



LiquaTile 1171

NSF Approved/ USDA Authorized Topcoat
Preliminary Technical Data Bulletin

PRODUCT DESCRIPTION

LiquaTile 1171 is a 100% solids reinforced, proprietary formulated epoxy-based lining designed for corrosion control and protection of tank internals and any other areas requiring approval for potable water or USDA authorization. LiquaTile 1171 has been tested and certified by NSF under Standard 61 for use in potable water tanks. LiquaTile 1171 is also USDA authorized for use in Federally Inspected meat and poultry plants where there is a possibility of incidental food contact. This product is intended for industrial use only.

TYPICAL USES

- * Steel and fiberglass storage tanks or pipelines
- * Harsh/Severe Industrial Maintenance Applications
- * Tank Linings including potable water
- * Chemical process floors & concrete containment areas
- * Pulp and Paper Services
- * Waste Pits
- * Wastewater Treatment Applications

BENEFITS

- Fast Turnaround time (Cures in 12 hours at ambient temperature)
- Flexible to reduce coating stress caused by “oil canning” effects
- High-build, easy to install monolithic application process (12-16 mils WFT/DFT per coat)
- Excellent adhesion to steel, concrete and fiberglass substrates
- Low cured shrinkage
- VOC compliant (Solvent Free)

TECHNICAL DATA

Components Two
 Weight, lbs/gal. (mixed) 12.5+/- 0.5
 Recommended Thickness, mils DFT 12 – 32
 Theoretical Coverage, mil sq.ft./gal. 1604
 Practical Coverage, mil sq.ft./gal. allow appropriate loss factors (Depends on porosity and surface profile)
 Barcol hardness, min. 65
 Color(s) Gray, Black, and White (Standard)
 (Other colors may be available upon request)
 Shelf Life (unmixed/unopened) One Year
 VOC Content (mixed), g/l Zero
 Flash Point (mixed), °F >173 F

TECHNICAL DATA (continued)

Pot Life, minutes @ 77°F 60
 Max Service Temperature (dry) 300F
 Max Service Temperature (wet)* 190F
 * Tested with Deionized water
 Coverage to Achieve Dry Film Thickness, sq.ft./gal.
 (Actual – allow for approximate loss of 10%)
 @ 16 mils 100
 @ 32 mils 50

Drying Time (@ 77°F and 50% relative humidity)
 To Touch 4 hours
 To Handle 6 hours
 To Recoat 2 to 6 hours

* See Chart Below... These values are approximate and depend on many factors including coating thickness, amount of thinner used, and surface temperature. This chart is only to be used as a guideline. Actual time may vary depending on these factors.

Temp. (°F)	Pot Life (min.)	Cure Time (hours)	Min. Recoat (hours)	Max. Recoat (days)
50	120	48	12	4
77	60	12	6	4
90	30	9	3	3

NOTE: Below 50 degrees F/10 degrees C cure is greatly retarded and film properties may be adversely affected.

Cure Time* to Achieve a Minimum Barcol hardness of 65 (@ 77°F and 50% relative humidity)

For Immersion Service 12 hours
 *Force curing is required for low temperature applications to expedite curing process.
 ** NSF requires a 48 hour cure before a tank is returned to service

APPLICATION INFORMATION

Method
 Airless spray system (min. 45:1 compression ratio); 0.023” – 0.027” orifice tip; use 3/8” min. hose unless more than 50 ft. is needed. If more than 50 ft. is needed, use 1/2 inch hose. For smaller areas and repairs; brush, trowel. Or use 1/4” nap shed resistant phenolic core roller.
 NOTE: Do not apply if temperature is below 50 degrees F or if the dewpoint is within 5 degrees of the temperature. All application and surface preparation should be consistent with

APPLICATION INFORMATION (cont.)

good painting practices.

Minimum Temperature of Application (Air) - 50 °F, otherwise force curing is required.

Thinning - Not recommended or desired.

