

# TECHNICAL DATA SHEET | Section 7.5

# POLYGLAZE® AL-50/50SC

Aliphatic Polyurethane Topcoat

# **Product Description:**

Polyglaze® AL-50/50SC is an economical, aliphatic, single component, liquid applied, moisture cured, polyurethane coating. Polycoat Products manufactures products in different VOC's ranging from 100 to 340 gms/liter to comply with VOC requirements in various regions. Make sure to use the right grade of product which complies with VOC regulations/ requirements applicable as per federal, state, statutory, counties, cities and local bodies at the place of installation.

#### **Features**

- Excellent Weatherability
- Good Color Retention
- UV Stable

### **Typical Uses**

- Concrete
- Metal, Rubber, Wood or Masonry Surfaces
- Pedestrian Traffic
- Plywood
- Resealing Existing Polyurethane Surfaces
- Vehicular Traffic

## **Packaging**

**1-Gallon** 1 gallon (3.78 liters) can

**5-Gallon** 5 gallon (18.9 liters) pail

**55-Gallon** 55 gallon drum, net fill 50 gallons (189

liters)

#### **Colors**

For Polyglaze® AL-50/50SC (250 VOC) Dolphin Grey Tan, and Tint-White. Tint-White with color packs are available in Stone Grey, Dolphin Grey, Battleship Grey, Tan, Indian Sand and Ash Brown.

For Polyglaze® AL-50/50SC (100 VOC) Tint-White with color packs are available in Stone Grey, Dolphin Grey, Battleship Grey, Tan, Indian Sand and Ash Brown.

Custom colors are also available. Minimum order of 250 gallons (945 liters). See color chart for special provisions.

Contact Polycoat Products for more information. For pretinted standard color other than stock color, a minimum of 150 gallons (567 liters) is required.

#### Coverage

The approximate coverage is 1 gallon/100 sqft (0.41 l/sqm). Coverage rate will depend on surface roughness and porosity.

#### Mixing

Before application, mix Polyglaze® AL-50/50SC using a mechanical mixer at slow speed. Add Polyglaze® AL-50/50SC Catalyst and continue mixing until a homogeneous mixture

# Technical Data (Based on Draw Down Film)

	Polyglaze® AL-50	Polyglaze® AL-50SC
Coverage Rate	1 gal/100 sqft 0.41 l/sqm	1 gal/100 sqft 0.41 l/sqm
Dry Film Thickness per Coat	12 ± 2 mils 305 ± 50 microns	13 ± 2 mils 330 ± 50 microns
Hardness, ASTM D2240	90 ± 5 Shore A	90 ± 5 Shore A
Tear Resistance, Die C ASTM D624	400 ± 50 pli 70.1 ± 8.8 kN/m	$400 \pm 50 \text{ pli}$ $70.1 \pm 8.8 \text{ kN/m}$
Tensile Strength, ASTM D412	2700 ± 200 psi 18.6 ± 1.4 MPa	3000 ± 200 psi 20.7 ± 1.4 MPa
Ultimate Elongation, ASTM D412	250 ± 50%	250 ± 50%
Specifc Gravity	1.20 ± 0.4	1.20 ± 0.4
Total Solids by Weight, ASTM D2669	80 ± 5%	85 ± 5%
Total Solids by Volume, ASTM D2697	74 ± 3%	83 ± 3%
Viscosity at 75°F (24°C)	1500 ± 300 cps	3500 ± 200 cps
Volatile Organic Compounds, ASTM D2369-81	<2.08 lb/gal <250 gm/liters	<0.83 lb/gal <100 gm/liters

and color is attained. Boxing of the material is recommended. Use caution not to whip air into the material as this may result in pinhole blisters and/or shortened pot life. Do not mix in an up and down motion.

#### **Application**

For best results, use a squeegee. Airless sprayer or phenolic resin core roller may be used but extra care should be taken not to cause air bubbles.

Requires a continuous coating application to minimize lines and/or streaking.

The first coat of Polyglaze® AL-50/50SC should be applied at the rate of 1 gallon/100 square feet (0.41 liters/sqm). For best results, airless sprayer or phenolic core roller may be used but extra care should be taken not to cause air bubbles. Apply Polyglaze® AL-50/50SC evenly over the entire deck resulting



. . . . . in: AL-50 @ 12 ± 2 dry mils (305 ± 51 microns) or AL-50SC @  $13 \pm 2$  dry mils (330  $\pm 51$  microns). After 24 hours, proceed to the second coat.

> Polyglaze® AL-50/50SC may require more than one coat depending on the job specifications and requirements. When estimating material requirements, coverage rates tend to increase for subsequent coats of material. To obtain proper adhesion between coats it is imperative that re-coating be done within 48 hours.

# Curing

.... .... .....

