

Approvals and conformities

USA Department of Defense

MIL-PRF-85322

Aeroglaze M1433 elastomeric coating is a gray, two-component polyurethane coating designed to produce a tough, flexible film for use in protecting radomes, antennae, and leading edges of aircraft. This coating accommodates thermal expansion and contraction and functions exceptionally well to protect the underlying substrates from abrasion, erosion, and minor impact damage.

Features & Benefits

- **Durable:** provides excellent resistance to abrasion, erosion, and impact; conforms to ASTM D-16 Type IV classification.
- **Easy to Apply:** can be applied by pressure pot or HVLP spray equipment; builds thick films easily with one application of multiple coats.
- **MIL-PRF-85322 Compliant:** meets the requirements of MIL-PRF-85322 and is listed on the Qualified Products List.
- **Primer and Topcoat Compatibility:** provides excellent adhesive properties when used in conjunction with Aeroglaze epoxy or wash primers, and Aeroglaze and Chemglaze aliphatic moisture-cure or two-component polyurethane coatings.

DIRECTIONS FOR USE

Surface Preparation

Thoroughly clean surfaces to remove all dust, oil, and grease. Composite substrates require light sanding of the surface using an emery cloth or 320-500 grit sandpaper and additional solvent cleaning of the surface to remove dust residue. Contact your Socomore representative for an appropriate primer recommendation.

Reclaiming a Coated Composite Surface

If a wash primer was used in the initial application, the cured coating can be removed by scoring the coating with a sharp blade then covering the area with clean rags that have been soaked in Aeroglaze 9958 thinner or MEK. The solvents will dissolve the wash primer, permitting easy removal of the cured coating.

Mixing

Thoroughly stir Aeroglaze M1433A prior to combining with M1433B to incorporate any material that may have settled. While stirring, add Aeroglaze M1433B component. The mix ratio of Aeroglaze M1433A to M1433B is 3:1 by volume. Thoroughly mix the coating until it is uniform in color and consistency. In most cases, Aeroglaze M1433 does not require thinner to be sprayed.

Note: Both Aeroglaze M1433A and M1433B components are sensitive to atmospheric moisture, especially M1433B component. Only open Aeroglaze M1433B component when ready to use.

Application

Apply Aeroglaze M1433 by pressure pot or HVLP spray equipment. Ensure that the air supply contains less than 500 ppm moisture. For application on composites, apply Aeroglaze 9947 wash primer to the substrate surface. Allow the primer to thoroughly dry before applying Aeroglaze M1433. For further details on the use of Aeroglaze wash primers, refer to the appropriate technical data sheet.

Apply Aeroglaze M1433 elastomeric coating at ambient substrate and surface temperatures of at least 10°C (50°F), with substrate temperatures at 3°C (5°F) above the dew point. Apply the coating by spray using multiple passes to obtain a dry film thickness of 203-356 micron (8-14 mil). Feather the elastomeric coating toward the trailing edge. Allow Aeroglaze M1433 elastomeric coating to cure a minimum of 3-4 hours at 23.9°C (75°F) before topcoating.

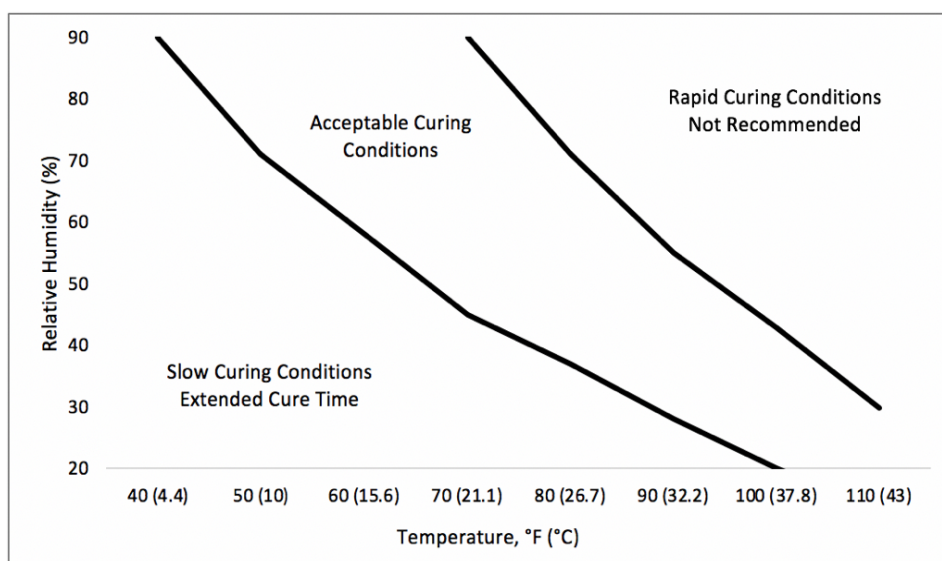
Aeroglaze M1433 elastomeric coating is not a cosmetic coating; it will change color and chalk when exposed to UV. For adequate UV resistance, apply a UV-resistant Aeroglaze or Chemglaze aliphatic moisture-cure polyurethane topcoat. The topcoat must be applied within 24 hours of application of Aeroglaze M1433 to obtain optimal adhesion.

