# **AEROGLAZE 9947**

# NON-CHROMATE WASH PRIMER

Technical Data Sheet

## Approvals and conformities

DEPT OF NAVY 7125345-001

OTAN/NATO 8030-01-437-7265 (quart part A), 8030-01-437-7266 (pint part B)

Aeroglaze 9947 two-component wash primer is designed for priming bare metal surfaces, particularly non-ferrous substrates such as aluminum. The primer may also be used on properly prepared steel, galvanized steel, fiberglass, and carbon fiber composite.

#### **Features & Benefits**

- Excellent Adhesion: provides excellent adhesion to aluminum, properly prepared steel, and galvanized steel.
- Corrosion Resistant: provides excellent resistance without chromates. When used in conjunction with Aeroglaze or Chemglaze polyurethane coatings, primer provides outstanding durable properties.
- **FDA Compliant:** meets requirements of FDA Dry Bulk Food Regulation Title CFR, Paragraph 175.300.
- Infinite Recoat Time: no maximum recoat time as long as the primed surface remains free from dirt, grease, and other surface contaminants and is protected from exposure to water.

# **DIRECTIONS FOR USE**

## **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.

Before coating special alloys, chemically treated surfaces, or metal surfaces not listed below, apply Aeroglaze 9947 wash primer and topcoat to a test coupon to determine if primer will provide adequate adhesion to the surface. Aeroglaze 9947 wash primer is not recommended for use over painted surfaces or chemical conversion treatments.

#### **Ferrous Substrates**

Remove all grease, oil, and contaminants, following SSPC-SP 1 Solvent Cleaning procedures, by wiping with a suitable solvent such as Aeroglaze 9958 thinner or 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. Apply Aeroglaze 9947 wash primer to blast-cleaned surfaces immediately after the surface has been prepared. Blushing or rusting



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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. Use SSPC-SP 1 Solvent Cleaning procedures to prepare these substrates. Perform an adhesion test to ensure Aeroglaze 9947 wash primer will adhere to prepared alloys.

### **Anodized or Chemically Treated Non-Ferrous Substrates**

Abrade the surface by sanding or abrasive blast cleaning to expose bare metal. Aeroglaze 9947 wash primer will not adhere unless bare metal is exposed. If sanding or abrasive blast cleaning cannot be performed, contact your Socomore representative for an appropriate recommendation.

Fiber-Reinforced Plastic (FRP) or Composite Radomes

Aeroglaze 9947 wash primer may be used to prime scuff-sanded FRP or composite aircraft radomes. Its unique properties allow for easy removal with Aeroglaze 9958 or similar solvents.

## **Mixing**

The mix ratio of Aeroglaze 9947 wash primer is 1:1 by volume. Thoroughly stir Aeroglaze 9947A before use. While stirring, add 1/3 of Aeroglaze 9947B and mix well. Add the rest of Aeroglaze 9947B in two additions, stirring well after each addition. Thoroughly mix the primer and allow to stand for a 15-minute induction period. Dilute up to 20% by volume with Aeroglaze 9958 thinner to control the application film thickness. The exact thinning percentage is dependent on the spray system used. Add the thinner while stirring the mixed primer. After the wash primer is thinned and uniformly mixed, use immediately. The working life of Aeroglaze 9947 wash primer is 8 hours. After 8 hours, discard any mixed primer. Even though the primer may still be liquid, it will no longer adhere to the substrate.

### Application

Aeroglaze 9947 is best applied by HVLP spray equipment. The optimum dry film thickness is 6.4-12.7 micron (0.25-0.5 mil). Airless spray equipment can be used, provided a maximum of 12.7 micron (0.5 mil) dry film thickness is not exceeded. Excessively thick films of primer will fail cohesively. Aeroglaze 9947 wash 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. The coverage rate is 8.6-14.3 m²/L (350-584 ft²/gal).

# **Drying/Curing**

Allow primer to thoroughly dry before topcoating. All corners and recesses of primed part(s) must be completely dry or poor adhesion of the topcoat will result. Use explosion-proof fans on primed parts with detailed geometry to remove solvents and accelerate drying.

Depending on conditions, primer may dry in 2-3 hours at 18-24°C (65-75°F). High humidity conditions and low temperatures will slow drying. Aeroglaze 9947 wash primer completely dries to a dull, matte, transparent appearance. Once dry, primed surfaces can be topcoated with Aeroglaze or Chemglaze polyurethane coatings.

#### Clean-Up

Use Aeroglaze 9958 thinner to clean equipment. Thoroughly clean mix and spray equipment immediately after use.



## **Typical Properties\***

	Aeroglaze 9947A	Aeroglaze 9947B	Mixed
Appearance	Red Liquid	Clear Liquid	Red
Viscosity, cps @ 25°C (77°F) ASTM D 2196-66, Brookfield LVT	1000-5000 Spindle 2, 30 rpm	~10 Spindle 1, 60 rpm	400 Spindle 2, 30 rpm
Density ASTM D 1475-85, kg/L (lb/gal)	1.06-1.11 (8.85-9.25)	0.93-0.97 (7.80-8.10)	1.02 (8.5)
Solids Content by Weight, % ASTM D 2369-87 modified,	32-36	1.64	22
Flash Point (Seta), °C (°F) ASTM D 3278-82, Closed Cup	20 (88)	20 (69)	-
Volatile Organic Content (VOC), g/L (lb/gal) ASTM D 3960-87	691 (5.83)	921 (7.68)	815 (6.7)
Working Life, hr	-	-	8

<sup>\*</sup>Data is typical and not to be used for specification purposes.

# PRECAUTIONS FOR USE AND STORAGE

The shelf life is one year from date of shipment for Aeroglaze 9947A and Aeroglaze 9947B 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 flames.

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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