EPOXY 49 — JOBSITE MIXING, STOICHIOMETRY & EXOTHERM WALL POSTER

TAPE AT EYE LEVEL ABOVE MIXING STATION BEFORE OPENING PART A OR PART B CONTAINERS · 11" x 17" SHOP & TRAILER MASTER

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24-HOUR CHEMICAL EMERGENCY (CHEMTREC)
1-800-424-9300
Part B Corrosive (UN2735) / HDI Vapor - Flush Eyes 15+ Min

CRITICAL EXOTHERM RULE: NEVER LEAVE MIXED RESIN SITTING IN THE BUCKET! (>200°F FLASH CURE & SMOKE IN 11-20 MIN)

IMMEDIATELY AFTER THE 3-MINUTE DRILL MIX, DUMP THE ENTIRE PAIL ONTO THE CONCRETE SLAB IN CONTINUOUS S-RIBBONS TO DISSIPATE HEAT!

STEP 1 · EXACT STOICHIOMETRY: 2A : 1B vs. 1A : 1B

2 PARTS A : 1 PART B BY VOLUME (WHITE SPLIT BUCKETS / 5G)

*** EPOXY 49 (Gold) · PRIMER 49 (Sky Blue) · MVB 49 (Safety Orange)**

* 3-Gal Kit = 2 Gal Part A (Green Badge) + 1 Gal Part B (Orange Badge).

*** Partial Batch Rule: Measure in marked quart/gallon cups (NEVER eyeball!).**

*** METALLIC DOSING: Add 1 Jar (150g) Mica per 1 Gal Part A (2 Jars / 3-Gal Kit).**

Pre-blend pigment into Part A for 60-90 sec BEFORE pouring in Part B!
3-Color Marble Split: 70% Primary Base · 20% Secondary · 10% Accent Vein.

1 PART A : 1 PART B BY VOL OR WT (METAL F-STYLE TINS)

*** POLYASPARTIC 49 (Aliphatic Cyan UV Topcoat - 2-Gal Metal F-Tin Kit)**

* Equal 1 : 1 Mix (e.g. 2 Quarts A + 2 Quarts B = 1 Mixed Gallon).

*** THIN-FILM LIMIT: Apply 6-12 Wet Mils MAX! Puddling >12 mils traps CO2 haze.**

*** MOISTURE LOCK: Reseal Part B Metal F-Tin cap IMMEDIATELY after pouring!**

STEP 2 · 350 RPM JIFFY PADDLE & 3-MINUTE TIMER RULE

01 — 300 - 350 RPM MAX:
Use low-speed corded mixing drill + helical Jiffy paddle.
High RPM whips micro-air bubbles that cure as pinholes!

02 — SET 3-MIN PHONE TIMER:
Mix Epoxy / Primer / MVB for a FULL 3:00 MINUTES (2:00 min for Polyaspartic 49). Unmixed streaks = soft sticky spots!

03 — SCRAPE WALLS & FLOOR:
Sweep flat mixing stick around bucket walls and bottom chime at 1:30 mark so zero unmixed Part A clings to plastic.

04 — RIBBON DUMP @ 3:00:
Pour entire mixed batch onto floor in S-ribbons immediately. Never scrape unmixed bucket residue onto finish coat!

STEP 3 · PRE-POUR SLAB, DEW-POINT & MVER GO / NO-GO

CHECKPOINT	GREEN LIGHT (GO)	RED LIGHT (STOP / FIX)
Concrete Profile	**ICRI CSP 2-3 Grind** (CSP 3 for MVB 49)	**Smooth trowel, sealer,** or acid-etched slab!
Slab Moisture	**<= 3.0 lbs MVER (F1869)** & <= 75% RH -> PRIMER 49	**3.1 - 25 lbs / 76-99% RH** -> MUST USE MVB 49!
Extreme Vapor	**MVB 49 @ 16 Mils WFT** (100 sf/gal, pH 14 rated)	**> 25 lbs MVER or active** standing water -> STOP!
Slab Temp (IR)	**55°F - 85°F Slab Temp** (65°F-78°F optimal)	**< 50°F (slow/blush) or** > 90°F (flash pot life)!
Dew Point Gap	**Slab >= +5°F (+3°C)** ABOVE Dew Point	**Within 5°F of Dew Pt** (condensation / peel)!
Ambient RH %	**Relative Humidity < 85%** (50% RH ideal cure)	**RH > 85% -> Amine blush** & Polyaspartic micro-foam
Outgas Trend	**Stable or FALLING slab** temp (afternoon/evening)	**Rising morning sun on** porous unprimed slab!

