

HEAVY INDUSTRIAL EPOXY

SET7900 is a high-solids epoxy with exceptional adhesion that offers excellent corrosion protection for long-term exterior exposure. Has excellent fresh and salt water resistance. A cold weather version catalyst is available.

Recommended For:

- Bulk Storage Tanks
- Piping and Catwalks
- Structural and Support Steel
- Water and Waste Treatment Plants

Features:

- Self-Priming
- Excellent Corrosion Protection
- Excellent Adhesion, Even Over Tightly Adhering Rust
- Good Flexibility and Impact Resistance
- Two-Component Pkg.

FOR INDUSTRIAL USE ONLY

Surface Preparation: Steel: Surface should be dry, clean, free of dirt, grease, old or loose scaling paint and anything that might interfere with adhesion. Lightly sand to dull any existing high-gloss surface. For mild environments, ferrous substrates should be cleaned and profiled by commercial blast cleaning to SSPC-SP 6/NACE No. 3 (Commercial Blast Cleaning) or to SSPC-SP 11 (Bare Metal Power Tool Cleaning) to remove mill scale, rust and other contaminants. For use in severe environments or used for immersion service, metal substrates should be cleaned and profiled to SSPC-SP 10/NACE No. 2 (Near-White Blast Cleaning).

Nonferrous: Nonferrous metal surfaces should be degreased with SET500 and abraded with 80 grit (wet or dry) sandpaper to promote adhesion. Concrete should be clean, dry and free of oil, grease and contaminants. New concrete must be allowed to cure 30 days. Smooth concrete surfaces should be acid etched or mechanically profiled to provide suitable anchor pattern.

Recommended Topcoats:

If improved gloss and color retention is important, we recommend topcoating with SET2400 or SET2500 for outdoor and UV exposure.

Colors:

White and tintable bases and custom colors are available upon request.

Shipping Weight:

(approximate due to color, fill level and pigment)

SET7900 2 Gal Kit: (A)16 lbs. / (B)14.5 lbs.
SET7900 5 Gal Kit: (A)43 lbs. / (B)37 lbs.

APPLICATION DATA

Optional Enhancers:
Not applicable

Wet Film Thickness:
6–8 wet mils per coat

Dry Film Thickness:

- Mild exposure: 1–2 coats for a minimum of 8 DFT
- Severe Exposure: 2 coats for a minimum of 10 DFT
- Immersion service: 3 coats for a minimum of 15 DFT

Pot Life @ 77°F (25°C):
Regular catalyst: 7 hours
Cold weather catalyst: 5 hours
Doubling the volume or an increase in temperature will shorten the pot life. Consult manufacturer when using in high humidity (above 85%).

EQUIPMENT:

Apply by Air-Assisted Airless or HVLP:
Air pressure is not to exceed 10 psi at the air cap.

HVLP:
45–60 psi at the gun
1.7 mm or equivalent

AA Tip Size:
60 psi at the gun
Recommended liquid pressure is 2100–3300 psi with a tip size from 415–521.

Roller/Brush:

- 3/8"–1/2" shed-resistant roller
- China bristle brush (Do not use nylon.)

MIXING AND THINNING:

Two-component packaging. Thoroughly mix each component separately then blend the components together, being careful not to induce air into the mixture, until a uniform color is obtained. Allow the combined components to sit for an induction time of 15 minutes. Lightly stir and apply. No thinning for high-build applications! Always thin after adding catalyst. Thin up to 5%, depending on application, with SET600 or Set601 (exempt solvents).

Avoid over-thinning or sagging can result!

Mixing:

SET7900 (A) : SET7900 (B)
1 : 1

SET601 above 80°F (27°C) or SET602 below 80°F (27°C)

CURE SCHEDULE @ 77°F (25°C):

	With Regular Catalyst	With Cold-Weather Catalyst
Tack Free	4.5 hours	3 hours
Drying Time (light foot traffic)	11 hours and 50% humidity	9 hours and 50% humidity
Curing Time	7 days	7 days
Recoat	8 hours minimum/72 hours maximum (degloss and recoat)	6 hours minimum/48 hours maximum (degloss and recoat)

STORAGE CONDITIONS:

Store indoors @ 40°F–110°F (4.4°C–43.3°C)

CHEMICAL RESISTANCE

Although SET7900 exhibits resistance to these environments, this list is not meant to imply an express guarantee in actual service. It is recommended that the user contact Surface Engineered Technologies (SET) for specific recommendations when severe exposure is expected.

WATER

SALTS

ACIDS

SOLVENTS

ALKALIS

AMMONIA

PHYSICAL PROPERTIES

PROPERTY	VALUE*
Finish	Gloss
% Solids by Volume	81% ± 2%
% Solids by Weight	88% ± 2%
Theoretical Coverage @ 1 mil	1300 mil sq. ft. per gallon, depending on color <i>The actual coverage will be less depending on application techniques, job conditions and type of surface to be coated.</i>
Viscosity at 77°F (25°C)	95 KU
VOC Actual	89 g/L / 0.75 lb/gal.
VOC Regulatory	98 g/L / 0.82 lb/gal.
Flash Point	Part A: 85°F (29°C) / Part B: 86°F (30°C)
Weight of Volatiles	11.4% ± 2%
Weight of Exempt	5.9% ± 2%
Volume of Exempt	8.2% ± 2%
Shelf Life (when kept at the recommended storage conditions and in original, unopened containers)	24 months @ 77°F 25°C)
Pigment Type	Chemical Resistant
Solvent Type	Exempt and HAPS Free
Vehicle Type	Epoxy
	* Values listed will be color dependent Values blended 1A:1B

SAFETY

Read Safety Data Sheets and container label cautions and warnings for important safety and health information prior to use. KEEP OUT OF REACH OF CHILDREN.

Ventilation: When using in enclosed areas, adequate air circulation must be used during and after application until the coating is fully cured. The ventilation system should be capable of preventing the solvent vapor concentration from reaching the lower explosion limit for the solvents being used. If the user is not sure or not able to monitor the levels, then use an approved (MSHA/NIOSH) respirator.

Caution: This product contains flammable solvents. Keep away from sparks and open flames. All electrical equipment/installations should be grounded in accordance with the National Fire Protection Association's (NFPA 70®)/National Electric Code® (NEC®). In areas where potential explosion hazards exist, personnel should be required to use non-ferrous tools and wear conductive, non-sparking shoes.

DISCLAIMER

At the time of publication, the product and technical data contained herein is believed to be accurate by Surface Engineered Technologies (SET). SET is committed to the continual improvement of its coatings, which may cause future product/technical data to change without prior notice. Our products are intended for use by properly trained personnel in industrial applications. Product performance will depend upon surface preparation, technique, method of application, surface to be coated and environmental conditions. However, there is no guarantee of comprehensiveness, accuracy or product performance given or implied herein. SET recommends that products be tested regarding these parameters prior to final use. **Always refer to the current Safety Data Sheet before use.**

WARRANTY: Surface Engineered Technologies (SET) warrants its products to be free of defects in materials and workmanship. Since SET has no control over surface preparation or application methods, no guarantee concerning results is offered, expressed, or implied. If this product is found to be defective, liability shall be limited to the refund of purchase price or replacement of product.

