Technical Data Sheet (TDS) – Pourla Heat Resistant Epoxy Resin

Product Description

POURLA

Pourla Ultra Heat Resistant Epoxy Resin is a high-performance, self-leveling, crystal-clear epoxy system designed for surface coating, DIY coasters, and other applications that require a durable, high-gloss, and heat-resistant finish. This 1:1 mix ratio formula is easy to use, ensuring a smooth application. It provides exceptional scratch and stain resistance and features UV inhibitors to reduce yellowing over time.

FOR THE BEST PERFORMANCE, READ ALL DIRECTIONS BEFORE MIXING OR POURING!

Applications

- Surface Coating
- Coasters
- Tray
- Artwork and Resin Crafts
- River Tables Coating
- Other High-gloss Protective Coatings

Preparation

Work Environment

For the best results, ensure your workspace is clean, dry, and free of dust and debris. The ideal working temperature is between 65-75°F (18-24°C) with low humidity. High humidity can slightly reduce working time, while temperatures below 65°F can slow curing. Keep the temperature above 65°F for the first 48 hours after application to allow proper curing.

Surface Preparation

All surfaces must be clean, dry, and free from contaminants such as dust, oil, moisture, lint, and sanding debris. Avoid using paper towels, dirty rags, or touching the surface with bare hands, as oils and dirt can interfere with adhesion. If sanding is required, remove all sanding residue and wipe the surface down with a clean, dry cotton cloth dampened with denatured alcohol. Do not use a tack cloth, as it may leave residues.

Wood & Porous Surfaces

When working with porous materials like live edge wood or concrete, applying a seal coat is recommended to prevent air bubbles from forming during the curing process. Use a thin layer of mixed epoxy at 1 ounce per square foot and allow it to cure until solid. After curing, lightly sand the surface with 80-120 grit sandpaper to smooth out imperfections, then wipe it clean with denatured alcohol before proceeding with the flood coat.

Materials & Tools

Before beginning your project, gather all necessary materials and tools, including:

- Two-part epoxy resin kit (Parts A & B)
- Graduated mixing containers
- Clean stir sticks or a power mixer
- Disposable gloves and protective gear
- Torch or heat gun for bubble removal
- Drop cloths for protection
- Casting molds or forms (if applicable)

By following these preparation steps, you'll create the optimal conditions for a smooth, high-quality epoxy finish that is free from defects and imperfections.

BEFORE USE: ALWAYS USE PROPER SAFETY EQUIPMENT, SUCH AS GOGGLES, PROTECTIVE MASK, GLOVES, AND CLOTHING.

WARNING: The cure of epoxy is an exothermic reaction and will generate heat. Do not apply in thicknesses greater than the recommended maximum application thickness for the product. It can reach 200-300°F for a massive reaction.

Mixing & Pouring

Measuring & Mixing Ratio

• Measure 1 part Resin (Part A) to 1 part Hardener (Part B) by liquid volume.

- Always pour the Hardener (Part B) first, followed by the Resin (Part A) into a clean, smooth-sided container.
- Use graduated mixing containers to ensure precise measurement. Any variance in the ratio may cause curing issues.

Mixing Process

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- Mix thoroughly for at least 3-5 minutes, scraping the sides, bottom, and corners of the container to ensure even blending.
- Avoid whipping excessive air into the mixture, as this can introduce bubbles.
- If mixing large quantities (1 gallon or more), use a power mixer at low speed to prevent excessive air entrapment. For smaller batches, use stir sticks.
- Do not mix more than 3 gallons at a time. If additional batches are needed, always use a clean, dry container to prevent contamination and improper curing.

Adding Tints & Colorants

- Do not add pigments or colorants until the resin and hardener are fully mixed.
- Once mixed, pour the resin into separate cups to blend in colors as needed.
- Only use epoxy-compatible tints and colorants to avoid chemical reactions that may interfere with curing.

Pouring & Application Thickness

- Pour the mixed epoxy onto the surface using an S-shaped motion for even distribution.
- Spread the resin evenly with a spreader or brush, allowing it to self-level naturally.
- Do not apply more than 1/8" per coat. For thicker applications, use step-pouring techniques.

Removing Air Bubbles

- Allow the epoxy to sit for 1-2 minutes to let bubbles rise naturally.
- Use a heat gun or torch in a sweeping motion (6-10 inches from the surface) to eliminate air bubbles.
- Avoid concentrating heat in one area for too long to prevent surface distortion.

Curing Time & Recoating

- Working time: 20-30 minutes (varies by temperature and project size).
- Recoating: Apply additional layers within 14-24 hours for the best adhesion—no sanding required.
- If more than 24 hours have passed, lightly sand with 220-grit sandpaper before applying the next layer.
- Full cure & maximum hardness: Allow 2-7 days before placing items on the surface.

By following these steps, you'll achieve a flawless, high-gloss, and durable epoxy finish with minimal defects.

Clean-Up & Disposal

Tool Cleaning

Clean all tools and mixing equipment using Isopropyl Alcohol or a residue-free cleaner. Do not use soap and water, as it may interfere with the epoxy's properties.

Disposal

Dispose of any unused product and containers in accordance with Federal, State, and local regulations. Do not pour excess epoxy down drains or into the environment.

Storage

Keep any remaining product in its original, tightly sealed containers, stored in a cool, dry place away from direct sunlight. Always store in a locked area, out of reach of children and pets.

Technical Specifications

Application Data

Property	Specification
Epoxy Resin Color	Clear
Hardener Color	Clear
Epoxy Resin Density:	$70 \pm 2 \text{ lb/ft}^3$



Epoxy Hardener Density:	$60 \pm 1.9 \text{ lb/ft}^3$
Mix Ratio by Volume	1A:1B
Mix Ratio by Weight	1.2A:1B
Working Time (Pot Life)	20-35 minutes at 25°C (77°F)
Initial Cure Time	5-6 hours @77°F
Full Cure Time	36-48 hours @77°F
Resin Viscosity	7500 - 9500 cP @ 75°F
Hardener Viscosity	800 - 1600 cP @ 75°F
Coverage	12.5 sq. ft. per gallon at 1/8" thickness
Shelf Life	At least 12 months in sealed containers

Physical Data

Property	Specification
Cured Color	Clear
Finish	High-gloss, crystal-clear
UV Resistance	Enhanced UV inhibitors to reduce yellowing
Hardness (Shore D)	80-84
Heat Distortion Temperature (HDT)	90°C (195°F)
Water Absorption Rate	<0.1%

For additional details or technical support, refer to the Safety Data Sheet (SDS) or contact our team.