EPOXY49 LLC | 1714 W 23RD ST, HOUSTON, TX 77008 | (346) 281-7132 | EPOXY49.COM

POLYASPARTIC 49 TM - TECHNICAL DATA SHEET (TDS)

98-99% High-Solids Aliphatic Polyaspartic UV & Hot-Tire Topcoat | Document Rev: 2026.11

MIX RATIO (A:B)	SOLIDS CONTENT	DRY TO TOUCH	UV STABILITY
1A : 1B by Volume	98%-99% High Solids	2 Hours @ 72 deg F	2,000+ Hrs QUV (No Yellow)

1. PRODUCT DESCRIPTION & COMMERCIAL USE

POLYASPARTIC 49 is a commercial 98-99% high-solids two-component aliphatic polyaspartic ester urethane finish coat engineered as the UV-stable, chemical-resistant, and hot-tire proof armor layer over vinyl flake broadcasts, metallic epoxy floors, and quartz systems. Enables next-day return to service with 3x the abrasion resistance of standard epoxy topcoats.

2. ASTM PHYSICAL & PERFORMANCE PROPERTIES (TESTED @ 72 deg F / 50% RH)

PROPERTY	TEST METHOD	TYPICAL VALUE / SPECIFICATION
Volume Solids Content	ASTM D2697	**98% - 99% High Solids**
VOC Content	EPA Method 24 / SCAQMD 1113	**< 50 g/L (VOC Compliant)**
Mix Ratio (Part A : Part B)	By Volume or Weight	**1 Part A : 1 Part B (1:1 Ratio)**
Mixed Viscosity @ 77 deg F (25 deg C)	ASTM D2196	**400 - 600 cps**
Shore D Hardness	ASTM D2240	**80 - 82 Shore D**
Taber Abrasion Resistance	ASTM D4060 (CS-17, 1000g, 1k cyc)	**< 22 mg Loss (Extreme Wear Resistance)**
UV Accelerated Weathering	ASTM G154 (QUV 2,000+ Hours)	**Delta E < 0.5 (100% Non-Yellowing Aliphatic)**
Hot-Tire Pick-Up Resistance	140 deg F Wet Patch / Shear Test	**Pass - Zero Delamination, Blistering, or Staining**
Tensile Strength	ASTM D638	**6,500 psi**
Elongation at Break	ASTM D638	**8% - 10% (Thermal Shock Flexible)**
Chemical Resistance	ASTM D1308 (24-Hr Spot)	**Gasoline, Motor Oil, Brake Fluid, Skydrol, Road Salt**
Working Time on Slab @ 72 deg F / 50% RH	Field Open Time	**15 - 20 Minutes (High Humidity Accelerates Cure)**
Cure Schedule @ 72 deg F / 50% RH	Dry / Foot / Vehicle	**2 Hrs Dry-to-Touch | 4-6 Hrs Foot | 24-48 Hrs Vehicle**
Recommended Film Thickness	Maximum Single Coat	**6-10 Mils WFT (Do Not Exceed 12 Mils in Single Coat)**

3. SURFACE PREPARATION, MIXING & FIELD APPLICATION PROTOCOL

* 1. Substrate Readiness: Apply over scraped & vacuumed vinyl flake broadcast or tack-free/sanded EPOXY 49 base coat.
* 2. Dew Point Check: Substrate temperature MUST be at least 5 deg F above dew point. High humidity accelerates polyaspartic cure.
* 3. 1:1 Mixing: Combine 1 Part A with 1 Part B by volume. Blend at 300-350 RPM for 2 minutes. Do not whip air into resin.
* 4. Ribbon Pour & Spread: Pour immediately onto floor in ribbons. Spread with flat squeegee or magic trowel.
* 5. Cross-Roll Finish: Immediately back-roll and cross-roll using an 18" 3/8" nap solvent-resistant shed-free roller.
* 6. Coverage Rates: Over Scraped 1/4" Flake: 125-160 sq ft/gal (10-12 mils) | Over Smooth Metallic Base: 200-250 sq ft/gal (6-8 mils).
* 7. Thin Film Rule: Never puddle or apply thicker than 12 mils WFT per coat, or CO2 micro-bubbling / solvent hazing may occur.

4. OSHA GHS SAFETY & HANDLING SUMMARY (REFER TO FULL SDS BEFORE USE)

* SIGNAL WORD: Part A (Polyaspartic Ester Resin) = WARNING | Part B (Aliphatic HDI Polyisocyanate) = DANGER (OSHA GHS).
* Hazard Statements: Part A & B: H317 Skin sensitizer. Part B: H332 Harmful if inhaled, H334 Asthma/respiratory sensitizer.
* Required PPE: Nitrile gloves, chemical goggles, protective clothing, and NIOSH-approved organic vapor respirator in enclosed spaces.
* Storage & Moisture Sensitivity: Store at 60 deg F-80 deg F. Part B reacts with atmospheric moisture - reseal containers immediately.
* Emergency & Shelf Life: 24-Hr CHEMTREC: 1-800-424-9300. 12-month shelf life in factory-sealed F-style metal cans.