



9AV-35 Mod 1

EPOXY COATING: HEAT CURE
SERIES E900
FLUID RESISTANCE, CORROSION PROTECTION

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DESCRIPTION

9AV-35 Mod 1 is a single-component epoxy coating formulated to provide excellent fluid resistance and corrosion protection. It can be applied by spray or dip and must be heat cured.

OUTSTANDING FEATURES/BENEFITS

- Offers resistance to a wide range of fluids for both aerospace and defense applications
- May be applied to most metallic and non-metallic substrates
- Inhibits corrosion on both ferrous and non-ferrous metal substrates
- Withstands acidic environments

TYPICAL USES

Use for corrosion protection and fluid resistance.

NOTICE

Before using this product, read all warnings, limitations and safety information printed on the product label, Safety Data Sheet and Technical Data Sheet. The properties listed on this sheet are not intended for use as a specification. Please contact our Technical Service Team.

Refer to our website for answers to common questions:
<https://www.sandstromproducts.com/resources/FAQs/>

LIMITATIONS

- Do not use where there is potential for contact with food.
- Not formulated to improve wear life or load carry.

COMPOSITION AND PHYSICAL PROPERTIES

Net Weight per gallon[^] <i>ASTM D1475</i>	8.3 ± 0.2 lbs.	Vehicle	Epoxy
Weight Solids[^] <i>ASTM D2369</i>	35.0 - 42.0%	Lubricating Pigment	Not applicable
Volume Solids	33.00% (Theoretical)	Color	Amber
VOC	4.91 lbs./gallon (Theoretical)	Finish	Matte
Odor	Strong Solvent	Coverage Rate*	1060 sq. ft./gallon @ 0.5 mils
Viscosity[^] <i>ASTM D4212</i>	24 ± 5 seconds, #2 EZ Zahn @ 77°F	Recommended Coats	1
Shelf Life	12 Months from Date of Shipment	Dry Film Thickness <i>ASTM D7091</i>	0.5 - 1.0 mils
Storage Conditions	40°F - 100°F		
Freeze/Thaw Stability	Stable		

*Actual figures do not include spray loss. Also allow for surface irregularities and porosity, as well as material loss when mixing.
[^] Property tested with each production batch.

PERFORMANCE AND FUNCTIONAL PROPERTIES

Acid Resistance: <i>Immersion 1 week in Water/ Hydrochloric Acid with pH < 1.0</i>	Pass	Operating Temperature Range	-320°F to 500°F
Chemical/Fluid Resistance:		Corrosion Protection:	
<i>MIL-PRF-46010 Table 1 Fluids ASTM D2510 A, ASTM D2510 C</i>	Pass	<i>ASTM B117: Steel MIL-DTL-16232 Type M Class 3</i>	Over 1000 Hrs.* (at 0.5 mil)
<i>MIL-L-23398 Table III Test Fluids ASTM D2510 A, ASTM D2510 C</i>	Pass	<i>ASTM B117: Steel MIL-DTL-16232 Type Z Class 3</i>	Over 1000 Hrs.* (at 0.5 mil)
<i>SAE AS5272 Table 3 Fluids ASTM D2510 C</i>	Pass		
<i>100 MEK Double Rubs[^] ASTM D5402</i>	100+		

*Tests halted before failure.
[^] Property tested with each production batch.

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

GENERAL

Sandstrom 9AV-35 Mod 1 is a heat-cure single component coating in a thermosetting resin system thinned with appropriate solvents. For maximum service, the APPLICATION INSTRUCTIONS MUST BE FOLLOWED CLOSELY.

COVERAGE

One gallon of this material will cover approximately 600 sq. ft. with a dry film thickness of 0.0005 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). Remove grit blast debris from surface. Phosphate according to MIL-DTL-16232 Type M Class 3 or 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. Abrasive blast the surfaces with 180-220 grit aluminum oxide (25-50 RMS optimum). Passivate the surfaces with ASTM A967, types nitric 1, nitric 2 or nitric 3, as applicable.

Application on aluminum. 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. Abrasive blast surface with 180-220 grit aluminum oxide (25-50 RMS optimum) and alkaline anodize.

Application on copper alloys. Pre-clean surface with aliphatic naphtha or any other EPA compliant cleaner that sufficiently cleans surface to pass ASTM F22. Pretreat using one of the following methods (in order of preference):

- a) Black oxide treatment (according to MIL-F-495).
- b) Bright dip or grit blast (25-50 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.

THINNING

No thinning is required. Use as supplied.

APPLICATION

Apply by spray or dip to the desired film thickness (usually 0.0003 to 0.0007 inches).

BAKING

Allow parts to flash off at least 30 minutes at ideal conditions: 77°F ± 5°F and ≤ 70% relative humidity before baking.

Bake at 400°F for 60 minutes to yield optimum corrosion protection and fluid resistance properties.

IMPORTANT! The hour begins when **the part** has reached 400°F, NOT when it is placed in the oven. In cases of very thick metals, an extra hour may be required to bring the part up to the proper temperature. Thermocouples may be used to determine the true temperature of the metal. However, if the metallurgical properties are adversely affected by baking at this temperature (i.e., ALUMINUM, in some cases), contact Sandstrom Products Company for alternative procedures.

CLEANUP

Use PM solvent for cleaning tools.

REMOVAL

In the event it is necessary to remove product, physical removal is best (such as grit blasting, sanding or grinding). Also, select epoxy cold strippers will remove applied 9AV-35 Mod 1.

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.