



TECHNICAL DATA SHEET – POLYSPEC® IMO ULTRALITE TG

Revised: 3/2018

DESCRIPTION

PolySpec IMO UltraLite TG is a 100% solids, zero VOC's, trowel applied, modified epoxy resin that is mixed with proprietary lightweight aggregates. It is specially formulated to provide a seamless, lightweight surface for finished deck coverings.

IMO UltraLite has been approved as meeting parts 2, 5, and 6 of Annex 1 of the IMO Fire Testing Procedures (FTP) Code.

Coast Guard Approval Number 164.106/37/1 and 164.117/36/1

TYPICAL APPLICATION

PRIMER	PolySpec IMO UltraLite TG Primer/Grout Coat @ 5-7 mls
BODY COAT	PolySpec IMO UltraLite at desired thickness
SEAL COAT	PolySpec IMO UltraLite TG Primer/Grout Coat @ 5-7 mls
OPTIONAL	PolySpec IMO Approved Primary Deck Covering

PERFORMANCE DATA

WEIGHT@ 1/4" (MIL-D - 3135)	0.75-0.85 lb/ft²
COMPRESSIVE STRENGTH (ASTM D - 695)	2300-2500 psi
FLEXURAL STRENGTH (ASTM C - 293)	1200-1400 psi
TENSILE STRENGTH (ASTM D - 412)	700-900 psi
ADHESIVE STRENGTH (MIL D - 3135)	>1000 psi
CORROSION RESISTANCE (MIL D - 3135)	No sign of corrosion, No softening or detachment from the steel plate
FLAME RESISTANCE (MIL-D - 3135)	Self Extinguishing, Flame Retardant
RESISTANCE TO ELEVATED TEMPERATURE (MIL-D-3135)	No flow, No slip, No softening

BENEFITS

- Lightweight
- Extended overcoat and application times, which ease application schedules
- No shrinkage, when applied at any thickness
- Excellent compatibility with virtually all epoxy primer systems
- Greater tolerance in areas of low humidity
- Zero VOC: safe for environment, installers, and occupants
- Absence of hazardous solvents
- Easy to repair
- Tenacious bond to substrate
- Good compressive strength
- 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 covering
- Wet & dry spaces in all marine and shipboard applications, especially those prone to flexing
- Approved for deck leveling or fairing

STANDARD COLORS: Light Orange

POLYSPEC® IMO ULTRALITE TG

TROWEL GRADE EPOXY LIGHTWEIGHT UNDERLAYMENT

PACKAGING / COVERAGE

.5 cu ft per 5-Gallon Pail (used for mixing)
20 sq ft @ ¼" thickness
5 sq. ft @ 1" thickness
Primer/ Bond Coat: .75 Gallon 100-120 sq. ft. @ 10-12 WFT
Sealer / Grout Coat: .75 Gallon 80-100 sq. ft. @ 10-12 WFT

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°C / 5°F above dew point
SHELF LIFE	6 month
POT LIFE	30 - 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 ITW Polymers Sealants North America, Inc.
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 during use. Avoid eye and skin contact. Do not ingest or inhale. Refer to Safety Data Sheet for detailed safety precautions.
6. For industrial/commercial use. Installation by trained personnel only.

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/Bond 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 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 grout coat application.
3. **Grout Coat Application:** One coat of PolySpec® IMO UltraLite Grout Coat is normally required to achieve desired finish but a second coat may be added if necessary. Workmen should wrap shoes in polyethylene, masking tape or other suitable covering to protect the surface. Mix PolySpec® IMO UltraLite material together making sure to stir thoroughly and to scrape the sides and bottom of the container to ensure proper mixing. Pour from the mixing container at once to prolong working time. 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.

NOTE: Follow installation instructions to ensure proper material cure.

CLEANING EQUIPMENT Once cured, use MEK or xylene. Always wear gloves when using this product. Wash hands, arms and face with warm soapy water.

C / DOC IMOULTG 04006-1106-TDS
TuffRez and PolySpec are ® Registered Trademarks of
ITW Polymers Sealants North America, Inc..

© Copyright 2018 ITW Polymers Sealants North America, Inc. All rights reserved. Published technical data and instructions are subject to change without notice. Please visit the online catalog at www.polyspec.com for the most current technical data and instructions. Or, you may contact your ITW Polymers Sealants North America, Inc. representative for current technical data and instructions.

ITW Polymers Sealants North America, Inc. warrants its products to be free from defects in material and workmanship. ITW Polymers Sealants North America, Inc.'s sole obligation and Buyer's exclusive remedy in connection with the products shall be limited, at ITW Polymers Sealants North America, Inc.'s option, to either replacement of products not conforming to this warranty or credit to Buyer's account in the invoiced amount of the nonconforming products. Any claim under this Warranty must be made by Buyer to ITW Polymers Sealants North America, Inc. in writing within five days of Buyer's discovery of the claimed defect, but in no event later than the expiration of the applicable shelf life, or one year from the delivery date, whichever is earlier. Buyer's failure to notify ITW Polymers Sealants North America, Inc. of such nonconformance as required herein shall bar Buyer from recovery under this warranty.

ITW Polymers Sealants North America, Inc. makes no other warranties concerning this product. No other warranties, either expressed or implied, or statutory, such as warranties of merchantability or fitness for a particular purpose, shall apply. In no event shall ITW Polymers Sealants North America, Inc. be liable for consequential or incidental damages.

Any recommendation or suggestion relating to the use of the products made by ITW Polymers Sealants North America, Inc. whether in its technical literature, or in response to specific inquiry, or otherwise, is based on data believed to be reliable; however, the products and information are intended for use by Buyers having requisite skill and know-how in the industry, and therefore it is for the Buyer to satisfy itself of the suitability of the products for its own particular use, and it shall be deemed that Buyer has done so, at its sole discretion and risk. Variation in environment changes in procedures of use, or extrapolation of data may cause unsatisfactory results. ITW Polymers Sealants North America, Inc. can not guarantee that color will conform to sample, if provided.