

## Approvals and conformities

ADCOLE	A26364
AIL Systems	986643
THALES ALENIA SPACE (formerly ALENIA SPAZIO)	M02C018N00A
COMDEV USA	CMS41803
US Air Force	0N814850-1
EMS Technologies	194909SCD
Exelis, Inc	561455
GOODRICH	HPA0210C
Harris	2011362
HONEYWELL	FMC9625-01, P8251333
Hughes	SCGMS56061
Kearfott	Y122A013
L3 Communications	635907-3, 699-006849, B185239, N500045
LOCKHEED MARTIN	LAC-37-4462-0600, MAP-CK10787
Merrimac	801642
Raytheon	HMS15-2135
TRW	C809398

Aeroglaze® Z307 coating is an absorptive, electrically conductive polyurethane coating designed for application on substrates used in aerospace operations. These operations include those where coatings must exhibit low outgassing characteristics while providing static dissipating and high thermal absorptivity properties. Aeroglaze Z307 coating cures to a flat black finish.

## Features & Benefits

- **Low Outgassing:** exhibits low gassing properties in high vacuum environments.
- **Durable:** provides mechanical properties required for rigorous durations in space; provides excellent performance on rigid or flexible substrates.
- **High Thermal Absorptivity:** provides thermal absorptivity for applications where superior heat absorption is required.
- **Static Dissipation:** provides static dissipating properties.

## ***DIRECTIONS FOR USE***

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### **Surface Preparation**

Thoroughly clean surfaces to remove all dust, oil and grease. For most substrates, apply primer to ensure proper adhesion and performance of the coating.

Contact your SOCOMORE representative for recommended Aeroglaze primer required for your application.

### **Mixing**

Before opening container, thoroughly mix coating using a paint shaker for 5 minutes. Open the lid carefully as the container may be under slight pressure. Stir coating with a clean paint stick to check for any settled material and ensure mixture is homogeneous. If material has settled, return closed container to the paint shaker and shake an additional 5 minutes or until no settling is apparent. Dilute coating with 15-20% Aeroglaze 9958 thinner, by volume, to a Zahn Cup #2 viscosity of 18-22 seconds.

### **Application**

Apply coating by conventional spray equipment. Aeroglaze Z307 coating is best applied at 13-35°C (55-95°F), with substrate temperatures at least 2.8°C (5°F) above the dew point.

Apply Aeroglaze Z307 coating at a maximum thickness of 19.05 dry micron or 101.6 wet micron (0.75 dry mil or approx. 4 wet mil) per coat. Typical dry film thickness of Aeroglaze Z307 coating should be approximately 38.1- 50.8 micron (1.5-2.0 mil).

Hold the gun at right angles to the surface, approximately 20.3-30.5 cm (8-12 in) away, and apply with a 50% overlap. A light mist coat should be applied, followed by a full wet coat of 76.2-101.6 wet micron (3-4 wet mil). Coverage rate is 7 m<sup>2</sup>/L (284 ft<sup>2</sup>/gal).

### **Curing**

Aeroglaze Z307 coating cures by reacting with moisture in the air. Cure rate is dependent on the temperature, relative humidity and amount of air circulation needed to remove the solvent.

Under the acceptable curing conditions, the coating will develop its ultimate properties in approximately 7 days. Lower temperatures and humidities will retard cure, while higher temperatures and humidities may cause bubbling.

Aeroglaze Z307 coating cures to a tack-free surface in 2-3 hours at 25°C (77°F) and 50% relative humidity. Room temperature cure times of 12 hours permit handling; 36-48 hours permit normal usage.

Aeroglaze Z307 coating may be recoated after the first application within 3 hours minimum and 24 hours maximum. Recoat time is dependent on temperature and humidity. High temperature and humidity promote fast cure while low temperature and humidity slow down the cure. In high temperature and high humidity conditions, recoat within 8 hours to prevent intercoat adhesion failure.

If the maximum recoat time is exceeded, the surface must be roughened by sanding with fine sandpaper before recoating.

### **Cleanup**

Use Aeroglaze 9958 thinner to clean equipment. Do not use lacquer thinners, water or solvents containing alcohols.

## TECHNICAL CHARACTERISTICS

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### Typical Properties\*

Property	Value
Appearance	Black Liquid
Viscosity, cps @ 25°C (77°F), ASTM D 2196-86, Brookfield LVT	50-400
Density, ASTM D 1475-85	0.91-0.96 kg/L (7.6-8.0 lb/gal)
Solids Content by Weight, ASTM D 2369-87 modified	20-24%
Flash Point (Seta), ASTM D 3278-82, Closed Cup	19°C (67°F)
Volatile Organic Content (VOC), ASTM D 3960-87	731 g/L (6.1 lb/gal)
Outgassing**, ASTM E 595-77	1.06% TML***, 0.04% CVCM****
Gloss @ 85°	15 maximum

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

\*\* 40 day cure at room temperature

\*\*\* Total Mass Loss

\*\*\*\* Collected Volatile Condensable Materials

## PRECAUTIONS FOR USE AND STORAGE

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Shelf life is one year from date of shipment when stored in original, unopened container. Store indoors away from heat, sparks and 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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