MetaSet8700

Novolac Epoxy with Teflon

TECHNICAL DATA SHEET

set™ Surface Engineered Technologies

INTERIOR TANK LINING

SET8700 is an interior corrosion-resistant equipment coating with low VOC for use in severe chemical and solvent environments. Can be applied directly to blasted steel or concrete. Has a slick surface to ease the cleanup of environmental build-up.

Recommended For:

- Tank Lining/Frac Tanks
- Plant Maintenance
- Equipment Manufacturers
- Chemical Plants
- Pulp Mills
- Water and Waste Treatment Plants

Features:

- High Build
- Excellent Corrosion Protection
- Outstanding Chemical Resistance
- Low VOC
- Two-Component Pack
- Easy-to-Clean Surface
- Slick Surface

FOR INDUSTRIAL USE ONLY

Surface Preparation: **Steel:** *All metal surfaces must be free of all dust, dirt, oils, rust and other contaminants. Oil and grease should be removed by scraping off the heavy deposits and cleaning with suitable solvents, emulsion cleaners, stream or hot biodegradable alkaline detergent solution followed by a water rinse. All welds should be clean and free of splatter, slag or sharp projections. Sharp edges or any surfaces that may produce a pinhole must be avoided. SSPC-S10 near-white blast all areas to be coated. Surface profile mut have a minimum anchor pattern of 2.0 mils. There should be no evidence of a polished or peened surface. Depth of anchor pattern should be measured by using a KTA-Tator Surface Profile Comparator and Testex profile tape. It is important to remove all salt and sulfide contaminants. Rinse the entire surface using Chlor*Rid DTS™ according to the directions. After cleaning, use Chlor*Test at three places per 100 sq. ft. to verify cleanliness. If necessary reblast and rerinse with Chlor*Rid DTS™ and retest to verify that less than 10ppm of chloride has been attained. If surface is left uncoated for more than 24 hours the steel must be reblasted, rerinsed and retested.*

Concrete: *Check for excessive moisture in accordance with ASTM D4263. Remove all oil, grease, dirt, water or other contaminants in accordance with ASTM D4258. Abrasive grit blast, wet abrasive blast or high-pressure water blast all surfaces to be coated, to remove all laitance, efflorescence, surface hardeners, etc. Thoroughly clean all blasted surfaces to remove all dust and debis. Using a patching compound, repair all cracks and urface irregularities. Grind all form ties or other metallic protrusions below the surface and patch or fill. Vacuum clean all surfaces to be coated to remove all remaing dust.*

Colors:

Gray and Buff

Shipping Weight:

(approximate due to color, fill level and pigment)

SET8700 3 Gal Kit: 2(A)24 lbs. / (B)8 lbs.

Recommended Topcoats:

Not applicable

APPLICATION DATA

Optional Enhancers:

Not applicable

Wet Film Thickness:

6–8 wet mils per coat

Spray in a cross-hatch multi-pass system with a 50% overlap between passes.

Dry Film Thickness:

Two-coat system:
1st coat: 10 DFT / 2nd coat: 10 DFT

Brush or roller will need a double coat for proper millage.

Pot Life @ 77°F (25°C):

1 hour, less at higher temperatures

EQUIPMENT:

*Apply by by Air Assisted Airless or HVLP:

Air pressure not to exceed 10 psi at the air cap.

Roller:

3/16"nap mohair roller

Brush:

China bristle brush (Do not use nylon.)

HVLP:

45–60 psi at the gun
1.7–2.0 mm or equivalent

AA Tip Size:

60 psi at the gun

Recommended liquid pressure is 5000–4500 psi with frac tank recommended tip, 417–621 size.

MIXING AND THINNING:

Two-component packaging. Both components must be above 60°F (15°C) prior to mixing. Thoroughly mix each component separately. Then blend the components until a uniform color is obtained. No induction time is necessary. Do not use mixed material beyond the pot life limits. For spray application, thin up to 15% with SET602 (exempt solvent). Always thin after adding catalyst.

Mixing:	SET8700 (A) / 2 : SET8700 (B) catalyst / 1

CURE SCHEDULE @ 77°F (25°C):

Tack Free	3 hours
Drying Time (light foot traffic)	7 hours
Curing Time	7–11 days
Recoat	16–18 hours minimum
	Must be recoated within 72 hours. (degloss and recoat)

*Apply by Air Assisted Airless or HVLP (continued):

Strike Coat: *All welds, seams, nuts, bolts, edges, angles and irregular surfaces must be given an initial worked-in brush coat prior to a full spray application of the first coat. This should also apply to all areas inaccessible by spray gun, as necessary, to achieve the specified dry film thickness and a surface free of imperfections. For best results, apply when the surface temperature is above 50°F (10°C) and relative humidity is not greater than 85%.*

STORAGE CONDITIONS:

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

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CHEMICAL RESISTANCE

Although SET8700 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

PHYSICAL PROPERTIES

PROPERTY	VALUE*
Finish	Gloss
% Solids by Volume	86% ± 2%
% Solids by Weight	91% ± 2%
Theoretical Coverage @ 1 mil	1383 mil sq. ft. per gallon, depending on color *The actual coverage will be less depending on application techniques, job conditions and type of surface to be coated.*
Viscosity at 77°F (25°C)	84 KU
VOC Actual	33 g/L / 0.28 lbs./gal.
VOC Regulatory	37 g/L / 0.31 lbs./gal.
Flash Point	Part A: 79°F (26°C) / Part B: >212°F (>100°C)
Weight of Volatiles	8.7% ± 2%
Weight of Exempt	6.1% ± 2%
Volume of Exempt	10.7% ± 2%
Shelf Life (when kept at the recommended storage conditions and in original, unopened containers)	12 months @ 77°F (25°C)
Pigment Type	Chemical Resistant
Solvent Type	HAPS free
Vehicle Type	High-Solid/Novolac with Teflon ***Values listed will be color dependent** ***Values blended 2A: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.*