



#8558

ALUMINUM BAKING FINISH: HEAT CURE

SERIES E860

CORROSION INHIBITING;

APPROVED UNDER HAMILTON SUNDSTRAND MS37.18



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DESCRIPTION

The #8558 Aluminum Baking Finish Kit consists of:

- 4 Parts Component A (E860-000) Epoxy Resin
- 1 Part Component B (E860-M16) Pigment
- 3 Parts Component C (G110-C01) Catalyst Thinner

Aluminum Baking Finish #8558 components can be combined to form two types:

Type I – Thinned form (three-component)

Type II – Two-component form

Use Type as specified on drawing, when applicable.

Product components listed on Hamilton Sundstrand MS37.18 as UNS 8559, UNS 8560, UNS 1100.

TYPICAL USES

Use as an exterior protective coating for all types of metals to inhibit corrosion from industrial solvents and hydraulic oils and to protect from high operating temperatures.

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

- For use on all metals including magnesium
- Excellent chemical and fluid resistance
- Special pigmentation eliminates need for prime coat
- Exhibits good thermal stability
- Will not discolor appreciably when subjected to temperatures of 450°F for 24 hours

LIMITATIONS

- This product is not intended to be used as a lubricant.
- Product component A must be stored in 0°F freezer upon receipt to maintain shelf life.

COMPOSITION AND PHYSICAL PROPERTIES

Net Weight per gallon <i>ASTM D1475</i>	Component A: 8.8 ± 0.2 lbs. Component B: 10.4 ± 0.2 lbs. Component C: 6.8 ± 0.2 lbs.	Vehicle	Epoxy
		Lubricating Pigment	n/a
Weight Solids	A: 70% ± 3% B: 45 - 52% C: 6 - 7%	Color	Mixed product: Aluminum metallic
		Color Stability	Not for exterior use
Volume Solids (Theoretical)	A: 66% ± 3% B: 25% ± 3% C: 5.5 - 6.0%	Finish	Smooth
		Cleanup	See CLEANUP
VOC	A: 2.2 lbs./gallon B: 5.1 lbs./gallon C: 6.3 lbs./gallon	Thinner	See MIXING
		Induction Period	None
Odor	Strong solvent	Mix Ratio	Type I: 4 parts A, 1 part B, 3 parts C Type II: 4 parts A, 1 part B
Viscosity	A: 250 ±100 cps, #3 spindle @ 20 rpm @ 77°F B: 4000±500 cps, #7 spindle @ 20 rpm @ 77°F	Pot Life	Mixed product: 3 - 4 days @ 60°F; See Application for extending pot life with refrigeration
		Force Cure	See BAKING
Shelf Life	A & B: 6 months from date of shipment (w/ proper storage) C: 12 months from date of shipment	Coverage Rate* <i>ASTM D1400</i>	620 sq. ft. @ 1 mil DFT (mixed)
		Recommended Coats	1
Storage Conditions	A: ≤ 0°F Freezer upon receipt B & C: < 100°F	Dry Film Thickness	0.8 – 1.0 Mil
Flash Point	A: 58°F ± 2°F Setaflash B: 79°F ± 2°F Setaflash C: 23°F ± 2°F Setaflash		

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

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 of 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

PERFORMANCE AND FUNCTIONAL PROPERTIES			
Chemical/Fluid Resistance:			
ASTM D2510C	Excellent – Unaffected by various industrial solvents and hydraulic oils (e.g., Skydrol 500, acetone, MEK, trichloroethane, etc.)		
Corrosion Protection:			
ASTM B117: Plain Steel	264 hrs.*	*Tests halted before failure	
ASTM B117: Steel MIL-DTL-16232 Type Z Class 3	1200 hrs.*		
Hardness ASTM D3363	4H minimum	Thermal Stability ASTM D2511	Pass
Operating Temperature Range	-320°F to +450°F		

GENERAL

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

COVERAGE

One gallon of this material will theoretically cover 620 sq. ft. with a dry film thickness of 0.001 inches. Coverage depends upon method 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

The following surface preparations are recommended for the individual metals listed to develop maximum adhesion and corrosion protection. Please contact Sandstrom Technical Service for substitute surface preparations if recommended steps cannot be followed.

Application on steel. Pre-clean the steel surface with aliphatic naphtha or any other EPA compliant cleaner that sufficiently cleans surfaces to pass ASTM F22. Sandblast the surfaces with 180-220 grit aluminum oxide (30-60 RMS optimum). Phosphate IAW MIL-DTL-16232 (weight should be 11.8-17.2 g/m²), type Z, class 3.

Application on stainless steel. Pre-clean the steel surface with aliphatic naphtha or any other EPA compliant cleaner that sufficiently cleans surfaces to pass ASTM F22. Sandblast the surfaces with 120 grit aluminum oxide (30-60 RMS optimum). Passivate the surfaces with ASTM A967, types nitric 1, nitric 2 or nitric 3, as applicable.

Application on aluminum. Pre-clean the aluminum surface with aliphatic naphtha or any other EPA compliant cleaner that sufficiently cleans surfaces to pass ASTM F22. Sulfuric acid anodize IAW MIL-A-8625 and seal the surface (hot water or nickel acetate seal only) OR hard coat and seal.

Application on titanium. Degrease the surfaces to be coated with non-chlorinated solvent wash to pass ASTM F22. Sandblast the surface with 180-220 grit aluminum oxide (30-60 RMS optimum) and alkaline anodize.

Application on copper alloys. Pre-clean the copper surface with aliphatic naphtha or any other EPA compliant cleaner that sufficiently cleans surfaces to pass ASTM F22. Sandblast the surfaces with 180-220 grit aluminum oxide (30-60 RMS optimum). Pretreat using one of the following methods (in order of preference): a) Black oxide treat (according to MIL-F-495) b) Bright dip or grit blast (30-60 RMS optimum).

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! THIS COATING CONTAINS HEAVY PIGMENTS WHICH SETTLE RAPIDLY. THEREFORE, IT SHOULD BE STIRRED THOROUGHLY BEFORE USE AND CONTINUOUSLY DURING APPLICATION.

MIXING

TYPE I (Thinned) - Mix 4 Parts of Component A with 1 Part of Component B and thin with 3 Parts of Component C.

TYPE II - Mix 4 Parts of Component A with 1 Part of Component B.

APPLICATION

Properly mixed product should be sprayed to desired film thickness (0.8 – 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

Allow parts to flash off at least 10 minutes before baking.

TYPE I (Thinned) - Bake for 20 minutes at 300°F.

TYPE II - Bake for 30 minutes at 350°F.

IMPORTANT!

The time begins when **the part** has reached baking temperature, NOT when it is placed in the Class A oven.

CLEANUP

Use MEK for cleaning tools.

REMOVAL OF #8558 ALUMINUM BAKING FINISH

In the event it is necessary to remove #8558 Aluminum Baking Finish, physical removal is best (such as grit blasting, sanding or grinding).

WARNINGS: Constant stirring is imperative for best results.

DANGER! USE WITH ADEQUATE VENTILATION.

Strict compliance to the instructions given in Surface Preparation, Stirring and Baking is very essential for obtaining optimum results.

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 INFRINGING 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 of 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