

Aeroglaze® 9929 Epoxy Primer

Description

Aeroglaze® 9929 two-component epoxy primer is designed for use on properly prepared aluminum and steel surfaces for applications that require protection against corrosion.

Features and Benefits

Easy to Use – prepackaged kits include components in the proper mix ratio.

Corrosion Resistant – provides excellent corrosion protection.

Application

Surface Preparation – Thoroughly clean surfaces prior to primer application to remove all dirt, oil, grease and oxides.

Different substrates require specific surface preparation methods as listed below. Steel Structures Painting Council (SSPC) and National Association of Corrosion Engineers (NACE) standards are listed where applicable.

Before coating special alloys, chemically treated surfaces or metal surfaces not listed below, apply test patches of Aeroglaze 9929 epoxy primer and topcoat with appropriate coating to determine if primer will provide adequate adhesion to the surface.

- **Ferrous Substrates**

Remove all grease and oil contaminants, following SSPC-SP 1 Solvent Cleaning procedures, by wiping with a suitable solvent such as xylene. Remove all weld splatter and prepare weld seams, rivet heads and joints using SSPC-SP 3 Power Cleaning procedures.

Blast clean the surfaces using a dry, quality blast media to obtain a 51-76 micron (2-3 mil) white metal blast anchor profile. Follow SSPC-SP 5 / NACE No. 1 White Metal Blast Cleaning procedures. Blast cleaning must remove all mill scale, rust and old paint. Remove all blast material and dust from the prepared surfaces by brushing, filtered air blow off or vacuuming prior to primer application.

Typical Properties*

	9929 Part A	9929 Part B
Appearance	Yellow Liquid	Clear Amber Liquid
Viscosity, cps @ 25°C (77°F) ASTM D 2196-86, Brookfield LVT	1000-7000	250-750
Density ASTM D 1475-85		
kg/L	1.45-1.50	0.89-0.96
(lb/gal)	(12.14-12.64)	(7.5-8.0)
Solids Content by Weight, % ASTM D 2369-87 modified	67.5-72	59.5-64
Flash Point (Seta), °C (°F) ASTM D 3278-82, Closed Cup	19 (67)	26 (80)
Volatile Organic Content (VOC) ASTM D 3960-87		
g/L	446	344
(lb/gal)	(3.71)	(2.87)

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

SOCOMORE TECHNICAL DATA

Apply Aeroglaze 9929 primer to blast-cleaned surfaces immediately after the surface has been prepared. Blushing or rusting will occur very quickly if prepared surface is left exposed to humid air.

• Non-Ferrous Substrates

Except for stainless steel, most non-ferrous substrates such as aluminum, some alloys and galvanized steel are too soft to blast clean. Prepare these substrates by either priming with Aeroglaze 9924, 9924V or 9947 wash primer or alodine treating as follows:

1. Detergent and solvent clean using SSPC-SP 1 Solvent Cleaning procedures.
2. Deoxidize surface using phosphoric acid solution per Federal Test Standard 141 Method 2013.1, Table 2.
3. Perform chemical conversion treatment per Mil-C-81706/Mil-C-5541 D.

Mixing – Thoroughly stir Aeroglaze 9929 Part A before use. While stirring, add Aeroglaze 9929 Part B and mix to a uniform consistency. Allow mixed primer to stand for induction for 15-30 minutes. If less than a full prepackaged kit is mixed, mix ratio of Aeroglaze 9929 primer is 3.5:1, Part A to Part B by volume.

Dilute primer to obtain improved spray and flow properties, and better control of the application film thickness. Dilute up to 15% by volume with Aeroglaze 9953 thinner. Slowly add the thinner while stirring the mixed primer.

After thinned and uniformly mixed, use primer immediately. Working life of Aeroglaze 9929 primer is 8 hours at 25°C (77°F). Working life is shortened as the temperature increases. To reduce waste, mix only the amount of primer to be used in a 4-hour period.

Applying – Aeroglaze 9929 primer is best applied when substrate and ambient temperatures are above 10°C (50°F), and substrate temperature is a minimum 2.8°C (5°F) above the dew point.

Apply primer by spray methods using conventional or airless spray equipment. Primer must be applied in a single wet pass with a 50% overlap. Hold the gun at right angles to the surface, approximately 20.3-30.5 cm (8-12 in) away, and apply in even, parallel passes. Coverage rate is 4.9-19.6 m²/L (200-799 ft²/gal).

Recommended film thickness depends on the substrate being primed. For chemically-treated aluminum, Aeroglaze 9929 primer should be applied at a dry film thickness of 19.1-25.4 micron (0.75-1.0 mil). For blasted steel, Aeroglaze 9929 primer should be applied at a dry film thickness of 75.0-100.0 micron (3.0-4.0 mil). Aeroglaze 9929 primer may also be brush applied for touch-up purposes.

Typical Properties* of Mixed Primer

Mix Ratio, Part A to Part B	
by Volume	3.5:1
by Weight	5.5:1
Mixed Appearance	Yellow
Viscosity, cps @ 25°C (77°F)	735
ASTM D 2196-86, Brookfield LVT	
Density, kg/L (lb/gal)	1.35 (11.3)
ASTM D 1475-85	
Solids Content, %	
ASTM D 2369-87 modified	
by Volume	49.8
by Weight	68.6
Volatile Organic Content (VOC), g/L (lb/gal)	435 (3.63)
ASTM D 3960-87	
Working Life, hr @ 25°C (77°F)	8
Dry Film Density	1.9
Dry Film Coating Weight, gm/ft ²	4.47
1 mil thickness	

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Curing – Aeroglaze 9929 primer cures by a chemical reaction between the epoxy and polyamide resins. Cure rate is dependent on the film thickness, temperature, relative humidity and amount of air circulation needed to remove the solvent. When cured at 25°F (77°F), a 25.4 micron (1 mil) dry film thickness is typically tack free in 2-4 hours; a 101.6 micron (4 mil) dry film thickness is typically tack free in 7-9 hours.

Primed surfaces must be topcoated with Aeroglaze polyurethane coatings before primer has cured for 18 hours.

Aeroglaze 9929 primer may be recoated after the primer is tack free. Primer must be recoated before it has cured 18 hours or adhesion failures may result. Curing at elevated temperatures can greatly reduce recoat time; baking is not recommended.

If the maximum recoat time is exceeded, the surface must be roughened by sanding with fine to medium grit sandpaper. Remove the sanding dust and solvent wipe with Aeroglaze 9953 thinner. For optimum adhesion, spray apply an additional 25.4 micron (1 mil) coat of Aeroglaze 9929 primer and cure for 2 hours minimum/ 18 hours maximum before topcoating with Aeroglaze polyurethane coatings.

Cleanup – Use Aeroglaze 9953 thinner to clean equipment and hoses. Thoroughly clean all spray equipment immediately after use as the primer will continue to cure inside the equipment, making their removal more difficult.

Prior to applying polyurethane coatings, flush spray equipment with Aeroglaze 9958 thinner to remove any Aeroglaze 9953 thinner remaining in the equipment. Aeroglaze 9953 thinner contains solvents that will inhibit the proper cure and/or appearance of polyurethane coatings.

Shelf Life/Storage

Shelf life is one year from date of shipment when stored in a dry, well ventilated area at temperatures under 27°C (80°F) in original, unopened containers. Do not store or use near heat, sparks or open flame.

Cautionary Information

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.

SOCOMORE TECHNICAL DATA

Values stated in this technical data sheet represent typical values as not all tests are run on each lot of material produced. For formalized product specifications for specific product end uses, contact SOCOMORE.

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