

# POLIBRID® 670-S

# **TECHNICAL DATA**

## FLEXIBLE, MOISTURE-TOLERANT EPOXY PRIMER FOR CONCRETE

#### **GENERAL PROPERTIES**

**POLIBRID 670-S** is an ultra-high solids, two component, organo-silane modified, amido-amine epoxy primer designed specifically for applications of Polibrid solventless elastomeric polyurethane coatings and linings to concrete substrates.

**POLIBRID 670-S** utilizes the most advanced technology in moisture-tolerant, flexible epoxy resins, producing tenacious adhesion to the substrate while creating a strong chemical bond to the Polibrid elastomers. Its superior moisture tolerance serves as a barrier to substrate moisture that allows application of the Polibrid elastomeric polyurethane coating and lining materials over dry or damp concrete surfaces.

**POLIBRID 670-S** is topcoated with the Polibrid elastomers after it sets up firm, but while still in a tacky condition, using "wet-to-wet" application techniques that enhance adhesion and increase productivity.

**POLIBRID 670-S** does not contain tars, lead, zinc or chromates and complies with all known VOC emissions standards.

#### RECOMMENDED USES

Recommended for application to concrete substrates. Suitable for damp surfaces such as those found in pump stations, manholes, cooling tower basins, secondary containment installations and other belowgrade or at-grade structures.

### LIMITATIONS

**POLIBRID 670-S** is not recommended for application to wet surfaces. Concrete may be damp to the touch, but surfaces must be free of condensation and all visible moisture.

This product is not waterproofing. It will not repair leaks or remedy excessive water vapor or hydrostatic pressure conditions.

GENERIC TYPE	Modified Amido-Amine Epoxy	
COLOR	Turquoise Blue	
SOLIDS CONTENT	99% Minimum	
VOC CONTENT *	0.028 lbs./gal. ( 3.3 gm./lt.)	
COMPONENTS	Two	
MIX RATIO BY VOLUME	1A:1B (1 Part "A" to 1 Part "B")	
THEORETIC COVERAGE	1,599 sq.ft./gal. @ 1 mil DFT (39.8 m²/lt. @ 25µ)	
	320 sq.ft./gal. @ 5 mils DFT (8 m <sup>2</sup> /lt. @ 125μ)	
RECOMMENDED FILM THICKNESS	5 mils DFT (125μ)	
POT LIFE **	± 2 hours @ 60°F (16°C)	
	± 1 hour @ 72°F (22°C)	
	± 30 minutes @ 90°F (32°C)	
DRYING TIME	± 48 hours @ 60°F (16°C)	
	± 32 hours @ 72°F (22°C)	
	± 12 hours @ 90°F (32°C)	
TOPCOAT TIME	After primer has set up firm, but before it dries to the touch.	
FLEXIBILITY	Passes multiple bends on 1/4" to 3/16" conical mandrel	
HARDNESS	"2H" in 7 days @ 72°F (22°C)	
RELATIVE HUMIDITY	Maximum: 95%	
AMBIENT TEMPERATURE	Minimum: 60°F (16°C) Optimum: 75°F (24°C)	
SUBSTRATE TEMPERATURE	Minimum: 55°F (13°C) <u>and</u> at least 5°F (3°C) above Dew Point. Optimum: 75°F (24°C)	
MATERIALS TEMPERATURE	60°F to 90°F (16°C to 32°C)	

<sup>\*</sup> Theoretic

<sup>\*\*</sup> Based on two (2) gallons of mixed material at 72°F. Usable pot life may be substantially reduced at higher temperatures and/or when mixing larger volumes.

#### **EQUIPMENT REQUIREMENTS & APPLICATION CHARACTERISTICS**

Application Methods..... Application by airless spray is preferred. Can also be applied by brush, roller or conventional spray.

Spray Equipment ....... Contact Manufacturer for detailed equipment recommendations.

Air	ess	Sp	ray

Pump	30:1 Fluid-to-Air Ratio
Hose Diameter	
Spray Tips	. GRACO® R-A-C III or IV
Tip Apertures	0.017" to 0.021"
Fluid Pressure	>2,500 psi

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Conventional Spray	
Pump Spray p	ot with dual regulators
Air Supply	100 psi
Material Hose Diameter	1/2"
Material Hose Length (Maximum	i) 50'
Air Hose Diameter	5/16"
Fluid Pressure	10-25 psi
Atomization Pressure	50-75 psi
Thinning	Not recommended

Mixing ...... Before using, agitate both components in their original containers for 5 minutes to produce complete suspension. Measure components at precise 1A:1B volume ratio, pour into clean separate container and blend by agitating mixed components for 5 additional minutes. Do not apply primer that has exceeded its usable pot life.

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Cleaning Solvents.	MEK, Toluene	
	Part A: >205°F (96°C) Part B: >205°F (96°C)	
Weight per Gallon.		
Packaging	1 gal. Cans or 5 gal. Pails	
Sales Units	2 gal. Kits or 10 gal. Kits	
_	Keep in a cool, dry place. Do not store e or earth. Avoid freezing. Do not open	
Shelf Life1 opened containers)	Year (Stored dry, in original un-	

#### SURFACE PREPARATION

Allow a minimum 28 day cure period for new Portland Cement ASTM Type I concrete. Decontaminate per ASTM D-4258. Abrasive blast clean per ASTM D-4259 to remove laitance, loose concrete, and existing coatings, and to produce surface profile resembling coarse sandpaper. Waterblasting alone or acid etching are not acceptable. Repair all leaks as directed by Engineer and eliminate standing water. If necessary, resurface with high-strength, rapid-curing, zero-shrinkage resurfacing product, before primer application. Concrete must be free of dust and contaminants prior to primer application.

#### TOPCOATING

For optimum results, topcoat Polibrid 670-S before it dries to the touch. Primer must be free of dust, moisture, condensation and contaminants before topcoating.

If primer dries hard to the touch before topcoating, application of an additional coat of Polibrid 670-S primer is required.

#### PRECAUTIONS

**READ AND FOLLOW ALL CAUTION STATEMENTS ON** TECHNICAL DATA SHEET AND CORRESPONDING MATERIAL SAFETY DATA SHEET.

HEALTH & SAFETY: Use with properly fitted organic vapor respirators and adequate ventilation. Avoid breathing vapor or mist. Avoid contact with eyes and skin. Liquid coating may cause skin sensitization. Do not allow contaminated clothing to contact skin. Follow precautions in CFR Title 29 (OSHA) and all other pertinent health and safety standards. Comply with all Local, State and Federal environmental regulations.

CONFINED SPACES: Provide forced air ventilation. Require workers to use carbon monoxide filtered, breathing air-line respirators. Comply with all OSHA regulations regarding work in confined spaces!

FIRST AID: SKIN CONTACT: Wash with plenty of soap and water. EYE CONTACT: Immediately flush with plenty of fresh water for at least fifteen (15) minutes and get specialized medical attention promptly. INHALATION: Remove to fresh air and provide oxygen. INGESTION: Immediately call a physician or poison control center. DO NOT INDUCE VOMITING!

#### THESE MATERIALS ARE FOR INDUSTRIAL USE BY FACTORY-TRAINED QUALIFIED TECHNICIANS ONLY!

CONSULT YOUR POLIBRID TECHNICAL SERVICE REPRESENTATIVE BEFORE SPECIFYING!

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