POLYGLAZE 400FR/400FR-C/400FR-SC

Fire Rated Aliphatic Polyurethane Topcoat

REVISION 4/1/18

Product Description

Polyglaze 400FR/400FR-C/400FR-SC is an aliphatic, two 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 requirement 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

- Fire Retardant
- Durable
- UV Resistant for Gloss Retention

TYPICAL USES

- Concrete
- Plywood
- Heavy Pedestrian Traffic
- 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)

TECHNICAL DATA (BASED ON DRAW DOWN FILM)

	Polyglaze 400FR (340 VOC)	Polyglaze 400FR-C (250 VOC)	Polyglaze 400FR-SC (100 VOC)
Coverage Rate	1 gal/100 sqft 0.41 l/sqm	1 gal/100 sqft 0.41 l/sqm	1 gal/100 sqft 0.41 l/sqm
Dry Film Thickness per Coat	11 ± 2 mils 279 ± 50µ	11 ± 2 mils 279 ± 50µ	13 ± 2 mils 330 ± 50µ
Hardness, ASTM -2240	95 ± 5 Shore A	95 ± 5 Shore A	95 ± 5 Shore A
Specific Gravity	1.36 ± 0.1	1.42 ± 0.1	1.49 ± 0.1
Total Solids by Weight, ASTM D-2369	79 ± 2%	79 ± 2%	82 ± 2%
Total Solids by Volume, ASTM D-2697	68 ± 2%	71 ± 2%	77 ± 2%
Viscosity at 75°F (24°C)	2400 ± 500 cps	2700 ± 500 cps	3500 ± 500 cps
Volatile Organic Compounds	2.33 lb/gal 280 gm/liters	1.67 lb/gal 200 gm/liters	0.71 lb/gal 85 gm/liters

Colors

For Polyglaze 400FR (340 VOC): Tan

For Polyglaze 400FR-C (250 VOC): Tan, Dolphin Grey, and Tint-White. Tint-White with color packs are available in Stone Grey, Battleship Grey, Indian Sand, and Ash Brown.

For Polyglaze 400FR-SC (100 VOC): Tan, Dolphin Grey, and Tint-White. 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 pre-tinted 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

The volume mixing ratio is 1 part Polyglaze 400FR/400FR-C/400FR-SC Side-A Powder to 5 parts of Polyglaze 400FR/400FR-C/400FR-SC Side-B Liquid.

Step 1: Mix the 400FR/400FR-C/400FR-SC Liquid using a mechanical mixer at slow speed until a homogeneous mixture and color is attained. 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.

Step 2: Remove plastic bag of 400FR/400FR-C/400FR-SC Side-A Powder from the 6 gallon (22.68 liter) pail and set aside. Fill this empty container half full with the pre-mixed 400FR/400FR-C/400FR-SC Side-B Liquid. Slowly add 400FR/400FR-C/400FR-SC Side-A Powder, mixing with mechanical mixer.

Ensure that all powder is transferred from the bag to the container. Continue mixing until no lumps are present, again being careful not to entrap air in the mixture.

Step 3: When 400FR/400FR-C/400FR-SC Side-A Powder has been thoroughly blended into 400FR/400FR-C/400FR-SC Side-B Liquid add the rest of 400FR/400FR-C/400FR-SC Side-B Liquid. Mix with mechanical mixer until uniform mixture is attained. Mixed material must be used within 2-4 hours of mixing the two components.

Application

For best results, 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.

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 vehicular traffic on the finished surface.

Uncured 400FR/400FR-C/400FR-SC 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 400FR/400FR-C/400FR-SC Side-B Liquid and mix thoroughly. This accelerated 400FR/400FR-C/400FR-SC will cure in 6-8 hours at 75°F (24°C) and 50% relative humidity. If Polyglaze Hardener is used to accelerate curing, the 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 400FR/400FR-C/400FR-SC 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 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 technical department with the results.

With regard to coating asphalt surfaces, please contact Polycoat 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.