Handling - Store at moderate temperatures (65-85°F) prior to product application for ease of handling and mixing. Additional heating may be required and is recommended for spray application.

Pre-Heating - Not required at ambient temperatures.

Mixing - The mix ratio is 2 parts Resin: 1 part Hardener by volume. The potlife is 1 Hour at 77 degrees F. The potlife will be extended at lower temperatures and shortened when higher. All components (Part A Resin and Part B Hardener) should be between 70 degrees F and 90 degrees F prior to mixing. Mechanically pre-mix each component; add the hardener into the resin and then mix the combined compound at 400-600 rpm for 3 to 4 minutes using a power agitator, such as a Jiffy mixer and a high strength industrial drill. To ensure complete mixing, scrape sides and bottom of containers. Incomplete mixing will result in soft spots or color variation. Begin application immediately after mixing.

Surface Preparation

All surfaces shall be pre-cleaned and dry, free of dust, dirt, oil or any other foreign matter according to SSPC-SP1. Prior to abrasive blasting, grind smooth all weld seams, sharp edges, weld spatter, and pitted or irregular surfaces. Steel surfaces shall be abrasive blasted to SSPC SP-5, or NACE #1 “white metal” finish with a minimum 2.5 mil surface profile. If salt contamination is suspected, clean substrate using a liquid soluble salt remover according to the manufacturers instructions. Surfaces should be coated immediately after blasting to avoid any failures associated with flash rusting. Concrete surfaces shall be abrasive blasted to remove all laitence and other surface contaminants. These instructions are summarized. For additional information regarding surface preparation specifications and techniques, please contact our technical services department.

Limitations

- A) A 10 mil build is usually obtainable with one coat; however, this build decreases rapidly when the substrate temperature is above 90 degrees F (32 degrees C.) NSP 120 Clear has a significantly lower build than the pigmented products.
- B) This product may not cure properly in temperatures below 50 degrees F (10 degrees C.)

APPLICATION INFORMATION (cont.)

C) Epoxies will show early chalking and yellowing on exposure to ultraviolet light.

D) When applying NSP coating products in cooler temperatures (50 degrees F - 60 degrees F) and high humidity, it is necessary to watch for the formation of an amine blush. This blush may appear as a milky white residue on the surface of the cured coating, but will not affect the integrity of the film. However, blush must be removed by solvent wipe before the application of another coat or an intercoat adhesion problem will occur.

Clean Up: Use Acetone or other Ketone solvent.

PACKAGING AND SHIPPING INFORMATION (cont.)

All Wolverine Coatings Corporation’s LiquetaTile products are packaged as two-component units consisting of a slack-filled pail of resin and a slack-filled pail of hardener. Kits are available in 1.5G, 3G, and 150G units.

DOT Class (resin) – Not regulated

DOT Class (hardener) –Paint Related Material, 8, DOT Number UN 3066, III

All shipments are freight collect, F.O.B. Shipping Point (Florida, South Carolina, Georgia, or Texas).

GENERAL SAFETY GUIDELINES

Wolverine Coatings Corporation products are for industrial use only and installed only by qualified coating and lining contractors. Store in closed containers in a cool, dry area away from direct sunlight, sources of ignition and other hazards. Personnel shall wear protective clothing and eyewear, solvent-resistant gloves and OSHA approved respiratory equipment. Avoid contact with eyes and skin. Do not ingest or inhale. In some cases, products may cause skin irritation or allergic reactions. Refer to product Material Safety Data Sheets (MSDS) for information regarding emergency and first aid procedures, health effects, reactivity data and other special precautions. Since this is a two-component mixture be sure to read both Material Safety Data Sheets (Part A & B). All work shall be performed in accordance with current OSHA regulations.

The information contained herein is to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no warranty of results and assume no liability for any damages incurred by the use of this product. Our products are sold on the condition that the user evaluates them, as well as our recommendations, to determine the suitability for a particular purpose. The user is solely responsible for the selection of Wolverine Coatings Corporation products.