



# SA61D

**EPOXY BAKING ENAMEL: GLOSS BLACK**

**SERIES E861**

**SPECIFIED TO SUNDSTRAND MS37.20  
SPECIFIED TO WESTINGHOUSE 32213AX**



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## DESCRIPTION

SA61D is a single component, epoxy base baking enamel, formulated to give exceptional corrosion protection and chemical/fluid protection.

**Type I** enamel is thinned with SAT-100 activated thinner.

**Type II** enamel is thinned with methyl ethyl ketone.

## TYPICAL USES

- Provides heavy duty service as an exterior protective coating for all metals including magnesium.

## NOTICE

**Before using this product, read all warnings, limitations and safety information printed on the product label, Safety Data Sheet (MSDS) and Technical Data Sheet.**

## OUTSTANDING FEATURES/BENEFITS

- Offers high degree of resistance to chemical corrosion, solvent softening, abrasion and impact
- Exhibits good thermal stability
- Special pigmentation eliminates need for prime coat

## COMPOSITION AND PHYSICAL PROPERTIES

<b>Net Weight per gallon</b>	8.60 ± 9.30 lbs./gallon	<b>Vehicle</b>	Combination of epoxy resins and thermosetting latent curing agents
<b>Weight Solids</b>	55.0% ± 2.0%	<b>Pigment</b>	Carbon Black, Corrosion Inhibitors
<b>Volume Solids</b>	45.0% (Theoretical)	<b>Color</b>	Gloss Black
<b>VOC</b>	4.02 lbs./gallon	<b>Gloss</b>	80+ gloss units at 60°F
<b>Odor</b>	Strong solvent	<b>Pot Life</b>	4 days
<b>Viscosity</b>	50 – 70 KU @ 77°F	<b>Coverage Rate* @ 1.0 mil</b>	727 sq. ft./gallon (as manufactured)
<b>Shelf Life</b>	6 Months from Date of Manufacture	<b>Recommended Coats</b>	1
<b>Storage Conditions</b>	Store at 40°F or below IMPORTANT TO ROTATE STOCK	<b>Dry Film Thickness</b>	0.5 – 1.0 mil DFT recommended (use this as a guide to determine the optimum DFT for your specific application)
<b>Freeze/Thaw Stability</b>	Stable	<b>Flash Point</b>	55°F ± 2°F Setflash

\*Actual figures do not include spray loss. Also allow for surface irregularities and porosity, as well as material loss when mixing.

## PERFORMANCE AND FUNCTIONAL PROPERTIES

<b>Chemical/Fluid Resistance:</b>	
<i>Various Hydraulic Oils (including Skydrol 500)</i>	No Effect
<i>Various Industrial Solvents (including Acetone, MEK, Trichloroethane)</i>	No Effect
<i>MEK Double Rubs</i>	100+
<b>Corrosion Protection:</b>	
<i>ASTM B117: Plain Steel</i>	500 hours (@ 0.001" DFT)
<i>ASTM B117: Steel MIL-DTL-16232 Type Z Class 3</i>	1000 hours
<b>Hardness</b>	4H Pencil
<b>Operating Temperature Range</b>	-320°F to +450°F

IMPORTANT NOTICE TO BUYER / WARRANTY AND LIMITATIONS ON OUR LIABILITY  
We warrant our products to be free of manufacturing defects and that they meet our current published physical properties and specifications. All information and suggestions presented are rendered gratis and are accurate to the best of our knowledge. They are based on technical data we believe to be reliable and are intended for use by persons having skill and "know-how" at their own discretion and risk. Prior to use, customers are cautioned to determine the suitability of our products for any given application through their own testing. NO WARRANTY IS MADE, EXPRESS OR IMPLIED, REGARDING SUCH INFORMATION, THE DATA ON WHICH IT IS BASED OR THE RESULTS OBTAINED FROM ITS USE OR THAT OUR PRODUCT SHALL BE MERCHANTABLE OR FIT FOR ANY PARTICULAR PURPOSE. SUCH STATEMENTS ARE NOT INTENDED TO SUGGEST INFRINGEMENT OF ANY PATENT. Since conditions of use of our products are beyond our control, all suggestions and statements are made without guarantee, warranty or other responsibility, express or implied, on our part. We assume no responsibility for results obtained, or damages incurred, from their use beyond replacing material proved to be defective or refunding the purchase price of such material at our option. Acceptance of delivery of our product means you have accepted the terms of this warranty, whether or not purchase orders or other documents state terms that vary from this warning. No seller is authorized to make any representations or warranty or assume any other liability on our behalf with any sales of our products. SANDSTROM PRODUCTS COMPANY

**GENERAL**

For maximum service, the APPLICATION INSTRUCTIONS MUST BE FOLLOWED CLOSELY.

