

DESCRIPTION

PolySpec® IMO UltraLite is a trowel applied ultra-lightweight epoxy mortar system comprised of a modified waterborne epoxy resin and specially formulated lightweight aggregates. This system is designed for marine use in wet or dry spaces as an underlayment, filler, and patching material. When properly applied this system will offer a moisture resistant, seamless surface designed for compatibility with most finish decking and coating systems.

PolySpec® IMO Ultra Lite is approved under the requirements outlined in Parts 2, 5, and 6, Annex 1 of the IMO FTP Code.

Coast Guard Approval Numbers 164.106/36/0 and 164.117/33/0

TYPICAL APPLICATION

• Primer	PolySpec IMO-UltraLite Primer/Sealer @ 5-7 mils
• Body Coat	Light Weight Leveler @ up to 2" thickness
• Seal Coat	PolySpec UltraLite Primer/Sealer @ 5-7 mils
• Optional	PolySpec IMO-Approved Primary Deck Covering

PERFORMANCE DATA

Weight @ 1/4"	MIL-D-3135	0.98lb/ft ²
Compressive Strength .	ASTM C-579.....	2500 psi
Bond Strength	MIL-D-4541	330 lb/in ²
	(Cohesive Failure of PolySpec IMO-Ultralite)	
Flexural Strength	ASTM C-293.....	1200 psi
Tensile Strength	ASTM D-412.....	600 psi

STORAGE & INSTALLATION

Storage Environment.....	Dry area, indoors: 18–27°C / 65–80°F
Application Temperature, ambient (ideal)	16–24°C / 60–75°F
Application Temperature, substrate ...	Minimum 50°F / 5°F above dew point
Shelf Life	12 months
Pot Life, @ 77°F.....	45 minutes

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 65°F to 80°F 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.

CONSIDERATIONS & LIMITATIONS

1. This product should not be installed at temperatures less than 50°F (10°C) or higher than 95°F (35°C).
2. Do not thin with solvents unless advised to do so by PolySpec.
3. Confirm product performance in specific chemical environment prior to use.
4. Prepare substrate according to "Surface Preparation" portion of this document.
5. 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.
6. For industrial/commercial use. Installation by trained personnel only.

PolySpec® IMO Ultra Lite

TECHNICAL DATA SHEET

Epoxy Lightweight Underlayment and Leveler

BENEFITS

- Ultra-Lightweight
- Fast set, minimal downtime
- Waterborne: safe for environment, installers, and occupants
- Absence of hazardous solvents
- Easy cleaning of tools in water
- Good compressive strength
- Suitable for use in wet or dry spaces
- Can be sanded easily
- Water-resistant
- Excellent flexural strength

RECOMMENDED USES

- PolySpec® IMO-UltraLite is recommended for military and shipboard applications. It is designed as an underlayment for ceramic tile, epoxy terrazzo, vinyl, polymeric decking materials and virtually any other deck covering or coating system
- Wet & dry spaces in most marine and shipboard underlayment applications
- Approved for deck leveling or fairing, patching, ramping, and sloping to drain

STANDARD COLORS

Natural

PACKAGING / COVERAGE

- UNIT SIZE: .5 ft³ per 6-Gallon Pail (used for mixing)
- COVERAGE @ 1/4": 24 ft² 2.23 m²
- COVERAGE @ 1/2": 12 ft² 1.11 m²
- COVERAGE @ 2": 3 ft² .28 m²

Primer/Sealer

- UNIT SIZE: 2 Gallon
- COVERAGE @ 5-7WFT 450 ft² 41.81 m²

SURFACE PREPARATION

This product can be applied to the following substrate(s) that have been prepared according to PolySpec Surface Preparation Guidelines:

Steel

Existing deck covering shall be totally removed. It is imperative that, before installation begins, all surfaces to which PolySpec decking product(s) will be applied — including deck, bulkheads, pipes, protrusions, etc. — are cleaned of all foreign matter such as dirt, dust, plaster, cement, paint, oil, grease, wax, rust, scale, moisture, concrete curing compounds or release agents, and other contamination.

- *Metal surfaces must be cleaned until bright metal is exposed.*
- *Surface preparation should include vertical surfaces three inches up from the deck.*
- *Surface preparation shall be by the methods most feasible, such as grinding, abrasive vacuum blasting, sanding, or using a needle gun or other appropriate hand tool(s) to clean the deck.*
- *Remove all dust and other loose material so that adhesion is assured.*

If existing substrate or deck covering cannot be removed, material must be cleaned and inspected for soundness prior to installing PolySpec product.

If PolySpec product is to be installed over an existing system, it is imperative that the coating be thoroughly sanded, cleaned and wiped with isopropyl alcohol before installation of the PolySpec decking product(s).

Urethane topcoats must be completely removed to ensure adhesion of the system.

Refer to PolySpec Guidelines for Subfloor Preparation for additional details.

INSTALLATION STEPS

1. **Primer/Bond Coat Application:** Mix PolySpec® IMO-UltraLite Primer/Sealer Coat for approximately 1–2 minutes. Scrape sides and bottom of can to ensure complete mixing. Do not turn mixing container over on deck to allow to drain. Apply one coat with brush, short nap roller or squeegee to all surfaces where PolySpec® IMO-UltraLite body coat is to be applied. Avoid puddles. IMO-UltraLite should be applied while primer is still wet.
2. **Body Coat Application:** Add Part B to Part A and mix thoroughly for approximately 1–2 minutes with a Jiffy mixer. Scrape sides and bottom of can to make sure all components are thoroughly mixed. Pour mixed resin into pail. Add aggregate and mix approximately 2 minutes until all particles are wet. All components must be used promptly once the curing agent has been added to the resin to avoid having material set up in the container.
Apply one coat of PolySpec® IMO-UltraLite using standard cement finishing tools. Use low angle lighting to detect trowel marks. Hand trowel to compact, level, and smooth finish. Material can be applied to desired thickness, down to feather edge.
Allow material to cure for a minimum of 14 hours or until hard. Knock off any burrs with sander or the edge of a steel trowel. Sweep/vacuum floor clean prior to seal coat application.
3. **Seal Coat Application:** One coat of PolySpec® IMO-UltraLite Sealer Coat is normally required to achieve desired finish. Workmen should wrap shoes in polyethylene, masking tape or other suitable covering to protect the surface. Pour PolySpec® IMO UltraLite Sealer Part B into PolySpec® Part A and mix thoroughly for 2 minutes using a mechanical mixer and jiffy mixing blade. Scrape sides and bottom of can during mixing, to insure proper mix. If increased surface penetration is desired, 6 oz. of water may be added during mixing to reduce viscosity. Once properly mixed, apply by brush to base, corners, around piping, and other hard to reach areas. For walking surfaces and other accessible flat areas, apply with a red or white rubber squeegee. Then roll out material using a short nap, ¼" roller to remove ridges, lap marks or drops on the surface. **DO NOT OVER SEAL.** A properly sealed surface has all voids filled with sealer uniformly. Allow sealer to cure long enough to walk on, usually 12 to 16 hours depending on the temperature. All epoxy coatings cure faster in warm weather and slower in cold weather.
Avoid contact with water to the surface for 36 hours depending on the temperature. **CAUTION:** Contact with water will cause whitish, cloudy spots if the epoxy is not fully cured.

CLEANING EQUIPMENT

1. Clean tools and equipment with warm soapy water.
2. Once cured, use PolySpec® All Purpose Cleaner, a non-flammable and low-evaporating cleaner.
3. Always wear gloves when using this product.
4. Wash hands, arms and face with warm soapy water.

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