

# Liquid Porcelain

# Liquid Porcelain™

Trilon S Series, Tile-Like Acrylic Urethane

LP249 SERIES

Base Part A LP249  
Activator Part B LP249B

## SPECIFICATIONS

### DESCRIPTION:

**Liquid Porcelain** and all products of the **Liquid Porcelain™ Refinishing System** were designed specifically for the tub and tile refinishing industry. **Liquid Porcelain** provides a water and stain resistant finish that lasts for years and stands up to the difficult service exposure typical of bath and kitchen surfaces. **Liquid Porcelain** has the best gloss, gloss retention, color retention, and durability today's paint technology can provide. This two part acrylic urethane is hard drying with a resilient, tile-like toughness that gives it unsurpassed impact and abrasion resistance. In addition, **Liquid Porcelain** is water impermeable and fully resistant to splash and spill type contact from most chemicals. This high quality refinishing enamel is available in three gloss levels: high gloss, semi-gloss, and low semi-gloss.

### USE:

**Liquid Porcelain** is ideal for use on:

- bathtubs and shower stalls
- bathroom and kitchen countertops and sinks
- countertop backsplash areas

Product results will vary by substrate and application method.

**It is the user's responsibility to determine the suitability and performance of this product for their application.**

### COLOR AVAILABILITY:

**Liquid Porcelain** is stocked in white and black, in three gloss levels. Custom colors available; minimum order is required. Special costing will be applied.

### ORDER CODE: [Mix Ratio: 4 Part A : 1 Part B, by volume]

Part A [base] ..... LP249 + gloss + color  
Part B [activator] ..... LP249B

Individual products are identified by the product series number, followed by a gloss identifier and color number.

Ex: LP249G700 is Liquid Porcelain, Gloss, White.

This product is available in:

Gloss ..... G  
Semi-Gloss ..... S  
Low semi-gloss ..... M

### PACKAGING:

This product is packaged in kits, containing both Part A and Part B components. Kit containers may be partially filled to obtain total yield when mixed.

Total Yield:	Part A:	Part B:
40 ounces	1 quart can	1 half pint can
1.25 gallons	1 gallon can	1 quart can
1 quart*		

*\*Southern California Air Quality Management District regulates this product only be purchased/used in quart sizes or smaller. Sizes larger than 1 quart may NOT be purchased for use as an Architectural or Maintenance coating in regions with these regulations.*

### ADVANTAGES:

- Low VOC
- Designed specifically for tub and tile refinishing
- State of the art gloss and color retention
- Excellent chemical, stain, and abrasion resistance
- Excellent flexibility, chip, and scratch resistance
- Extremely durable; resistant to acidic etching
- Easy to clean and repair

### LIMITATIONS:

- Not recommended for immersion into gasoline, diesel, hydraulic fluids or solvents
- Proper surface preparation required
- Maximum RH at worksite: 75%

## PROPERTIES

### DRY SCHEDULE: [at 50% RH and 1.5 mil DFT]

	60° F	77° F	90° F
<b>Dry to Touch</b>	60 mins	45 mins	25 mins
<b>Recoat</b>	8 hrs	2 hrs	60 mins
<b>Dry to Handle</b>	8 hrs	2 hrs	60 mins
<b>Full Cure</b>	7 days	7 days	7 days

**Critical Recoat Window:** After one week light sanding may be necessary if coating is subject to extended exterior exposure.

**VOC:** [excluding exempt solvents, mixed] ..... 2.00 lbs/gal (242 g/l)

**VOC:** [including exempt solvents, mixed] ..... 1.31 lbs/gal (154 g/l)

**FLASH POINT:** [setaflash, mixed] ..... 76° F (24.4° C)

**WEIGHT PER GALLON:** [mixed] .. 11.2 ± 0.5 lbs (1.34 kg/liter)

**APPLICATION VISCOSITY:** [recommended, mixed]

# 3 Zahn Seconds ..... 30-40

**SOLIDS:** [average, mixed]

% By Weight ..... 65 ± 2%

% By Volume ..... 58 ± 2%

**COVERAGE:** [average, mixed]

Theoretical at 1.5 mil DFT ..... 620 sq ft/gal

**REQUIRED FILM THICKNESS:**

ASTM D1005 Minimum Dried Film ..... 1.5 mil (38µ)

ASTM D4414 Minimum Wet Film ..... 3.0 mil (76µ)

**ASTM D523 GLOSS:**

@ 60° ..... 90

@ 20° ..... 75

**ASTM D3363 PENCIL HARDNESS:**

3H ..... Pass

**ASTM D5402 MEK RUBS:**

200 Double ..... Pass

**ASTM D2794 IMPACT RESISTANCE:**

160 inlb forward, 160 inlb reverse ..... Pass

**ASTM B117 SALT SPRAY RESISTANCE:**

5% Salt Spray, 150 hours [BondRite 1000] ..... Pass

**ASTM D5894UV CORROSION WEATHERING:**

ASTM D610 Rusting 7 cycles, 150 hours ..... Pass

ASTM D714 Blistering 7 cycles, 100 hours ..... Pass

**ASTM D4587/D523/D4214 QUV-UVA:**

500 hours @ 60° ..... 10% loss

1000 hours @ 60° ..... 20% loss

**ASTM D2247/D714 HUMIDITY RESISTANCE:**

400 hours [unscrubed] ..... Pass

**ASTM D4585 MOISTURE CONDENSATION:**

100° F, 400 hours ..... Pass

**ASTM D3359 ADHESION:**

5B ..... Pass

**ASTM D4060 ABRASION RESISTANCE:**

CS17 wheel, 110 cycles, 1 kg load ..... < 10 mg

**ASTM D522 FLEXIBILITY:**

180° bend, 1/4" mandrel ..... Pass

**ASTM D3170 CHIP RESISTANCE:**

Rating ..... N/A

**ASTM D2485 DRY HEAT RESISTANCE:**

200° F ..... Pass

**WET HEAT RESISTANCE:**

180° F Non-immersion ..... Pass

**ASTM D2243 WATER-BORNE FREEZE THAW:**

3 cycles ..... N/A

Properties listed above correspond to formula for gloss, white product and may vary by gloss level and/or color. All tests conducted at 1.5-2.0 mils DFT on Bondrite™ 1000 Q-steel panels, fully cured, 7 days, air dry, at 77° F and 50% RH.

