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307 LITE™ | CAN BE SCULPTED, STAMPED, AND TEXTURED

LIGHTWEIGHT TROWELABLE SCULPTING EPOXY - PUBLIC SPACE SAFE

TB – TECHNICAL BULLETIN

PRODUCT DESCRIPTION

307 LITE™ is a lightweight, two-component trowelable epoxy system that is public space safe- It is formulated as an easy-to-mix, "paste-like" consistency that is commonly used for general fabrication, coating, sculpting, patching, filling, joining, and repair. It contains no VOC's and is solvent-free.

307 LITE cures to a hard, strong, durable material that is easy to sand or machine and is suitable for interior and exterior spaces and themed environments.

WORKING FEATURES & BENEFITS

307 LITE is easy to mix and apply by hand or with a trowel or spatula.

EASY TO MANIPULATE

- ***Can be Smoothed with Water***
- ***Can be Sculpted***
- ***Can be Stamped***
- ***Can be Textured***
- ***Bonds to Itself and Many Other Substrates***
- ***Will Not Melt or Dissolve Foam Surfaces***
- ***Easy to Clean Up with Just Water***

USE WITH POLYGEM THICKENING AGENT

POLYGEM THICKENING AGENT allows you to customize your working consistency from a "paste" to a thicker "dough" or "clay" material to best fit your preferred working style and project needs.

THICKENING AGENT makes **307 LITE** easier to manipulate, sculpt, & stamp. It also minimizes sag when applying the material to vertical surfaces.

SUBSTRATES

307 LITE bonds to many materials including metals, wood, fiberglass, concrete, and rigid foams.

NOTE: 307 LITE DOES NOT BOND to silicone, polyethylene, polypropylene, or plastic wrap.

PACKAGING

307 LITE is available in a **2** or **10 Gallon Kit** and also in a **2 Drum Kit**.

PERFORMANCE BENEFITS OF CURED MATERIAL

MORE INFO

- ***Lightweight Formula***
- ***Chemically Inert***
- ***No Solvents***
- ***Non-Toxic***
- ***Halogen-Free***
- ***Contains No Heavy Metals***
- ***Cures to a Hard, Durable, Lightweight Material***
- ***Easy to Sand, Shape, and Machine***
- ***Paintable, Stainable, and Pigmentable***
- ***Weather Resistant to Heat & Moisture***
- ***Solvent Resistant***
- ***For Aquatic Use Once Sealed***

UNIT SIZE & COVERAGE RATE @¼ in. (6.35 mm)

2 Gallons 20.75 lb (9.41 kg)	**12 square ft.** (1.11 m^2)
10 Gallons 105.90 lb (51.76 kg)	**63 square ft.** (5.85 m^2)
2 Drums 1,125 lb (510.29 kg)	**676 square ft.** (7.06 m^2)

TECHNICAL SPECIFICATIONS

TYPICAL PROPERTIES | All values measured after 7 days at 73 °F (23 °C).

Mix Ratio: 1A:1B by volume | **Pot Life:** 90 Min. (100g)

Color: Gray Color may vary
A:Light Gray - Part B: Dark Gray

Mixed Viscosity: Thick Paste
Part A: 3,000 cps. - Part B: 375 cps

Working Time: .
Spreadable: 60 Min. - **Stampable:** 90 Min. - **Sculptable:** 2 Hrs.

Cure Time: 16 Hrs | **Shore Hardness:** 78D | **Shelf Life:** 36 Mos.*

Tensile Strength: 1,967 psi ASTM D638

Elongation at Break: 0.28% ASTM D638

Flexural Modulus: 365 psi ASTM D790

Flexural Strength: 3,958 psi ASTM D790

Compressive Modulus: 151 psi ASTM D695

Compressive Strength: 6,798 psi ASTM D695

Specific Volume: 21.65 cu. in./lb. ASTM D1475

Properties are based on the mixed material without Thickening Agent

* From date of manufacture when stored at 73 °F (23 °C) in unopened containers.

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PROJECT PREPARATION

BEST PRACTICE: CONDUCT A SMALL-SCALE TEST.
Before mixing substantial amounts of epoxy, always conduct a small-scale test to ensure the planned material & process yields desired results.

