



# TK-TRI-SILOXANE 290 BDS

## Bridge Deck Sealer

Item No. TK-290 BDS

### PRODUCT DESCRIPTION

TK-TRI-SILOXANE 290 BDS is a low viscosity, breathable, deep penetrating water repellent for concrete bridge decks and parking structures. Through the process of hydrolysis, TK-TRI-SILOXANE 290 BDS chemically bonds with the surface to form a protective barrier that is far superior to traditional penetrating water repellents.

#### Features:

- Forms a chemical, and permanent, bond with the substrate to provide ultimate protection against damage due to water and deicing chemical intrusion, acid rain, freeze/thaw exposure, airborne dirt, smog, industrial fumes and most other atmospheric chemicals.
- Penetrates up to 1/4" and eliminates surface moisture which can lead to spalling, freeze damage and rebar corrosion.
- Outperforms typical water repellents which can only bond physically with the surface and thus provide marginal protection.
- The coating is colorless, non-staining and non-yellowing.

#### USES:

Suitable for vertical or horizontal use on exterior above-grade concrete or masonry surfaces. Applications include parking structures, bridge decks, precast concrete, burnish block, split face block, stucco, poured concrete walls and concrete columns.

\*TK-TRI-SILOXANE 290 BDS is not suitable for use on gypsum.

### APPLICATION PROCEDURES:

#### PREPARATION:

Before using this product, read the Safety Data Sheet for complete safety information.

All surfaces to be treated must be clean and structurally sound. Thoroughly clean surfaces to remove all grease, oils, form oils or other contaminants. Best results are obtained by applying TK-TRI-SILOXANE 290 BDS to dry surfaces. It is recommended that surface temperatures be 40°F or above at the time of application to ensure that surfaces are frost-free.

*Existing Concrete preparation* - Unsound concrete should be removed and cracks or deteriorated areas repaired prior to application. Surfaces may need to be mechanically abraded to achieve maximum penetration.

*New Concrete preparation* - Water cure fresh concrete or use TK-DCWB DISSIPATING CURING COMPOUND 2519\*. As a standard procedure, fresh concrete should be allowed to cure for 28 days before applying waterproofing treatments. The product may be applied sooner than this, but depth of penetration will be affected by surface dryness. At least 1/8" of penetration is required for optimal performance of this product.

**A test patch should always be performed to determine proper results and coverage rates prior to application.**

#### MIXING:

The material is ready for use and requires no mixing. Do not thin or dilute.

#### APPLICATION:

Apply by roller or spray equipment in a uniform manner and in sufficient quantity to completely wet out the substrate. Very porous surfaces may require two coats.

*Split Face Block application* - Split face block must be thoroughly dry to allow for proper penetration into the block and to adequately wet it out with no rundown. TK-TRI-SILOXANE 290 BDS contains its own catalyst and will react with the block if it is damp, resulting in failure to penetrate the surface and leaving a "wet look" rather than a natural finish.

#### CLEAN UP:

Clean tools, equipment and spills with TK-00 XYLENE\*. Pump solvent through spray equipment to remove any residue that may clog the hose or wand assembly.

### TECHNICAL DATA

Composition and Materials:	An oligomeric, organosiloxane water repellent.
Density:	6.72 lbs
Flash Point:	105°F
VOC Content**:	< 700 g/l
A.I.M. Category:	Waterproofing Sealer and Treatment Maximum VOC 600 g/l
Applicable Standards:	- ASTM C666 Resistance of Concrete to Rapid Freezing and Thawing - ASTM C672 Scaling Resistance - NCHRP 244 (water absorption, % water vapor transmission and % reduction in chloride intrusion)

\*\* Exceeds VOC content limit. Exceedance fee has been paid.

### TYPICAL PROPERTIES

TK-TRI-SILOXANE 290 BDS is characterized by the following properties:

- Excellent penetration
- High alkali resistance and suitability for either alkaline or neutral substrates
- Low volatility
- Dries tack free
- Provides early water repellency
- Exhibits droplet effect

## COVERAGE:

Surface	Coverage
Bridge decks/ramps	100-200 square feet/gallon
Smooth concrete	125-225 square feet/gallon
Resealing Bridge decks/ramps:	150-250 square feet/gallon
Exposed aggregate:	100-200 square feet/gallon
Concrete block:	40-100 square feet/gallon
Brick/stone:	60-200 square feet/gallon

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 occur or if spillage removes the coating, TK-TRI-SILOXANE 290 BDS may be reapplied to the affected area(s).

## LIMITATIONS:

- Over-application may result in discoloration of the concrete.
- Surface temperatures should be 40°F or above at the time of application to ensure that surfaces are frost-free.
- Not for use on asphalt, surfaces subject to hydrostatic pressure or as a waterproofer on below-grade substrates.
- Not for use where spillage of solvents, fuels, brake or transmission fluid, etc is expected.
- Application to inappropriate or non-compatible substrates may affect adhesion of subsequent coatings.
- Do not apply if rain is expected within 4-6 hours of application.
- Sprayers should be equipped with neoprene fittings as this product is destructive to rubber.

## PROTECTION OF VEGETATION, GLASS AND ALUMINUM SURFACES:

Avoid contact with live vegetation, glass and aluminum. If properly protecting these surfaces is impractical, the following steps should be performed:

- 1) Minimize contact of TK-TRI-SILOXANE 290 BDS with live vegetation, glass and aluminum surfaces.
- 2) If TK-TRI-SILOXANE 290 BDS comes into contact with glass or aluminum, thoroughly clean surfaces with Windex® or an ammonia cleaner while the material is still wet.

## 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.

## AVAILABILITY:

TK-TRI-SILOXANE 290 BDS is available through TK Distributors. Contact TK Products for the nearest distributor. Packaged in 55-gallon drums, 5-gallon pails and 1-gallon cans.

FOR PROFESSIONAL USE ONLY

## NOTES:

- \*TK-DCWB DISSIPATING CURING COMPOUND 2519 must be purchased separately
- \*TK-XYLENE 00 must be purchased separately

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