

Aeroglaze® 9743 is a two-part epoxy primer designed for use on aluminum, metal, and prepared composite surfaces. Aeroglaze 9743 primer/tie-coat can be applied to scuff-sanded urethane top coats and epoxy primers. It is also used as a tie coat between scuff-sanded weather worn coatings and new urethane topcoats.

Features & Benefits

- Meets Military Performance Requirements of Mil-P-23377.
- Excellent Chemical and Corrosion Resistance.
- Lead and Chromate-free.
- VOC Compliant (310 gm/liter, 2.6 lbs/gal VOC).

Packaging

- **9743A**
1 Gallon Container (3.8 Liter)
- **9700B**
1/2 Pint Container (0.24 Liter)
1 Quart Container (0.95 Liter)

DIRECTIONS FOR USE

Surface Preparation

For maximum corrosion protection and long service life, clean all substrates and properly prepare before priming.

Non-Ferrous Substrates

Except for stainless steel, non-ferrous substrates (aluminum, special alloys) are usually too soft to blast clean. Pre-prime with either Aeroglaze 9924, Aeroglaze 9924V, or Aeroglaze 9947 wash primers. If substrates are not pre-primed with one of these primers, treat with an appropriate aluminum pretreatment as follows:

1. To degrease, use a detergent cleaner such as MilC 4361C. Rinse thoroughly with water.
2. Deoxidize surface using a phosphoric acid solution per Federal Test Standard 141 Method 2013.1, Table 2, or a deoxidizer such as Mil-C-38334. Rinse thoroughly with water.
3. Treat surface with an aluminum pretreatment such as Mil-C-5541/Mil-C-81706. Follow the procedure supplied by the chromate pre-treatment manufacturer.

For special alloys, adhesion tests are recommended to determine if Aeroglaze 9743 primer/tie-coat is a suitable primer. Contact your SOCOMORE Representative for recommendations of other suitable Aeroglaze primers and adhesion promoters.

Ferrous Substrates

Blast steel surface clean to a 2-3 mil profile using clean, unused, chloride-free inert blast media. Do not use steel shot. Remove sanding dust before priming. Prime within 4 hours to prevent flash rusting.

Composites

Scuff-sand and remove sanding dust before priming.

Mixing

Aeroglaze 9743A - Volume: 3, Weight: 100.00

Aeroglaze 9700B - Volume: 1, Weight: 20.71

Aeroglaze 9743 epoxy primer/tie-coat is packaged in pre-measured kits. Thoroughly mix Part A of the primer before adding Part B. After adding Part B, thoroughly mix; then let the mixed primer stand 30 minutes before using. Stir the primer just prior to use. Aeroglaze 9743 epoxy primer/tie-coat requires no thinning for application.

Application

Apply Aeroglaze 9743 epoxy primer/tie-coat by spray using conventional or HVLP equipment. It must be applied by holding the spray gun at a right angle to the surface, 8 to 12 inches away. Apply with even, parallel passes, with 50 percent overlap.

Apply Aeroglaze 9743 epoxy primer/tie-coat only when the surface and ambient temperatures are above 10°C (50°F), with the surface temperature 2.7°C (5°F) above the dew point.

The typical dry film thickness of Aeroglaze 9743 epoxy primer/tie-coat is 0.6 - 0.9 mils.

Pot Life

Aeroglaze 9743 epoxy primer/tie-coat has a 4 hour pot life at 25°C (77°F). The pot life is shorter at higher temperatures, and longer at lower temperatures. In order to ease application and reduce waste, only mix the amount of primer to be used in a four-hour period.

Curing Conditions and Recoat Time

Aeroglaze 9743 epoxy primer/tie-coat may be recoated after the primer is tack-free (5 hours minimum cure at 25°C [77°F]). DO NOT allow Aeroglaze 9743 epoxy primer/tie-coat to cure more than 18 hours before recoating; doing so will cause adhesion failure of successive coats.

Elevated air temperatures accelerate the cure, thus shortening the recoat time. Lower air temperatures slow the cure, thus lengthening the recoat time. Polyurethane coatings should not be applied to Aeroglaze 9743 primer/tie-coat primed surfaces if temperature is below the dew point. Note: Do not bake the primed substrate. Baking the primed substrate in attempt to shorten recoat time will cause the maximum recoat time to be exceeded.

If the maximum recoat time is exceeded, the surface must be roughened by sanding with fine to medium grit sand paper. Remove the sanding dust and solvent wipe with Aeroglaze 9958 thinner before topcoating. The best adhesion is achieved by reapplying the Aeroglaze 9743 epoxy primer/tie-coat and then topcoating within the recommended time with an Aeroglaze polyurethane coating.

Clean Up

After applying Aeroglaze 9743 epoxy primer/tie-coat, clean application equipment with Aeroglaze 9953 thinner. Flush the primer or remove from hoses, guns, and other equipment during lunch breaks, overnight, and during long down times. Mixed Aeroglaze 9743 epoxy primer/tie-coat that is left in or on

equipment will continue to cure, thus making clean-up more difficult.

Before using spray equipment to apply Aeroglaze polyurethanes, flush thoroughly with Aeroglaze 9958 thinner to remove any residual Aeroglaze 9953 thinner. Aeroglaze 9953 thinner is not compatible with Aeroglaze polyurethane coatings.

TECHNICAL CHARACTERISTICS

Typical Properties* of Aeroglaze 9743 Epoxy Primer/Tie-Coat

	Aeroglaze 9743A	Aeroglaze 9700B	Mixed A&B
Color	Red	Clear Amber	Red
Solids Content ASTM D 2369-87 modified	74.0% by weight 57.7% by volume	80.3% by weight 77.8% by volume	75.2% by weight 62.7% by volume
Density ASTM D1475-85	1.43 kg/liter 11.97 lb/gallon	0.91 kg/liter 7.6 lb/gallon	1.31 kg/liter 10.9 lb/gallon
Viscosity ASTM D1200 #4 Ford cup @ 25°C (77°F)	30 seconds maximum	61 seconds	40 seconds maximum
Flash Point ASTM D 3278-82 Setaflash, Closed Cup	21.7°C 72°F	26.3°C 95°F	-
Volatile Organic Content (VOC) ASTM D 3960-89	- g/liter 3.11 lb/gallon	180 g/liter 1.50 lb/gallon	- g/liter 2.71 lb/gallon
Theoretical Coverage ft ² /gallon/mil	-	-	1,005.7
Coating Film Dry Weight	-	-	3.70 gm/ft ² /mil 0.0082 lb/ft ² /mil
Shelf Life**	Six months	Six months	-

*Not to be used for specification purposes.

**From date of shipment, unopened container, storage at 21°C-27°C (70°F-80°F).

PRECAUTIONS FOR USE AND STORAGE

For industrial/commercial use only.

Must be applied by trained personnel only. Not to be used in residential applications. Not for consumer use.

Four-hour workable pot life at 25°C (77°F). Mix only enough to be used in a four-hour period for ease of application and reduced waste. Maximum cure time before topcoating is 18 hours.

Before using this or any other SOCOMORE product refer to the Material Safety Data Sheet (MSDS) and

label for safe use and handling.

Manufactured for SOCOMORE by: LORD Corporation, Saegertown, PA

This technical data sheet replaces and cancels the previous one.

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