

# ULTRA DIAMOND SEAL

## DECORATIVE CONCRETE CURE & SEAL



### DESCRIPTION

Ultra Diamond Seal is a blend of 100% methyl and ethyl methacrylate polymers used as a superior and specialized compound for curing and sealing exposed aggregate, stamped/stenciled concrete and other decorative concrete and masonry surfaces. Formulated specifically for decorative concrete applications where a glossier one coat spray or roller applied finish is desired. TK-Ultra Diamond Seal enhances and darkens the concrete surface providing a beautiful and durable high gloss finish.

### USES:

Suitable for interior or exterior use on new or existing architectural concrete, burnish block, terrazzo, brick, stone, slate, quarry tile or other cementitious materials. Ideal for exposed aggregate, stamped/stenciled concrete, colored concrete surfaces, paving block, patio stone, driveways and garage floors. When used interior, solvent odor may linger. Extinguish all ignition sources and provide proper ventilation.

### BENEFITS:

- Coating dries clear and does not yellow with age or exposure to ultraviolet rays.
- Provides superior protection against freeze/thaw cycles, deicing salts, and chemical erosion and efflorescence.
- Reduces the possibility of aggregate popouts on exposed aggregate by percolating down and around the stones to fill gaps and voids.
- Forms a durable long-lasting film with resistance to water, chemicals, abrasion and stains.
- Highlights and preserves the natural pigments in the surface, adding longevity and sparkle to the finished product.
- Does not discolor with over-use.

### APPLICATION PROCEDURES

#### PREPARATION:

Surfaces must be clean, dry and free of form oils, grease, dust, frost and curing compounds (particularly wax based). Large areas may be blown dust free by compressed air, washed and let dry. Surface water must be allowed to completely dissipate before applying.

Exposed Aggregate Application Preparation - When applying to exposed aggregate as a curing compound, the surface should be washed with a mild acid solution to remove the thin film of cement dust, then flushed with water and allowed to dry before applying TK-ULTRA DIAMOND SEAL.

At this point a small mock-up area should be applied in an inconspicuous location to test the compatibility of the coating with the prepared substrate. Allow the coating to dry and cure fully, then inspect for proper film formation, gloss, adhesion and confirm that the film is free from whitening or any other defects.

#### MIXING:

The material is ready for use and requires no mixing or dilution. It is unlawful to further dilute with non-exempt solvents.

#### APPLICATION:

TK ULTRA DIAMOND SEAL WILL DARKEN CONCRETE

Apply with a solvent resistant brush, roller, or high quality pump up sprayer. Work the compound into the concrete avoiding accumulations, puddling, runs, or sags. On large areas an airless sprayer can be used. When spraying, back rolling is recommended.



### CLEAN UP

Use TK-00 XYLENE to clean tools and equipment. Pump solvent through the sprayer to remove residue of materials which can clog the hose and wand assembly.

### SUITABILITY SAMPLE

Always prepare a small mock-up area to test the compatibility of the coating with the prepared substrate. Mock up should be performed in an inconspicuous location and allowed to cure and dry fully. Inspect for proper film formation, gloss, and adhesion, and confirm that the film is free from whitening or any other defects.

### COVERAGE

Surface	Coverage
Exposed Aggregate:	200-300 sq.ft./gal
Textured/Stamped Concrete Surfaces:	250-350 sq.ft./gal

*Coverage rates are provided as a guideline only. Many factors, including surface texture, porosity, and weather conditions, will determine actual coverage rates.*

## MAINTENANCE

Minimal maintenance is required other than occasional sweeping, dusting or mopping. If wear patterns do occur or if spillage removes the coating, TK-ULTRA DIAMOND SEAL may be reapplied to the affected area(s).

## LIMITATIONS

- Apply in temperatures above 40°F. Colder weather applications may be made under prescribed conditions and procedures specified by TK Products.
- Follow industry standards for use on colored concrete.
- Not for use on asphalt or surfaces subjected to hydrostatic water pressure, or as a waterproofing on below-grade surfaces.
- Sprayers must be equipped with neoprene hose, washers and gaskets as rubber or other materials will disintegrate from the solvent.
- Material will not freeze and may be stored outdoors in cold weather, however it must be allowed to warm to approximately 50°F before use.

Note 1. Concrete containing calcium chloride will remain dark longer when sealed. Extenders and additives (concrete admixes, fly ash) are now being added to some ready mixed concrete which can cause inconsistency in the porosity of the concrete. Some areas of the finished concrete may then appear darker than others. To compensate for these variations, coverage ratios should be adjusted.

Note 2. Popout problems can occur anytime, however, concrete in certain regional areas, concrete applied in extremely hot conditions (90°F+), and heavily steel troweled concrete can aggravate popout problems. These deficiencies are the result of a heat caused reaction, called alkaline silica reactivity (ASR), between the silica in the shale particles of the fine aggregate with the sodium and potassium alkali in the portland cement. For more information on this problem, refer to "POPOUTS" by Norman E. Henning, P.E. and Kenneth L. Johnson, P.E. of Twin City Testing and Engineering Laboratory and Lowery J. Smith of the J.L. Shiely Company. Where this type of shale is present, and extremely hot weather conditions prevail, it is recommended that liquid membrane curing compounds should not be used until the concrete has been completely cured by water ponding, continuous water spray mist, or wet burlap covering for a period of three days. A seal coat can then be applied for dustproofing and protection (when concrete is completely dry).

Note 3. When using a liquid or powder release (other than TK-LIQUID STAMP RELEASE 2090) care must be taken to ensure proper washing has taken place prior to applying TK-ULTRA DIAMOND SEAL as these substances may affect product adhesion and formation.

## FIRST AID

Consult this product's Safety Data Sheet for additional health and safety information. Safety Data Sheets are available through TK distributors, the TK office, and the TK website.

## REVISIONS

LAST: 05/27/21

PREVIOUS: 02/23/21

## TECHNICAL DATA INFORMATION

<b>Composition and Materials:</b>	A copolymer blend in a user friendly aromatic solvent.
<b>Percent Solid:</b>	29-30%
<b>Flash Point:</b>	110°F
<b>Drying Time:</b>	Tack free: 1-2 hours Recoat: 2-4 hours Full Cure: 24 hours
<b>VOC Content:</b>	< 700 g/l
<b>A.I.M. Category:</b>	Curing and Sealing Compound
<b>Maximum VOC:</b>	700 g/l
<b>Applicable Standards:</b>	- ASTM C-1315, Type 1, Class A, B & C - ASTM C-309, Type 1, Class A & B and Type C, 1D with a red dye added. - Fed. TTC-C-800A, Type 1, Class 1 - AASHTO Des. M-148, Type 1, Clear - DE CRD - C-300 - USDA Authorization for use in meat, poultry, and food processing plants. - Resilient Tile Institute approval for compatibility with most resilient tile, carpet adhesives, and paints.

## MANUFACTURER PART #'S

Size	Item Code
55 GALLON	TK-ULTRA DSEAL 55G
5 GALLON	TK-ULTRA DSEAL 5G
1 GALLON	TK-ULTRA DSEAL 1G

## VOC REGULATORY COMPLIANCE

AIM	OTC	LADCO	CARB	SCAQMD	CANADA
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>