----

---

----

At 75°F (24°C) and 50% relative humidity, allow each coat to cure 16 hours. Cure time will vary depending on temperature and humidity. If more than 48 hours passes between coats, re-prime the surface with Polyprime® U before proceeding.

Allow 24 hours before permitting light pedestrian traffic and at least 72 hours before permitting heavy pedestrian or auto traffic on the finished surface.

Uncured Polyglaze® AL-50/50SC is very sensitive to heat and moisture. Higher temperatures and/or high humidity will accelerate the cure time. Use caution in batch sizes and thickness of application.

Low temperature and/or low humidity extend the cure time.

If accelerated curing is required, add one quart (0.95 liter) of Polyglaze® Hardener in a 5 gallon pail (18.9 liters) of Polyglaze® AL-50/50SC and mix thoroughly. This accelerated Polyglaze® AL-50/50SC will cure in 6-8 hours at 75°F (24°C) and 50% relative humidity. If Polyglaze® Hardener is used to accelerate curing then re-coat window for the subsequent coat is reduced to 24 hours after cure. If the recoat window has passed, then solvent wipe the surface with VOC-compliant solvent and re-prime surface.

# Cleanup

Equipment should be cleaned with an environmentally safe solvent, as permitted under local regulations, immediately after use.

### Storage

Polyglaze® AL-50/50SC has a shelf life of 1 year from date of manufacture in original, factory-sealed containers when stored indoors at a temperature between 60-95°F (15-35°C).

## Limitations

The following conditions must not be coated with Polycoat deck coatings or systems: split slabs, buried membrane, sandwich slabs with insulation, slabs over unvented metal pan, magnesite, and non-structural lightweight concrete. On

grade slabs may receive Polycoat system coatings provided a moisture-vapor transmission test is first performed. Please contact Polycoat's technical department with the results.

With regard to coating asphalt surfaces, please contact Polycoat's technical department.

Surfaces must be dry, clean and free of foreign matter. Clear coating may turn opaque and cloudy due to moisture penetration, especially in exterior applications. Surface may be slippery when wet. Containers that have been opened must be used as soon as possible. Do not dilute under any circumstance.

#### Warning

This product contains Isocyanates and Solvent.

Limited Warranty: Please read all information in the General Guidelines, Technical Data Sheets, Guide Specifications and Safety Data Sheets (SDS) before applying material. These products are for professional use only and preferably applied by professionals who have prior experience with the Polycoat Products materials or have undergone training in application of Polycoat Products materials. Published technical data and instructions are subject to change without notice. Contact your local Polycoat Products representative or visit our website for current technical data, instructions, and project specific recommendations.

Polycoat Products warrants its products to be free of manufacturing defects and that they will meet Polycoat Products' current published physical properties. Seller's and manufacturer's sole responsibility shall be to replace that portion of the product which proves to be defective. There are no other warranties by Polycoat Products of any nature whatsoever expressed or implied, including any warranty of merchantability or fitness for a particular purpose in connection with this product. Polycoat Products shall not be liable for damages of any sort, including remote or consequential damages resulting from any claimed breach of any warranty whether expressed or implied. Polycoat Products shall not be responsible for use of this product in a manner to infringe on any patent held by others. In addition, no warranty or guarantee is being issued with respect to appearance, color, fading, chalking, staining, shrinkage, peeling, normal wear and tear or improper application by the applicator. Damage caused by abuse, neglect and lack of proper maintenance, acts of nature and/or physical movement of the substrate or structural defects are also excluded from the limited warranty. Polycoat Products reserves the right to conduct performance tests on any material claimed to be defective prior to any repairs by owner, general contractor, or applicator.

Disclaimer: All guidelines, recommendations, statements, and technical data contained herein are based on information and tests we believe to be reliable and correct, but accuracy and completeness of said tests are not guaranteed and are not to be construed as a warranty, either expressed or implied. It is the user's responsibility to satisfy himself, by his own information and test, to determine suitability of the product for his own intended use, application and job situation and user assumes all risk and liability resulting from his use of the product. We do not suggest or guarantee that any hazard listed herein are the only ones which may exist. Neither seller nor manufacturer shall be liable to the buyer or any third person for any injury, loss or damage directly or indirectly resulting from use of, or inability to use, the product. Recommendations or statements, whether in writing or oral, other than those contained herein shall not be binding upon the manufacturer, unless in writing and signed by a corporate officer of the manufacturer. Technical and application information is provided for the purpose of establishing a general profile of the material and proper application procedures. Test performance results were obtained in a controlled environment and Polycoat Products makes no claim that these tests or any other tests accurately represent all environments. Polycoat Products is not responsible for typographical errors. © 2020 Polycoat Products. All rights reserved. Revision 20200918.DM

