UNI-TILE SEALER *LV*

PENETRATING EPOXY PRIMER/SEALER

Technical Data & Application Instructions

PRODUCT DESCRIPTION

UNI-TILE SEALER LV is a two-component, epoxy polyamide penetrating primer/sealer. This unique industrial maintance coating is especially formulated to penetrate, prime, and seal porous surfaces.

BASIC USES

UNI-TILE SEALER LV is used to seal porous substrates and to improve adhesion when applying epoxy and polyurethane topcoats. It is also manufactured in a black dye version for use in sealing wood and concrete substrates before application of polyurethane foam.

UNI-TILE SEALER LV is a superior concrete floor finish for use in food and meat processing plants, animal holding facilities, and industrial or warehouse floors where chemical and abrasion resistance, as well as cleanability, are required. If used on exterior surfaces without an approved topcoat, **UNI-TILE SEALER LV** will amber or darken on aging.

TYPICAL PROPERTIES

1. **Mixing Ratio:**
   1 to 1 by volume (1A:1B)
2. **Mixed Usable Pot Life:**
   8 hours @ 75°F (24°C), 50% R.H.
   4 hours @ 95°F (35°C), 50% R.H.
3. **Solids by Weight (Mixed):**
   58% (±1) [ASTM D 2369]
4. **Solids by Volume (Mixed):**
   53% (±1) [ASTM D 2697]
5. **Dry Time to Touch:**
   60 minutes at 75°F (24°C), 50% R.H.
6. **Cure Time:**
   6 hours at 75°F (24°C), 50% R.H.
7. **Low & High Temperature Limits:**
   -70°F to 150°F (-56°C to 66°C)
8. **Volatile Organic Content (VOC):**
   380 grams/liter

ADVANTAGES

1. **ADHESION:** The penetrating action of **UNI-TILE SEALER LV** imparts a tenacious chemical and physical bond to concrete, brick, wood, fiberglass, plaster or drywall. This sealer creates an excellent bond with most topcoats to these substrates.
2. **NON-LIFTING:** Any of UNITED'S coatings may be applied over cured **UNI-TILE SEALER LV** without lifting or bubbling this solvent-resistant primer/sealer.
3. **DEEP PENETRATION:** The thin viscosity of the liquid allows **UNI-TILE SEALER LV** to penetrate very small crevices and preserve dense, steel troweled concrete, float finish concrete, sandblasted concrete or similar surfaces.
4. **ELIMINATES CONCRETE DUSTING:** Indepth protection eliminates concrete dusting and affords years of minimum maintenance.
5. **ANTI-SPALLING:** Applied to concrete decks, walks, industrial areas, etc., **UNI-TILE SEALER LV** effectively protects concrete from intrusion of destructive salts, oils, solvents and gasoline. It prevents damage from freezing and spalling, preserving concrete in a stable condition.

COLORS

UNI-TILE SEALER LV is manufactured in standard clear. Black is available when the sealer is applied to wood and concrete substrates beneath polyurethane foam. The black surface will absorb the sun's radiant heat, enhancing the ability of the polyurethane foam to achieve its maximum yield.

QUEST
CONSTRUCTION PRODUCTS

PACKAGING & MIXING

UNI-TILE SEALER LV is a two-component material available in 1-gallon (3.8 liter) can, 5-gallon (19 liter) pails and 55-gallon (209 liter) drums.

Mix Part A with an equal amount of Part B Catalyst. Stir thoroughly for five (5) minutes. After mixing, allow a minimum of thirty (30) minutes for sweat-in before using.

UNI-TILE SEALER LV can be applied full strength to help prevent pinholes on porous substrate. For most applications, however, it should be diluted up to a 1:1 ratio by volume, depending on the density and porosity of the substrate, with MEK, Xylol or Acetone. This will allow for an optimum combination of penetration and sealing capability over various substrates.

Shelf life of Part A and Part B components in unopened containers is 2 years. Store at temperatures between 50°F and 100°F (10°C to 38°C). Do not open containers until ready to use the material.