**COVERAGE**

One gallon of this material will cover 727 sq. ft. with a dry film thickness of 0.001 inches. Coverage depends upon methods of application and other variables such as overspray and type of surface to be coated. Above coverage rates are based on 100% efficiency.

**SURFACE PREPARATION**

Please contact Sandstrom Products Company for substitute surface preparations if recommended steps cannot be followed.

**Application on steel.** Pre-clean surface with aliphatic naphtha or any other EPA compliant cleaner that sufficiently cleans surface to pass ASTM F22. Abrasive blast surface with 180-220 grit aluminum oxide (25-50 RMS optimum). Phosphate IAW MIL-DTL-16232 (weight should be 11-22 g/m<sup>2</sup>), type M, class 3 (optimal performance) or type Z, class 3.

**Application on stainless steels.** Pre-clean surface with aliphatic naphtha or any other EPA compliant cleaner that sufficiently cleans surface to pass ASTM F22. Abrasive blast surface with 180-220 grit aluminum oxide (25-50 RMS optimum). Passivate surface with ASTM A967, types nitric 1, nitric 2 or nitric 3, as applicable.

**Application on aluminum and aluminum alloys.** Pre-clean surface with aliphatic naphtha or any other EPA compliant cleaner that sufficiently cleans surface to pass ASTM F22. Sulfuric acid anodize IAW MIL-A-8625 and seal surface with hot deionized water (>180°F for 30 minutes).

**Application on titanium and titanium alloys.** Degrease surface to be coated with aliphatic naphtha or any other EPA compliant cleaner that sufficiently cleans surface to pass ASTM F22. Abrasive blast surface with 180-220 grit aluminum oxide (25-50 RMS optimum) and alkaline anodize.

**Application on copper and copper alloys.** Pre-clean surface with aliphatic naphtha or any other EPA compliant cleaner that sufficiently cleans surface to pass ASTM F22. Abrasive blast surface with 180-220 grit aluminum oxide (25-50 RMS optimum). Form a black oxide finish on surface.

**IMPORTANT! DO NOT TOUCH CLEAN SURFACE WITH FINGERS - OIL FROM THE HANDS WILL INTERFERE WITH PROPER COATING ADHESION.** Whenever possible, treat both contact surfaces (i.e., the shaft and the bearing).

**STIRRING**

IMPORTANT! STIR THOROUGHLY BEFORE USE AND INTERMITTENTLY DURING APPLICATION.

**THINNING**

To accomplish rapid, full cure-

**Type I:** Use 1 part of SAT-100 Activated Thinner to 2 parts of SA61D Black.

**Type II:** Use 1 part MEK to 2 parts SA61D Black.

**APPLICATION**

Properly mixed product should be sprayed to desired film thickness (0.5 – 1.0 mil) within 3-4 days of mixing components (@ 60°F).

**Extending pot life:** The pot life of mixed product may be extended by refrigeration until either the viscosity has increased to the point it can no longer be applied and/or the gloss and appearance of the applied film is at an unacceptable level.

**BAKING, DRYING, CURING**

Product may remain slightly tacky until it is baked.

After a flash time of 15 minutes, SA61D can be cured according to the following schedule:

**Type I:** 30 minutes @ 300°F (reduced with SAT-100)

**Type II:** 30 minutes @ 350°F (reduced with MEK)

**IMPORTANT!** The time starts when **the part** reaches temperature, not when placed in a Class A oven.

**CLEANUP**

Use MEK for cleaning tools.

**REMOVAL**

In the event it is necessary to remove cured product, physical removal is best (such as grit blasting, sanding or grinding).

**DANGER! USE WITH ADEQUATE VENTILATION.**