic Assembly, Data processing, Military/ Aerospace, Hazardous Industries (dust or explosion hazards), and AGV areas. It is applied over our insulative epoxy primer, and optional intermediate coat.

### ADVANTAGES:

- Extremely low, non-offensive odor.
- Consistent resistance to ground without the need of a ground plane primer utilizing conductive particulates and polymers
- BODY VOLTAGE GENERATION (BVG) below 15 volts with conductive footwear

### ELECTRICAL PROPERTIES:

- Can be used to meet the recommendations set forth in ANSI-S20.20-2014.
- *Resistance:* This product is capable of exhibiting surface resistance values in the static dissipative and conductive ranges in accordance to values defined in test method EOS/ESD Association ESD STM S7.1-2005.
- *Reparability:* The lack of dependence on conductive fiber and ground plane primers allows this system to be repaired without sacrificing electrical performance.
- Dissipates a 5000-volt charge to 0 volts in less than 0.1 seconds
- Maintains ESD properties throughout the thickness of the applied coating and not dependent humidity for proper conductivity (unlike carbon fiber systems) To assure proper contact to floor surface, persons in area protected by ESD floor coating must wear approved quality ESD footwear.

### DURABILITY

Resistant to abrasion and other physical aggression pallet jacks and carts commonly found in testing and assembly facilities.

### COMPOSITION

Non-toxic static dissipating, polyurethane resin system combined with glass bead aggregates. Complies with VOC regulations for industrial maintenance coatings in the OTC and CA.

CURED PROPERTIES*: Properties	Test Method	Results
Abrasion Resistance Tabor CS-17, mg loss/1000 cycles/1000g mass	ASTM D4060	25 mg
Coefficient of Friction- COF James Test	ASTM D2047	0.55 0.65(w/GLOSS GRIP)
Tensile Strength	ASTM D2370	6160 PSI
Elongation	ASTM D2370	8%
Impact	ASTM D2794	140 in.lbs Direct & Reverse
Hardness (Pencil)	ASTM D3363	2H
Dry Film Thickness	at 4 mils WFT	3 mils

MATERIAL PROPERTIES*: Properties	Test Method	Results
Flash Point	ASTM D3278	187 °F (86°C)
Volume Solids (mixed)	ASTM D2369	75%
Mixed Viscosity	ASTM D2196	300-500 cPs
Dry Time	ASTM D5895	Tack Free 8 hr. Dry 16-24 hr. Full Cure 7-14 days
VOC-Volatile Organic Compound	ASTM D3960	< 250 g/l Pigmented

### APPEARANCE

SHEEN: Satin finish.

Slip Resistant: Meets ADA Standard - Coefficient of Friction (.6)  
Surface is easy to clean.

### APPLICATION

PUMA-CRETE® PC-112 ESD is installed by certified applicators throughout the U.S.A.

### SURFACE PREPARATION

To be assured of maximum adhesion and properties from any Puma-Crete® resin products the correct surface is essential. Please refer to technical data sheet "Surface Preparation".

### STORAGE, MIXING & APPLICATION TEMPERATURE

The storage, mixing and application conditions can affect the quality of the finish produced. Optimum storage and application temperature are 70°F.

### CURE SCHEDULE (70 deg F)

24 hours (foot traffic), 36 hrs Full cure (heavy traffic)

### MAINTENANCE

Regular cleaning of the applied system is recommended in order to maintain slip resistant properties and cosmetics. Normal cleaning agents (such as Simple Green) w/ auto floor scrubber.

### CHEMICAL RESISTANCE

Excellent resistances to organic and inorganic acids, alkalis, fuel and hydraulic oils, aromatic and aliphatic solvents.

### COLORS AVAILABLE

Standard colors: Std color is Medium Gray (also available in 7 additional colors—see Puma-Crete color chart.

### WARRANTY

5 years (refer to PUMA-CRETE® ESD warranty terms and conditions)

### CONDITIONS OF USAGE:

Installation of all products purchased must be by professional installers periodically published by PUMA-CRETE or otherwise approved by PUMA-CRETE in writing. Modification to any of PUMA-CRETE's products voids the warranty. The installer shall maintain a written contemporaneous record of field conditions (including, without limitation, surface and atmospheric conditions, usage rates, and lot numbers of products installed). PUMA-CRETE reserves the right of inspection of any installed product, installation and maintenance records and records of field conditions and may conduct additional testing as is reasonably required to investigate any warranty claims. Warranty shall only apply for products or materials that have been paid for in full.

**PUMA-CRETE Corp.**

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