

INDUSTRIAL MAINTENANCE

SET800 is a high-performance architectural enamel for application to adequately prepared ferrous and nonferrous substrates. Formulated for substrates in extreme environmental conditions such as exposure to chemicals, heavy abrasion and exterior exposure of metal structures and structural components. Can be frequently exposed to temperatures in excess of 250°F (121°C). Using SET800 Hardener will give better chemical and solvent protection and a faster dry-through time.

Recommended For:

- Plants and Equipment
- Industrial Equipment Market
- Metal Structures and Structural Components

Features:

- USDA-Approved for Intermittent Food Contact
- Quick Dry
- High Hiding
- Outstanding Flow and Leveling
- High Gloss Finish

FOR INDUSTRIAL USE ONLY

Surface Preparation: Surface should be clean and free of all surface contamination, using SET500 or similar cleaner. Treat aluminum with a commercial etching solution. For light rust, treat with SET400, a rust convertor. For heavily rusted areas, use abrasive blasting. For previously painted surfaces, sand using 320 grit (dry) or 400 grit (wet).

Recommended Primers:

Ferrous metals:
Use SET70 or SET7500
Nonferrous metals:
Use SET7300.

Apply SET800 to properly cured primers only.

Colors:

Comes in standard stock colors and custom matches are available upon request.

Shipping Weight:

(approximate due to color, fill level and pigment)

SET800: 1 Gal–11.6 lbs. / 5 Gal–58.4 lbs.

APPLICATION DATA

Optional Enhancers:

- SET800 Hardener
For better chemical/solvent protection and faster cure
- Liquid Lightning Accelerator
Will significantly decrease pot life.

Wet Film Thickness:

3–4 wet mils per coat

Dry Film Thickness:

1.5 mils–2 mils per coat

Pot Life @ 77°F (25°C):

Not applicable unless using SET800 Hardener (with hardener, 90 minutes).

EQUIPMENT:

Apply by Air-Assisted Airless or HVLP:

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

HVLP:

45–60 psi at the gun
1.4–1.5 mm or equivalent

AA Airless:

60 psi Air / 30 psi Material
Recommended liquid pressure is from 900–3300 psi with a tip size from 411–515.

Roller:

1/4" nap with phenolic core/nylon polyester

Brush:

Not recommended, for field repair only

MIXING AND THINNING:

If using hardener, always thin after adding hardener. Thin up to 15%, depending on application and temperature, with SET601 or SET602 (exempt solvents).

With optional SET800 Hardener:

$\frac{\text{SET800}}{16} : \frac{\text{SET800 Hardener}}{1} : \frac{\text{SETReducer}}{2}$
 SET601 above 80°F (27°C) or SET602 below 80°F (27°C)

With optional Liquid Lightning Accelerator:

Use only when using hardener. Add 3–8 drops per gallon.
(NOTE: Will significantly decrease pot life.)

CURE SCHEDULE @ 77°F (25°C):

	Without Hardener	With SET800 Hardener
Tack Free	30 minutes	30 minutes
Drying Time	7.5 hours	7.5 hours
Curing Time	3 days	1.5 days
Recoat	6 hours minimum 7 days maximum (degloss and recoat)	6 hours minimum 7 days maximum (degloss and recoat)

STORAGE CONDITIONS:

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

CHEMICAL RESISTANCE

Although SET800 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

SOLVENTS

PHYSICAL PROPERTIES

PROPERTY	VALUE*
Finish	High Gloss
% Solids by Volume	54% ± 2%
% Solids by Weight	65% ± 2%
Theoretical Coverage @ 1 mil	858 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)	79–81 KU
VOC Actual	182 g/L / 1.5 lbs./gal.
VOC Regulatory	250 g/L (w/SET800 Hardener 240 g/L) / 2.1 lbs./gal.
Flash Point	97°F (36°C)
Weight of Volatiles	35.4% ± 2%
Weight of Exempt	21.5% ± 2%
Volume of Exempt	25.8% ± 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	Ketone
Vehicle Type	Modified Alkyd

* Values listed will be color dependent

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.

