

COATING DATA

DESCRIPTION:

Ceramasafe 90 is a two-component, high solids, cyclo-aliphatic amine cured epoxy modified with a unique ceramic pigment package to provide outstanding permeability resistance and barrier protection. This high build, high performance coating is formulated for maximum corrosion protection of steel, non-ferrous metals and concrete substrates immersed in sewage, exposed to hydrogen sulfide gas or exposed to many acids, caustics and other corrosive chemicals. Ceramasafe 90 has excellent cathodic disbondment properties.

USE:

Use as a protective barrier coating on steel, non-ferrous metals and concrete exposed to sanitary sewage and other aggressive chemicals such as urea ammonium nitrate. It is also ideal for protecting steel and concrete immersed in fresh, sea and chemically contaminated water.

LIMITATIONS:

Do not use for immersion service above 120°F (49°C) or dry heat above 200°F (93°C). Not recommended for immersion in concentrated solutions of mineral acids or organic acids.

SURFACE PREPARATION:

Steel (Immersion)—SSPC-SP 10/NACE 2 Near-White Blast Cleaning using the appropriate abrasive media to achieve a profile depth of 3 mils. **Steel (non-immersion)**—SSPC-SP 6/NACE 3 Commercial Blast Cleaning using the appropriate abrasive media to achieve a profile depth of 3 mils. When repairing mechanical damage to Ceramasafe 90 follow printed repair procedure for “recoating”. **Concrete** – New concrete must cure for at least 28 days. Verify dryness by testing for moisture per “ASTM D4263 Plastic Sheet Method”. Must be clean, dry, sound and free of all curing compounds, oils, greases or any other contaminants. All concrete surfaces shall be made free of voids, cracks and other imperfections using Induron EFS 707 Epoxy Surfacer or Mortarchem. Prepare the surface per ICRI 310.2 to achieve surface profile to meet a CSP 3-5. The use of E-Bond 100 as a primer over concrete will substantially minimize outgassing. **Recoating** – This product does not require scarifying the surface prior to begin recoating with itself for 7 days. Prior to recoating, remove all chalk and/or other surface contaminates. For extended periods of time, SSPC-SP 7/NACE 4 Brush-Off Blast cleaning is recommended to clean surface.

COVERAGE:

Theoretical— 1,444 ft.² per gallon at 1.0 mil dry film thickness.

DRY FILM THICKNESS:

15 - 40 mils per coat. Multiple coats may be used if necessary.

WET FILM THICKNESS:

17 – 45 mils

APPLICATION DATA

BLEND RATIO:

One part CeramaSafe 90 Ceramic Epoxy Activator to one part CeramaSafe 90 Ceramic Epoxy Base by volume. Power agitate until components are thoroughly mixed.

POT LIFE: 45 minutes @90F, 90 minutes @70F, 3 hours @50F.

APPLICATION:

Airless Spray—Remove all inline material filters. Use .029 - .031 tip; 45:1 pump ratio at 80-100 psi operating air pressure. **Roll**—Use a high quality synthetic cover with a solvent resistant core. Additional coats may be required to achieve desired film thickness. **Brush**—Use natural bristle brush. Additional coats may be required to achieve desired film thickness.

THINNING:

None required. Clean equipment with K-1034 Reducer.

CLIMATE:

Use this product only if the substrate temperature and ambient air temperature is above 45°F and is expected not to decrease for at least two hours after application. Also, the substrate temperature must be 5°F above the dew point for a period of at least two hours after application to avoid condensation occurring on wet paint.

DRY TIME:

TO HANDLE—8 hours @90F, 16 hours @70F, 32 hours @50F.

TO RECOAT—50°F or higher, 12 hours; 40°F-50°F, overnight.

NON POTABLE IMMERSION SERVICE—50°F or higher, 7 days with proper ventilation 40°F-50°F, 14 days with proper ventilation.

Note: High film thickness, low temperature and/or poor ventilation will retard dry time.

PHYSICAL DATA:

VOLUME SOLIDS: 90% ± 2%

SOLIDS BY WEIGHT: 90% ± 2%

WEIGHT PER GALLON: 8.4 ± .2 lbs per gallon (mixed)

VOLATILE ORGANIC CONTENTS:

0.68 lbs/gallon mixed unthinned; 82 grams/liter mixed unthinned

HAZARDOUS AIR POLLUTANTS (HAPS)

.005 lbs/gallon solids mixed unthinned; 0.60 grams/liter solids mixed unthinned

COLORS: Standard Black

Special Order Gray and Blue

SAFETY DATA:

See individual product label for safety and health data information. Individual Material Safety Data Sheets are available upon request.