



## TECHNICAL DATA SHEET – RLP® 2378+

Revised: 7/2023

### DESCRIPTION

RLP 2378+ is a highly elastomeric, two-component, 100% solids polysulfide based coating for a variety of surface applications. It provides an impermeable yet flexible membrane with excellent resistance to chemical attack and environmental degradation.

### TYPICAL APPLICATION

PRIMER	PolySpec 100EX @ 5–7 mils (concrete) or American Safety MS-11CZ LT Primer @ 4–6 mils (steel)
BASECOAT	RLP 2378+ @ 16-20 mils
TOPCOAT	RLP 2378+ @ 16-20 mils
OPTION	Fabric Reinforcement: Geotextile Fabric

### PERFORMANCE DATA

TENSILE STRENGTH (ASTM C - 412)	300 psi
ELONGATION (ASTM D - 638)	250%
HARDNESS, SHORE A (ASTM D - 2240)	42-47
OPERATING TEMPERATURE, MAXIMUM	180°F
DRY:	Dependent on chemical exposure
WET:	
VOC	0.00 lb/gal; 0.00 gm/L
VOLUME SOLIDS	100%

### BENEFITS

- Impermeable yet flexible membrane
- 100% solids, zero VOC formulation
- Resistant to broad range of fuels and chemicals
- Maintains elasticity at very low temperatures
- Resistant to UV degradation
- Excellent crack-bridging capabilities
- Can be applied directly over elastomeric expansion joint sealants

### RECOMMENDED USES

- Primary & secondary containment for water, oil, fuels or other chemical solutions
  - Floating roof tank decks
  - Earthen dike containment membrane\*
  - Contaminated or deteriorated concrete\*
  - Unsound coated surfaces
- \*when applied over geotextile fabric*

**GENERIC DESCRIPTION:** Epoxy-Modified Polysulfide

**STANDARD COLORS:** Gray, Black

**PACKAGING:** 4.5-Gallon Unit

**MIX RATIO:** 1R: 2H

**COVERAGE:** 80 ft<sup>2</sup> / gallon @ 20 mils

**RLP® 2378+**

**CONCRETE, STEEL & EARTHEN DIKE LINING, REINFORCED ELASTOMERIC POLYSULFIDE**

**STORAGE & INSTALLATION**

STORAGE ENVIRONMENT	Dry area, 65-80°F
APPLICATION TEMPERATURE, AMBIENT	50-95°F
APPLICATION TEMPERATURE, SUBSTRATE	Minimum 5°F above dew point
SHELF LIFE	12 months
POT LIFE, @ 77°F	30 minutes
FOOT TRAFFIC, @ 77°F	16 hours
FULL SERVICE, @ 77°F	24 hours / Continuous Immersion: 7 days

**SURFACE TEMPERATURE**

	65°F	75°F	90°F
RECOAT (MIN)	32 hours	12 hours	6 hours
RECOAT (MAX)	4 days	72 hours	48 hours

**CONSIDERATIONS & LIMITATIONS**

1. This product is not designed for vehicular traffic.
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 during use. Avoid eye and skin contact. Do not ingest or inhale. Refer to Material Safety Data Sheet for detailed safety precautions.
5. Do not direct high-pressure spray toward any part of the body. Ensure that all related equipment has proper pressure ratings and that pressure is relieved before servicing equipment.
6. For industrial/commercial use. Installation by trained personnel only.

**SURFACE PREPARATION**

Refer to PolySpec Surface Preparation Guidelines for more details.

**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.

**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.

**EARTHEN DIKE:** (Incorporates a fabric liner.) Grade the dike/basin to promote flow of rainwater or spilled products away from the tank to a sump or collection area. The Thiokol RLP 2378+ fabric liner system may be applied over any type of soil condition as long as the surface profile is smooth and stable. If there is the possibility of puncture from the underside, such as angular rock, install a minimum of 2" of compacted sand to smooth the area. A trench (minimum 1' wide x 1' deep) should be excavated at the top of the dike wall to secure the liner at the completion of the project. See "Fabric Liner" below.

**FABRIC LINER**

**NOTE:** Install section of fabric only of a size where the first coat of RLP 2378+ can be applied the same day.

1. Sandblast any concrete or steel to which liner will be adhered.
2. Install non-woven polypropylene fabric (5 oz/yd<sup>2</sup> minimum) in pre-cut lengths perpendicular to the slope of the dike. Starting at the high point of the application site, lay out the fabric, overlapping the seams a minimum of 4".
3. Fold back top of overlapped seam and apply 3/8" to 1/2" diameter bead of THIOKOL 2235M Sealant 1" to 2" from edge of bottom sheet of fabric. Fold the top flap onto the base and roll with a metal roller, removing all wrinkles. Any sealant that is squeezed out of the seam should be smoothed.
4. Liner penetrations and connections should use pre-cut skirts of flashing of the fabric liner adhered with 2235M to expedite the installation of the field of fabric liner.

**INSTALLATION STEPS**

**NOTE:** For installations over unsound surfaces or earthen dike, fabric liner will be used in lieu of primer. Please refer to "Surface Preparation" and "Fabric Liner" instructions outlined at left.

1. Prime surface with PolySpec Primer. See data sheet for application details.
2. Independently pre-mix each component prior to using in order to disperse any possible settling that may occur during transportation and storage.
3. Prepare and apply RLP 2378+ according to one of the methods outlined below:

**A. Plural Component Airless Spray Equipment**

(recommended) Plural component airless spray equipment must be capable of heating both RLP 2378+ components to 90–140°F (to improve atomization properties). A static mixer with a minimum of 12 elements should be installed in two locations: 1) where material exits manifold, and 2) before final 6' whip hose going to spray gun. Mix Ratio: 1:2. Tip Size: 0.025–0.029" with a 10" or 12" pattern.

**B. Batch Mixing for Roller, Squeegee, Brush, Airless Sprayer**

Pour Component A Resin into Component B Hardener pail. Mix well using a mechanical jiffy-type mixer operated at low speed until a consistent color is attained. Scrape container sides to ensure proper blend.

**OPTION:** If thinning is required, dilute material with 8–10 ounces of xylene per gallon of mixed material. A Graco King pump, minimum of 45:1, can be used. A minimum 3/8" ID fluid line should be used with the shortest possible operating length. A short whip may be used to improve the mobility of the spray gun. Application by roller, squeegee and brush are also suitable methods.

**NOTE:** Work very quickly due to the product's short pot life (approximately 30 minutes at 77°F). For airless spray applications, the operator must be aware of this issue to prevent material from setting up in pump and lines.

4. After the first coat has become slightly tack free, apply an additional coat of resin/hardener mixture according to Step 3. Be sure first coat is clean and dry before application of second coat.

**NOTE:** If it has rained or the second coating has not been recoated within 72 hours, the surface must be solvent-wiped to remove dust and dirt. If surfaces are to be recoated after 7 days, the first coat must be scrubbed with a nonmetallic scouring pad or water-blast to remove surface contamination. After the surface is dry, the topcoat may be applied.

5. For earthen dike systems, it is necessary to secure the liner at the top of the berm wall after the RLP 2378+ system has cured. This is accomplished by backfilling the trench with soil, rounded gravel or using a "deadman" post.
6. Always wear gloves when using this product.

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