MANDATORY MIXING & APPLICATION TOOL CHECKLIST

[ ] Clean graduated 5-Gal HDPE mixing pails + quart ratio cups

[ ] Low-speed 350 RPM drill + Jiffy paddle + flat scrape sticks

[ ] Infrared slab thermometer + thermo-hygrometer (Dew Point)

[ ] Notched squeegee (3/16" MVB / 1/8" Metallic) + 18" Magic Trowel

[ ] 18" shed-free 3/8" solvent-resistant rollers + spiked shoes

[ ] 91% Isopropyl Alcohol mist sprayer (NEVER 70% water-heavy IPA!)

[ ] Cleanup Solvents: Acetone, MEK, or Xylene (before resin cures)

STEP 4 · POT LIFE, RECOAT WINDOWS & COVERAGE

PRIMER 49 (2A : 1B)

Pot Life: 25-35 Min | Tack-Free: 4-6 Hrs

Recoat Window: 6 - 24 HRS (If >24h: sand 80-grit)

Yield: 200-250 sf/gal (6-8 mils) · 600-750 sf / 3G Kit

MVB 49 VAPOR BARRIER (2A : 1B)

Pot Life: 11-20 MIN (FAST!) | Tack-Free: 4 Hrs

Recoat Window: 4 - 16 HRS (If >24h: sand 60-80 grit)

Yield: 100 sf/gal @ 16 mils (25 lb MVER) · 300 sf / 3G

EPOXY 49 BASE / METALLIC (2A : 1B)

Pail: 20-30 Min · Slab Open Time: 30-45 Min

Recoat Window: 8 - 24 HRS (If >24h: sand 120-grit)

Metallic: 40-50 sf/gal (35m) · Flake Base: 150 sf/gal

POLYASPARTIC 49 TOPCOAT (1A : 1B)

Working Time: 15-20 Min (Humidity speeds cure!)

Dry: 2h · Coat 2: 2-6h · Foot: 4-6h · Vehicle: 24-48h

Smooth: 200-250 sf/gal (6-8m) · Flake: 125-160 sf/gal

REQUIRED OSHA PPE & SDS VAULT

*** Gloves: >= 8 mil Nitrile or Butyl Chemical Gloves**

*** Eyes: ANSI Z87.1 Chemical Splash Goggles**

*** Lungs: NIOSH OV / P100 Cartridge Respirator**

*** First Aid Eyes: Flush w/ water 15+ min -> 911**

Scan QR for 13 Component SDS & ASTM TDS:
HTTPS://EPOXY49.COM/SPECS

20 ARCHITECTURAL METALLIC MICA SWATCH KEY (150G JAR PER GAL PART A · #11 RUBY RED = VERIFIED VENDOR #108 CRIMSON RED)

01 Onyx Black #14171A	02 Gunmetal Silver #4B5563	03 Liquid Gold #D97706	04 Mayan Bronze #78350F	05 Aztec Copper #B45309	06 Deep Ocean Blue #1E3A8A	07 Carib. Turquoise #0D9488	08 Pearl White #E2E8F0	09 Champagne Gold #C5B393	10 Emerald Green #065F46
11 Ruby Red (#108) #991B1B	12 Amethyst Purple #581C87	13 Mocha Espresso #451A03	14 Sterling Silver #94A3B8	15 Sapphire Blue #1D4ED8	16 Rose Gold #B76E79	17 Polished Brass #A16207	18 Charcoal Grey #374151	19 Titanium Pewter #52525B	20 Diamond Shimmer #CBD5E1