SURFACE PREPARATION

All surfaces must be clean and dry, and free of any dirt, oil, grease, soapy films, release or curing agents, surface chemicals or other foreign contaminants. UNITED recommends that new concrete be water-cured in lieu of using a curing compound.

Prior to applying **UNI-TILE SEALER LV**, all loose material, dirt and dust shall be removed by use of a power vacuum. If concrete is badly spalled, restore loose aggregate to a reasonable condition utilizing UNITED'S **Uni-Crete**.

New concrete that has been previously cured with a curing compound shall be cleaned prior to acid etching with a proper chemical solvent. Follow directions and safety precautions on label.

New concrete shall be cleaned and etched with 10% Muriatic Acid Solution. Dilute in proportion of 1 part acid to 8 to 10 parts clean water. Muriatic Acid Solution shall be sprinkled onto the concrete surface. After the solution has stopped bubbling or foaming (normally 5 to 10 minutes), the area shall then be scrubbed thoroughly by hand or by using mechanical scrubbers. After scrubbing, surfaces shall then be thoroughly rinsed with liberal amounts of fresh water. The surface may require additional rinsing or a high pressure water rinse to remove all traces of the acid solution.

Concrete surfaces that are contaminated with oil, grease, dirt, etc., shall be cleaned using **United Cleaning Concentrate (UCC)** and water. Cleaning shall be accomplished using mechanical scrubbers. Rinse thoroughly with fresh water to remove all traces of the **UCC** cleaner.

UNITED COATINGS HYDROSTOP LLC
2810 S. 18th Place • Phoenix, AZ 85034
1-480-754.8900 1-800-541-4383
www.questconstructionproducts.com

APPLICATION

UNI-TILE SEALER LV may be applied by brush, roller or spray. Airless spray is the preferred method. Any airless spray equipment capable of 1,000 psi (6,890 kPa) and ½ gallon per minute (1.9 l/minute) delivery can be used. A reversible self-cleaning spray tip with orifice size of .015" to .025" (.38 mm to .64 mm) and minimum 40 degree fan angle is recommended. For maximum production on large projects, airless spray equipment capable of 2,000 psi (13,790 kPa) and 1 gallon per minute (3.8 l/minute) delivery can be used.

Before spraying, flush Xylol or Methyl Ethyl Ketone (MEK) solvent through the hoses and spray gun to prevent contamination.

Coverage rate will vary depending upon surface porosity. One coat is usually sufficient for sealing of concrete and wood surfaces prior to topcoating. Two coats may be required if the substrate is extremely porous or when the **UNI-TILE SEALER LV** is being used on its own as a floor sealer. Apply **UNI-TILE SEALER LV** at the following approximate rates:

Concrete: 400 to 500 sq. ft./gallon (9.8 to 12.2 m²/l)
Wood: 500 sq. ft./gallon (12.2 m²/l)
Lightweight Concrete: 200 to 250 sq. ft./gallon (4.9 to 6.1 m²/l)

UNI-TILE SEALER LV should be topcoated, if appropriate, within 24 hours of application. At no time shall any topcoat be applied after 48 hours following application, as it will not achieve a chemical bond with the **UNI-TILE SEALER LV**.

Clean equipment with Methyl Ethyl Ketone (MEK).

LIMITATIONS & PRECAUTIONS

UNI-TILE SEALER LV is a thin penetrating sealer. Do not use as a high-build surface coating. Substrate temperature must be a minimum of 50°F (10°C).

UNI-TILE SEALER LV has been tested for chemical resistance against many common industrial chemical cleaners and solvents. For floors subjected to acids or unusual chemical spillage, consult UNITED'S Technical Service Department for recommendations.

Solvents in **UNI-TILE SEALER LV** are flammable. Use only in a well ventilated area. Keep away from heat, sparks, open flame, or lighted cigarettes. Use explosion-proof application equipment that has been grounded and bonded. Avoid prolonged or repeated breathing of vapor or spray mist. Approved (MSHA/NIOSH) chemical cartridge respirator should be worn by applicator. Avoid contact with eyes and contact with skin.

For additional information on safety requirements, refer to OSHA guidelines and **UNI-TILE SEALER LV** Material Safety Data Sheet.