PRIOPOXY OP

Product Bulletin

DESCRIPTION

Priopoxy OP is a two-component semi-gloss epoxy coating, 100% solids with high viscosity, designed to provide a textured appearance where a safe and decorative coating is required.

PACKAGING

Priopoxy OP, parts A and B10, are supplied in 5-gallon (19-liters) pails or in 55-gallon (208-liters) drums.

STORAGE AND SHELF LIFE

The two components should be stored in a cool, dry area out of direct sunlight. The materials should be stored between 65 and $75^{\circ}F$ (18 to $24^{\circ}C$) for **24 hours** prior to use for optimum handling properties. The shelf life of the components in their unopened original cans is one year.

PHYSICAL PROPERTIES (Liquid Material)

Property	Results
Flash Point, °F (°C)	Part A: >248 (120)
Setaflash closed cup (ASTM D3278)	Part B10: >200 (93)
Percent solids, by weight	Part A: 100
(ASTMD2369)	Part B10: 100
Density, lb/gal (Kg/L)	Part A: 12.4 (1.48)
(ASTM D1475)	Part B10: 8.6 (1.03)
	Mix: 11.4 (1.37)
Shelf Life	Minimum 1 year
Viscosity, cps Brookfield	Part A: 25000 -
(ASTM D2196)	30000
	Part B10: 50 - 100
	Mix: 5000 - 8000
Volatile organic compound, lb/gal (g/L)	
(ASTM D3960)	Mix A+B10 0 (0)

PHYSICAL PROPERTIES (Dry Film)

Property	Results
Hardness, Shore D (ASTM D2240)	80
Compressive strength (ASTM D695)	6,170 psi
Tensile strength (ASTM D638)	2,000 psi
Flexural strength (ASTM D790)	2,350 psi
Bond strength to concrete	Concrete fails
(ASTM D4541)	before loss of bond
Ultimate elongation (ASTM D638)	3.5
Impact resistance	No cracking or
(MIL D3134)	delamination
Inflammability (ASTM D635)	Self-extinguishing
Abrasion resistance, mg	
CS-17, 1000 rev., 1000 gr	
(ASTM D4060)	65

CHEMICAL RESISTANCE				
		DAY 1	DAY 7	
Inorganic acids	10% Hydrochloric acid	Ε	Ε	
_	30% Hydrochloric acid	Ε	G	
	10% Nitric acid	Ε	G	
	50% Phosphoric acid	F	Р	
	37% Sulfuric acid	G	G	
Organic acids	10% Acetic acid	G	F	
	10% Citric acid	G	G	
	Oleic acid	G	F	
Alkaline	10% Ammonium			
	hydroxide	Ε	Е	
	50% Sodium hydroxide	Ε	Е	
Solvents (alcohols)	Ethylene glycol			
	(antifreeze)	Ε	G	
	Isopropyl alcohol	F	F	
	Methanol	F	F	
Solvents (aliphatic)	d-Limonene	G	G	
	Jet Fuel (JP 4)	Е	Ε	
	Gasoline	G	G	
	Mineral spirits	E	E	
Solvents (aromatics)	Xylene	F	F	
Solvents (chlorinated)		Р	Р	
Solvents (ketones &	Methyl ethyl ketone	Р	Р	
esters)	Propylene glycol methyl			
	ether acetate (PMA)	F	F	
Miscellaneous	20% Ammonium nitrate	Е	Е	
Chemical	Brake fluids	F	F	
	Bleach	G	G	
	Motor oil (SAE30)	Е	E	
	Skydrol ® 500 B	F	F	
	Skydrol ® LD4	F	F	
	20% Sodium chloride	Е	E	
	1% Tide ® laundry soap	Е	Е	
	10% Trisodium	_	_	
	phosphate	E	<u>E</u>	

LEGEND:

- E: Excellent (No adverse effect)
- B: Good (Limited adverse effect)
- F: Fair (Moderate adverse effect)
- P: Poor (Unsatisfactory)

PRELIMINARY FLOOR INSPECTIONS

Check the concrete

Concrete must be structurally sound, clean, dry and above 65°F to assure a successful installation. Concrete must be at least 60 days old and free of curing membrane, paint of other sealer.

Do not coat until the curing membrane or any coating have been completely removed by chemical or mechanical means.

Check for moisture

Readings must be **below 3.0 lbs/24 hr/1,000 sq. ft.** on the calcium chloride test. Areas where moisture exceeds those values may need Priopoxy DP, a damp proof special primer.



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Check the ambient conditions

Floor temperature and materials should be between $65^{\circ}F$ ($18^{\circ}C$) and $90^{\circ}F$ ($32^{\circ}C$). Relative humidity must be less than 70% or the result may be a hazy appearance. DO NOT coat unless floor temperature is more than five degrees over the Dew Point.

LIMITATIONS

This product is not designed for exterior use, immersion, or any use where moisture can reach the underside of the coating.

Before applying for protection against specific chemical environments, consult our Chemical Resistance Guide.

Do not thin. Addition of thinners will slow down the cure and reduce the ultimate properties of this product. Recoat window times will also be affected.

EQUIPMENT

- · Protective clothing
- Jiffy-type Mixer Blade
- Slow speed drill (500 rpm or less)
- 5 mils Notched squeegee
- Roller Assembly
- Beige 3/4" Nap Roller
- Spiked shoes

PREPARATION

All oil, grease, wax, laitance, curing compounds, watersoluble concrete hardeners and other surface contaminants must first be removed by scraping or washing with detergents prior to acid etching, shot blasting, sanding or buffing.