TRIANGLE COATINGS, INC.  
Sales: 925-583-0800  
www.tricoat.com



# Liquid Porcelain™

## High Solids, Low VOC, Acrylic Urethane Topcoat

### APPLICATION DATA

#### SURFACE PREPARATION:

All surfaces must be clean, dry, and free of contaminants. All dirt, grease, rust, mill scale, or loose chalky paint must be removed. Surfaces must remain dry and protected from all moisture until fully cured.

Fiberglass and previously painted surfaces must be sanded to dull. Finish sanding surfaces with a very fine 400-600 grit sandpaper; dry brush or vacuum to remove all dust. All substrates must be primed or pre-treated.

#### APPLICABLE SUBSTRATES: [when properly prepared]

- porcelain
- fiberglass
- Formica
- cast polyester
- most metals
- steel

#### RECOMMENDED PRIMERS:

- 283P309 Aquapoxy™ Primer
- 983P746 TriBond - Liquid Porcelain™ adhesion promoter
- 941FAM35 Epoxy Primer - Liquid Porcelain™

Consult Triangle Coatings for other primer recommendations.

#### APPLICATION TEMPERATURE:

- Substrate must remain 10° F above the dew point during application and for 24 hours after application.
- Not recommended for substrate temperatures below 50° F or above 100° F.

#### MIXING PARAMETERS:

**Ratio:** ..... [Part A : Part B]  
 By Weight [LP249G700]..... 4.02 : 1.00  
 By Volume ..... 4.00 : 1.00  
**Sweat-in Time:** ..... none  
**ASTM D2196 Pot Life:** [valid for qtys of 1 gallon or more]

50° F	65° F	77° F	85° F
5 hrs	4 hrs	4 hrs	3 hrs

#### APPLICATION METHODS:

**Liquid Porcelain** can be applied by HVLP or air assist airless. For other types of application, please contact your Triangle Coatings representative. This product should be applied in two distinct coats to avoid pinhole voids.

#### HVLP:

Fluid Tip and Needle: ..... .030 - .040"  
 Fluid Pressure: ..... 10-15 psi  
 Air Cap Pressure: ..... 60 psi

#### Air Assist Airless:

Fluid Tip: ..... .012 - .013"  
 Fluid Pressure: ..... 900-1,400 psi  
 Air Cap Pressure ..... 10 psi

#### Airless:

..... no

#### Brush or Roller:

..... limited

#### THINNING:

..... AT75\*  
 Add **Part B** before reducing. For conventional spray, reduce 10-15% by volume.

#### CLEANUP:

..... AT75\*  
 Clean tools while **Liquid Porcelain** is still wet.  
**\*ONLY AT75 may be used to clean or thin this product.**

### HEALTH & SAFETY PRECAUTIONS

#### WARNING:

FLAMMABLE LIQUID AND VAPOR. DO NOT INGEST. May be harmful if swallowed or inhaled. Vapor may affect the brain or nervous system causing dizziness, headache, or nausea and can cause nose and throat irritation. Liquid contact with eye and skin causes irritation. Keep away from sparks, heat, or open flame. Use with adequate ventilation. Avoid breathing of vapor. Avoid contact with eyes and skin. Wash hands thoroughly after using and before eating and smoking. Wear an appropriately fitted respirator (NIOSH/MSHA approved) during and after application unless air monitoring demonstrates vapor levels are below applicable limits. Keep container closed when not in use. If spillage occurs, absorb and dispose of according to local regulations.

#### Contains:

- aromatic hydrocarbon mixture, CAS#64742-95-6
- bis 1,2,2,6,6-pentamethyl-4-piperdiny, CAS#41556-26-7
- 4-chlorobenzotrifluoride, CAS#98-56-6
- homopolymer of HDI, CAS#28182-81-2
- n-butyl acetate, CAS#123-86-4
- propylene glycol methyl ether acetate, CAS#108-65-6
- polyol
- xylylene, CAS#1330-20-7

#### FIRST AID:

Should eye contact occur, flush with plenty of water for at least 15 minutes and get medical attention if vision is disturbed. For skin, wash thoroughly with soap and water. If swallowed, seek medical attention immediately. DO NOT induce vomiting.

#### NOTICE:

Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. This product does not contain materials listed in California Proposition 65.

**THIS PRODUCT IS FOR PROFESSIONAL USE ONLY. KEEP THIS PRODUCT OUT OF REACH OF CHILDREN.**

### SHIPPING & HANDLING

#### SHIPPING DESCRIPTION: [CFR 49]

**Ground, Air, Vessel** ..... Paint, 3, UN1263, PG III  
 Required Label ..... FLAMMABLE LIQUID  
 Required Marking ..... PAINT UN1263

#### IMDG PACKAGING:

FLAMMABLE LIQUID, class 3.3, UN1263, III

#### IMDG STOWAGE:

..... Category A

#### UNIFORM FIRE CODE: [CFR 29]

..... CLASS II

#### STORAGE TEMPERATURE:

..... 120° F max

#### SHELF LIFE: [warranted]

..... 1 YEAR

#### HMIS RATINGS:

..... H - 2; F - 3; R - 0; PP - H

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