1. **Storage –** Store and use product at room temperature 73 °F (23 °C) **DO NOT USE** below 60 °F (16 °C).

2. **Safety -** Use in a well-ventilated area ("room size" ventilation). If you use any epoxy system regularly, wearing a NIOSH-approved respirator is advised. Wear safety glasses, long sleeves, and rubber gloves to minimize skin contact. Wear nitrile or vinyl gloves only.

3. **Plan Your Project & Rate of Coverage –** Recommended minimum thickness is ¼ in (6.35 mm).

4. **Prepare Your Substrate/Surface –** If applying to smooth surfaces such as plastics, glass, etc., surface may be roughened with sandpaper (120 grit) to aid adhesion. Clean surface thoroughly to ensure it is free of dust, oils, release agents, etc.

   For Metal Substrates– Abrade the surface to a white metal finish, then wipe down and clean it thoroughly. Apply a fiberglass sheet saturated in a laminating epoxy to the surface. When possible wrap the sheet around the substrate to ensure a good mechanical bond before applying **307 LITE**.

5. **Measure & Mix–** After pre-mixing Parts A and B, measure out equal parts 1A:1B by volume. Combine and mix material thoroughly until "streak-free". Large volumes can be mixed on a flat surface using two trowels. **DO NOT** mix more than can be applied within the working time of 60 minutes.

6. **When using with Polygem Thickening Agent –** Thoroughly coat gloves and working area with **Thickening Agent** to prevent sticking. Knead Parts A & B together while folding small amounts of powder into the mixture. The amount of powder to add depends on the desired working consistency. Continue to fold mixture repeatedly until it is streak-free.

7. **Application:** Trowel or spread by gloved hand onto your substrate. **DO NOT** apply to a surface that is less than 60 °F (16 °C).

   WORKING TIME - MATERIAL IS MASS SENSITIVE.
   More Mass = Less Time to Work.
   Apply and spread quickly to achieve the maximum working time. Temperatures above 73 °F (23 °C) will reduce working time.

SCULPT | STAMP | TEXTURE

SCULPT: Sculpt using a gloved hand and/or tools to shape material to your desired form. Water may be used to minimize material build up on gloves and/or tools.

STAMP: When stamping, we recommend using a flexible rubber stamp. Using a spray bottle filled with water, lightly dampen your stamp, and press it firmly into the material. Once the impression has been made, peel the stamp away carefully. There should be minimal transfer of material onto the stamp.

NOTE: Thickened 307 LITE will need to cure for awhile before it can be stamped. Thickening the material with Polygem's Thickening Agent will allow stampiing sooner with less of a wait time.

TEXTURE: Smooth Glass-Like Surface
Apply clear plastic food wrap to the uncured epoxy and smooth it to eliminate all wrinkles. Leave the wrap in place until the epoxy cures. Once cured, the plastic wrap can be peeled away easily; leaving a high gloss finish.

Rough, Distressed or Patterned Surface
A gloved hand or tools may be used to roughen or distress the surface. Small amounts of water applied to the tools or surface before & during texturing will minimize material build up.

FINISHING, PAINTING , AND CLEAN UP

Finishing – Cured material may be finished either by hand or with power tools. For best results & to minimize build up of material , use power tools at lower speeds.

NOTE: We recommend wearing a dust mask when machining.

Painting – Cured **307 LITE** can be painted with any water or solvent based paint system available from your local distributor. Follow paint manufacturer's instructions.

Sealing – For outdoor or post-finish applications, 307 LITE **must be sealed** with a commercially available, UV-resistant 2K clear coat. Apply in accordance with the clear coat follow manufacturer's instructions to ensure long-term performance and environmental resistance.

IMPORTANT: Sealing is **mandatory** for all components intended for use in aquatic environments, regardless of whether the part has been painted. When used for underwater applications the proper sealer to use is **1618™ CLEAR** by Polygem.

Clean Up – Uncured **307 LITE** can be cleaned up easily with just water.

Cleaning – When cleaning cured **307 LITE** wipe with a mild solvent followed by a water rinse. **DO NOT** allow water or solvent to pool on the surface.

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