Acid etching: Successive acid etch treatments may be required to obtain proper adhesion to concrete. Rinse with clean water and neutralize with proper solution. Allow the floor to dry before applying a primer.

Diamond Grind: The grinding machine must have a vacuum pickup to continually remove the generated dust. Results of grinding may vary depending on technique and the hardness of the concrete. Shot blasting: Use magnetic broom to remove excess shot, sweep to remove large debris and vacuum to remove fine dust. Caution should be exercised to minimize excessive shot blasting. Over "blasting" will result in reduced coverage rates of the primer and/or subsequent topcoats.

PRIMING - PRIOPOXY CL or PRIOPOXY DP

Use any of our specially designed concrete primers: Priopoxy CL or Priopoxy DP. For further information about description, mechanical properties and application procedures; please refer to the Product Bulletins of both systems.

EXPANSION JOINTS AND CRACK FILLING

Control joints can be filled with semi-rigid joint filler such as Prioflex SR. Construction joints less than one inch wide may also be filled

with Prioflex SR. Isolation or expansion joints must be cut and filled with a flexible material designed for this purpose.

BUILD COAT - OPTIONAL

There are various products that can be used as build coats, depending on the customer's necessities. For assistance, please consult a sales representative.

TOP COAT - PRIOPOXY OP

Coverage

Coverage of materials will depend upon coating thickness and will vary depending on texture, porosity and profile of the substrate. Theoretical coverage of product is:

Thickness	Cover rate / Gal	Cover rate / Lt
3 mil	534 ft ²	13.1 m ²
5 mil	320 ft ²	7.8 m ²
7 mil	229 ft ²	5.6 m ²

Mixing

It is important to remember that this material has a limited pot life. Therefore it is wise to check and make sure everything is in order before starting the mixing sequence.

The recommended mixing procedure is:

- 1.- Pre-mix Part A before adding Part B10.
- 2.- Mix 3 Parts A to 1 Part B10 by volume. Do not mix more material than can be applied in 13 minutes period at 24°C. High temperature will accelerate curing and reduce pot life. Check the following chart for pot life at various temperatures:

	60°F	65°F	70°F	75°F	80°F	90°F
Priopoxy OP	25	21	17	13	9	5

3.- Mix with a Jiffy-type mixing paddle and slow speed drill during 2 to 3 minutes. Do not introduce air while mixing. Failure to do so could result in weak or partially cured spots in the coating, diminishing the coating properties.

Application

The floor should be divided into sections that can be completed without stopping. The end of the section should be taped off to form a clean edge.

The recommended application procedures are:

- 1.- Take the mixed material and immediately pour it, in the form of a ribbon, at the end of the section being coated. This material should not be left in the container because it reduces the pot life of the product.
- 2.- One person can pass along the starting line, pulling a 5-mils notched squeegee at an even speed with slight down pressure, turn and come back making a second pass adjacent the first one. The greater the down pressure the thinner the material will be applied. A second person back rolls the material, in **one direction only**, using a **3/4**" nap roller. The use of spiked epoxy shoes will allow freedom of movement on the wet floor. **Caution: The floor may be slippery.**



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- 3.- Another line of Priopoxy OP is poured approximately one-foot from the rolled area and step 2 is repeated. The rolling personnel should make sure they are minimizing thick sections of material and roller marks at the junction of the previously rolled and freshly applied area.
- 4.- Follow these procedure until the section is completed.

Cure Time

The temperature of the substrate will determine the cure rate of the coating being applied. Check the following chart for more information.

Temperature (°F)	Foot traffic	Light traffic	Heavy traffic
77	10-12 hrs	22-24 hrs	70 hrs

Ambient air temperature may not be the temperature of the substrate. The substrate temperature should be measured and maintained above 65°F (18°C) during application. Full coating properties take 7 days to develop.

CAUTIONS

WARNING! USE WITH ADEQUATE VENTILATION. Use proper respiratory protection when required. Avoid contact with eyes, skin and clothing. If skin contact occurs, wash at the first opportunity with soap and water. If eye contact occurs, IMMEDIATELY FLUSH EYES WITH PLENTY OF WATER. CALL A PHYSICIAN.

DO NOT TAKE INTERNALLY! KEEP OUT OF THE REACH OF CHILDREN! FOR INDUSTRIAL USE ONLY.

LIMITED WARRANTY.- This Warranty applies only if the products were installed according to the mentioned specifications. **PRICOAT** will replace the defective product ONLY. Exclusions from Coverage: **PRICOAT** shall not be liable under any circumstances for:

- Faulty or improper application of the product or for injuries or damages of any kind whatsoever.
- Variations, weathering, surface cracking, deformation or any other changes derived from the use.
- Leaks or product damages resulting from anything other than an inherent manufacturing defect.
- Damage caused by improper storage, neglect, abuse, misuse or improper upkeep and maintenance.
- Products that have been altered in any way from their original configuration (for instance, addition of solvent).
- Damage caused by factors that are beyond the control of **PRICOAT**. The serviceable life of the product is affected by several factors such as substrate preparation, product application, maintenance and normal wear. These factors are beyond our control for which **PRICOAT** make no warranty.

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Assistance.- For more information please contact our Pricoat specialists by phone at (614) 481-4344.

