PolySpec THIOKOL

TECHNICAL DATA SHEET – THIOKOL® 5050

Revised: 3/2017

DESCRIPTION

Thiokol® 5050 primer is a low viscosity primer used to prime concrete and steel surfaces for Thiokol polysulfide sealants.

TYPICAL APPLICATION

PRIMER	Thiokol® 5050 Primer @ 700-800 linear ft/unit (concrete) – 2-3 mils (steel)
SEALANT	Thiokol® polysulfide sealant system

PERFORMANCE DATA

VOC	0.0 gm/L
VOLUME SOLIDS	65%

STORAGE & INSTALLATION

STORAGE ENVIRONMENT	Dry area, 65-80ºF
APPLICATION TEMPERATURE, AMBIENT	40-95ºF
APPLICATION TEMPERATURE, SUBSTRATE	Minimum 5º above dew point
SHELF LIFE	1 year
POT LIFE, @ 77ºF	3 hours
RECOAT TIME FOR CONCRETE, @ 77ºF	min 2 hours / max 36 hours
RECOAT TIME FOR STEEL, @ 77ºF	min 4 hours / max 36 hours

Material cures more slowly at cooler temperatures, and working time will be substantially reduced at higher temperatures. In hot weather, material should be cooled to 65ºF to 80ºF prior to mixing and application to improve workability and avoid shortened pot life. The data shown above reflects typical results based on laboratory testing under controlled conditions. Reasonable variations from the data shown above may result.

BENEFITS

- Low viscosity formulation penetrates and seals concrete pores
- Easy 1:1 volume mixing
- Easy to apply
- Fast recoat time

RECOMMENDED USES

- Concrete and steel primer as part of a complete Thiokol® Sealant System

GENERIC DESCRIPTION:

Epoxy Primer

STANDARD COLORS:

Clear Amber

PACKAGING:

0.25-Gallon Unit

MIX RATIO:

1R : 1H

COVERAGE:

½" – 960 linear ft/unit
1" – 480 linear ft/unit

700–800 linear ft/unit (concrete)
1100-1300 linear ft/unit (steel)
May vary depending on concrete porosity

THIOKOL® 5050

EPOXY PRIMER FOR POLYSULFIDE SEALANTS

ITW Engineered Polymers

CONSIDERATIONS & LIMITATIONS

1. Do not thin with solvents unless advised to do so by ITW Engineered Polymers.
2. Confirm product performance in specific chemical environment prior to use.
3. Prepare substrate according to “Surface Preparation” portion of this document.
4. Always use protective clothing, gloves and goggles consistent with OSHA regulations during use. Avoid eye and skin contact. Do not ingest or inhale. Refer to Material Safety Data Sheet for detailed safety precautions.
5. For industrial/commercial use. Installation by trained personnel only.

SURFACE PREPARATION

CONCRETE: Apply only to clean, dry and sound concrete substrates that are free of all coatings, sealers, curing compounds, oils, greases or any other contaminants.

- New concrete should be cured aminimum of 28 days.
- Concrete that has been contaminated with chemicals or other foreign matter must be neutralized or removed.
- Remove any laitance or weak surfacelayers.
- Concrete should have a minimum surfacetensile strength of at least 300 PSI per ASTM D-4541.
- Surface profile shall be CSP-3 to CSP-5 meeting ICRI (International Concrete Repair Institute) standard guideline #03732 for coating concrete, prod cing a profile equal to 60-grit sandpaper or coarser. Prepare surface by mechanical means to achieve this desired profile.
- Moisture vapor transmission should be 3pounds or less per 1,000 square feet over a 24 hour time period, as confirmed through a calcium chloride test, as per ASTM E-1907. Quantitative relative humidity (RH) testing, ASTM F-2170, should confirm concrete RH results <75%.
- All surface irregularities, cracks,expansion joints and control joints should be properly addressed prior to application.
- Outgassing may occur due to theporosity of some concrete surfaces. To reduce the effect of outgassing, the primer and coating should be applied when the temperature of the concrete substrate is dropping. This usually occurs in the evening; however, the concrete substrate temperature should be measured with a surface thermometer for verification. Double priming will greatly reduce the effects of outgassing by additionally filling the pores in the concrete.

STEEL: For immersion service, “White Metal” abrasive blast with an anchor profile of 2–4 mils in accordance with Steel Structures Painting Council Specification SP-5-63 or NACE No. 1 is required. For splash and spillage exposure, “Near White” SP-10-63 or NACE No. 2 is required.

Refer to PolySpec Surface Preparation Guidelines for more details

INSTALLATION STEPS

1. Component A Resin should be premixed prior to using due to possible additive separation.
2. Pour Component B Hardener into the Component A Resin pail and mix by hand for a minimum of two minutes. Scrape the side of the pail to ensure the entire product has been properly mixed; any unmixed material left on the side of the pail will not cure.
3. Thiokol 5050 Primer can be applied by brush.
4. Allow primer to cure within recommended recoat time before proceeding to application of Thiokol sealant.
5. For best results, clean tools and equipment with PolySpec® All Purpose Cleaner, a nonflammable and nonnon-evaporating cleaner. Always wear gloves when using this product.

Premixed / DOC 5050-TDS