Curing

Cure begins immediately once Aeroglaze M1433A and M1433B components are mixed. Aeroglaze M1433 cures by reacting with moisture in the air. The cure rate is dependent on the temperature, relative humidity, and amount of air circulation needed to remove the solvent.

Aeroglaze M1433 must be cured above 10°C (50°F) and 60% relative humidity. If the percent relative humidity drops between 30-40%, moisture should be supplied by steam or water to the curing environment.

Under the acceptable curing conditions, the coating will set to touch in 15-30 minutes, surface dry in 1-2 hours, and dry hard in 4-6 hours. Lower temperatures and humidities will slow the cure rate while higher temperatures and humidities will increase the cure rate. Higher temperatures and humidities may cause bubbling.



Clean-Up

Use Aeroglaze 9958 to flush any liquid or residual coating from spray equipment immediately after application. Circulate Aeroglaze 9958 through the hoses for at least 15 minutes. If the material has cured, use an approved chemical paint removal system to strip cured Aeroglaze M1433 from parts and equipment.

TECHNICAL CHARACTERISTICS

Typical Properties*

	Aeroglaze M1433A	Aeroglaze M1433B	Mixed
Appearance	Gray Liquid	Light Yellow to Deep Burgundy Liquid	Gray
Viscosity, cps @ 25°C (77°F), ASTM D 2196-86, Brookfield LVT Spindle 3, 30 rpm	700-1500	water thin	200-600
Density, kg/L (lb/gal) ASTM D 1475-85	1.04-1.05 (8.65-8.8)	0.83-0.90 (6.9-7.53)	0.98 (8.2)
Solids Content by Weight, % ASTM D 2369-87 modified	70.8-74.8	24.3	58
Flash Point (Seta), °C (°F) ASTM D 3278-82, Closed Cup	18 (66)	43 (110)	-
Volatile Organic Content (VOC), g/L (lb/gal) ASTM D 3960-87	297.2 (2.48)	636 (5.31)	419.4 (3.5)
Dry Film Coating Weight, gm/ft ² /mil	-	-	5.38
Working Life at 23°C (73°F), hr	-	-	2

Typical Cured Properties*

Property	Value
Hardness, Shore A	95
Tensile Strength, ASTM D 882-83 Method A	34.5 MPa (5000 psi)
Elongation at Break, ASTM D 882-83 Method A	500%

*Data is typical and not to be used for specification purposes.

PRECAUTIONS FOR USE AND STORAGE

The shelf life of each component is six months from the date of shipment when stored in a dry, well-ventilated area at temperatures between 16-24°C (60-70°F) in the original, unopened container. If the storage temperature drops below 10°C (50°F), Aeroglaze M1433B may crystallize. Before using, allow the material to return to the recommended storage temperature for two days to dissolve crystallization before using. Do not mix or use the material until it is no longer crystallized.

Before using this or any SOCOMORE product, refer to the Safety Data Sheet (SDS) and label for safe use and handling instructions.

For industrial/commercial use only. Must be applied by trained personnel only. Not to be used in

household applications. Not for consumer use.

Manufactured for SOCOMORE by: LORD Corporation, Saegertown, PA

This technical data sheet replaces and cancels the previous one.

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