# UNI-TILE SEALER

## PENETRATING EPOXY PRIMER

## Technical Data & Application Instructions



### PRODUCT DESCRIPTION

**UNI-TILE SEALER** is a two-component, quick drying epoxy polyamide penetrating primer/sealer. This unique primer is especially formulated to penetrate and seal porous surfaces before application of many of UNITED'S coating systems.

### BASIC USES

**UNI-TILE SEALER** 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** 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** will amber or darken on aging.

### TYPICAL PROPERTIES

1. **Mixing Ratio:**
   1 to 1 by volume (1A:1B)
2. **Mixed Usable Pot Life:**
   48 hours @ 75°F (24°C), 50% R.H.
   24 hours @ 95°F (35°C), 50% R.H.
3. **Solids by Weight (Mixed):**
   18% (±1) [ASTM D 2369]
4. **Solids by Volume (Mixed):**
   15% (±1) [ASTM D 2697]
5. **Dry Time to Touch:**
   30 minutes at 75°F (24°C), 50% R.H.
6. **Cure Time:**
   3 hours at 75°F (24°C), 50% R.H.
7. **Low & High Temperature Limits:**
   -70°F to 150°F (-56°C to 66°C)

### ADVANTAGES

1. **ADHESION:** The penetrating action of **UNI-TILE SEALER** 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. **APPROVED: UNI-TILE SEALER** is authorized by U.S.D.A. for use in Federally Inspected meat and poultry processing plants. It is also approved for use in animal holding facilities by Federal agencies.
3. **NON-LIFTING:** Any of UNITED'S coatings may be applied over cured **UNI-TILE SEALER** without lifting or bubbling this solvent-resistant primer/sealer.
4. **DEEP PENETRATION:** The thin viscosity of the liquid allows **UNI-TILE SEALER** to penetrate very small crevices and preserve dense steel troweled concrete, float finish concrete, sandblasted concrete or similar surfaces.
5. **ELIMINATES CONCRETE DUSTING:** Indepth protection eliminates concrete dusting and affords years of minimum maintenance.
6. **ANTI-SPALLING:** Applied to concrete decks, walks, industrial areas, etc., **UNI-TILE SEALER** has effectively protected 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** is manufactured in standard clear. Black colorant 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.

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## *PACKAGING & MIXING*

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

Mix Part A Clear with an equal amount of Part B Clear Catalyst. Stir thoroughly for five (5) minutes. **Do not reduce the mixture.** After mixing, allow a minimum of thirty (30) minutes for sweat-in before using.

Shelf life of Part A and Part B components in unopened containers is unlimited. 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 moisture, dirt, oil, grease, soapy films, 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**, 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 which 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 or UNITED'S **2020 Clean-Etch.** (Muriatic Acid Solution – dilute in proportion of 1 part acid to 8 to 10 parts clean water. UNITED'S **2020 Clean-Etch** is a concentrate – dilute in proportion of 1 part concentrate to 3 or 4 parts clean water.) Muriatic Acid Solution or United's **2020 Clean-Etch** shall be sprinkled onto the concrete surface. After solution has stopped bubbling or foaming (normally 5 to 10 minutes), 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. Surface may require additional rinsing or a high pressure water rinse to remove all traces of the acid solution.

Concrete surfaces which 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.

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## *APPLICATION*

**UNI-TILE SEALER** 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" (.38mm to .64mm) 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 substrate is extremely porous or when the **UNI-TILE SEALER** is being used on its own as a floor sealer. Apply **UNI-TILE SEALER** at the following approximate rates:

**Concrete:**
250-300 sq. ft./gallon (6.1 to 7.3 m²/l)
**Wood:**
300 sq. ft./gallon (7.3 m²/l)
**Lightweight Concrete:**
100 sq. ft./gallon (2.4 m²/l)

**UNI-TILE SEALER** 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**.

Clean equipment with Methyl Ethyl Ketone (MEK).

## *LIMITATIONS & PRECAUTIONS*

**UNI-TILE SEALER** 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** 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** are flammable. Use only in a well ventilated area. Keep away from heat, sparks, open flame, or lighted cigarettes. Use explosion-proof application equipment which 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** Material Safety Data Sheet.

Our data and suggestions are based on information from laboratory and field testing which we believe to be reliable. Because methods of application vary with each situation, we cannot guarantee or accept any liability resulting from the use of our products.