Technical Data Sheet - Fiche Technique

Approvals and conformities

Dept of Navy

7125345-001

Aeroglaze® 9947 two-component wash primer is designed for priming metal surfaces, particularly nonferrous substrates such as aluminum. Primer may also be used on properly prepared steel and galvanized steel.

Features & Benefits

- Excellent Adhesion: provides excellent adhesion bonds to aluminum, and properly prepared steel and galvanized steel.
- Corrosion Resistant: provides excellent resistance without chromate pigments. 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. 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 9947 wash primer and topcoat with appropriate coating to determine if primer will provide adequate adhesion to the surface.

Note: 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 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. Run 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, use an Aeroglaze epoxy primer instead.

• Fiber Reinforced Plastic (FRP) or Composite Radomes

Because of its unique solvent removal properties, Aeroglaze 9947 wash primer may be used to prime scuffsanded FRP or composites on aircraft radomes.

Mixing

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 primer to obtain improved spray and flow properties, and better control of the application film thickness. Dilute up to 20% by volume with Aeroglaze 9958 thinner. Add the thinner while stirring the mixed primer.

After thinned and uniformly mixed, use primer immediately. Working life of Aeroglaze 9947 wash primer is 8 hours. After 8 hours, discard any mixed primer. Even though primer may still be liquid, it will no longer adhere to substrates.

Application

Primer is best applied by HVLP spray equipment. Optimum dry film thickness of Aeroglaze 9947 wash primer should be 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. 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 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, see-through appearance. Once dry, primed surfaces can be topcoated with Aeroglaze or Chemglaze polyurethane coatings.

Cleanup

Use Aeroglaze 9958 thinner to clean equipment. Thoroughly clean mix and spray equipment immediately after use. Once Aeroglaze 9947 wash primer dries, it will cause coatings to stick to the equipment, making their removal more difficult.

TECHNICAL CHARACTERISTICS

Typical Properties*



	9947A	9947B
Appearance	Red Liquid	Clear Liquid
Viscosity, cps @ 25°C (77°F) ASTM D 2196-66, Brookfield LVT	1000-5000, Spindle 2, 30 rpm	~10, Spindle 1, 60 rpm
Density ASTM D 1475-85	1.06-1.11 kg/L (8.85-9.25 lb/gal)	0.93-0.97 kg/L (7.80-8.10 lb/gal)
Solids Content by Weight, ASTM D 2369-87 modified	32-36%	1.64%
Flash Point (Seta), ASTM D 3278-82, Closed Cup	20°C (69°F)	20°C (69°F)
Volatile Organic Content (VOC) ASTM D 3960-87	691 g/L (5.77 lb/gal)	921 g/L (7.68 lb/gal)

Typical Properties* of Mixed Primer

Mix Ratio, Part A to Part B	by Volume 1:1, by Weight 100.0:88.8
Mixed Appearance	Red
Viscosity, cps @ 25°C (77°F) ASTM D 2196-66, Brookfield LVT	400, Spindle 2, 30 rpm
Density ASTM D 1475-85	1.02 kg/L (8.5 lb/gal)
Solids Content ASTM D 2369-87 modified	11% by volume, 22% by weight
Volatile Organic Content (VOC), ASTM D 3960-87	815 g/L (6.8 lb/gal)
Working Life	8 hr
Dry Film Density	1.76
Dry Film Coating Weight, 0.5 mil thickness	2.08 gm/ft2

^{*}Data is typical and not to be used for specification purposes

PRECAUTIONS FOR USE AND STORAGE

Shelf life is six months for Aeroglaze 9947A and one year for Aeroglaze 9947B 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.

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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