

Technical Data Sheet

KEMPERDUR® TC Traffic Coating



Work pack includes:

Comp. A: White Formulation, Comp. B: Dark Brown Formulation, Comp. C: Mineral Filler

Product Description

KEMPERDUR® TC Traffic Coating is a high performance, “odor-free”, self-leveling, mineral-filled pedestrian and vehicular traffic coating for use with Surfacing Sand or Ceramaquartz aggregate to provide a heavy-duty traction-enhanced surfacing. Concrete Substrate applications ONLY.

Composition & Materials

KEMPERDUR® TC Traffic Coating is a solvent-free, three component, cold-liquid applied aromatic polyurethane coating consisting of Component A (resin), Component B (hardener), and Component C (the mineral filler).

Use

KEMPERDUR® TC Traffic Coating is used as a heavy-duty coating for balconies, terraces, parking decks, walkways, and other traffic locations. The system may be used in conjunction with a fully reinforced KEMPEROL® cold liquid-applied, two component polyurethane resin waterproofing membrane or directly to a primed concrete substrates where a full reinforced waterproofing membrane is not required. Applications over unoccupied spaces may utilize the KEMPEROL® waterproofing flashing membrane at perimeter and penetration only.

Limitations

Concrete surfaces to receive the TC Traffic Coating system must be properly designed and constructed in order to assure effective coating performance. Determine whether the concrete contains sufficient expansion/cold-joints prior to the application of the coating.

Note: If the concrete substrate does not contain adequate cold joints, additional cold joints must be created in the TC Traffic Coating system, at minimum every 20'. Contact manufacturer for the cold joint application process.

Minor yellowing will occur under UV exposure without approved KEMPERDUR® sealants.

KEMPERDUR® TC Traffic Coating may be applied only when the ambient temperature is 41 °F (5 °C) to 90 °F (32 °C), and the substrate temperature is a minimum of 5 degrees above the dew point.

KEMPERDUR® TC Traffic Coating is intended for application on horizontal surfaces and inclines of up to 3%. A TX Thixotropic additive must be used on inclines from 3-20%.

Yield

40 ft² (3.7 m²) / 12.5 kg work pack

Note: All yields are approximate and may vary depending upon smoothness of substrate.

Storage

Always store in cool and dry location. Do not store in direct sunlight or in temperatures below 50 °F (10 °C) or above 85 °F (29 °C). Approximate shelf life 12 months in sealed original containers.

For best use, 24 hours before application, the material is to be acclimated at temperatures between 65-70 °F (18-21 °C).

Precautions

Review Safety Data Sheets before handling, available online at www.kempersystem.net.

Surface Preparation

All surfaces must be free from gross irregularities, loose, unsound or foreign material such as dirt, ice, water, grease, oil, release agents, lacquers, or any other condition that would be detrimental to adhesion of the primer and surfacing.

Remove or grind down all fasteners, anchors, studs, or other protrusions to achieve a smooth surface.

Sustainability Information	
% Biobased Carbon Content ASTM D6866-21	59%
Recycled content % (post / pre)	0/0
Manufacture location	Buffalo, NY

Coating Properties	
Physical Property	Values
Standard Color	Beige
Physical State	Cures To Solid
Thickness	120 mils (3mm) w/ Sand
VOC Content	6 g/l
Usage Time*	15 Minutes
Water Resistant After*	4 Hours
Solid to Walk on After*	4 Hours
Completely Hardened After*	8 Hours
Water Absorption	<1%
Water Vapor Transmission	0.001 perms

* values obtained at 73°F, 50% relative humidity, may vary depending upon air flow, humidity and temperature.

Priming

When applying directly to the concrete substrate, the surface must be prepared in accordance with the current application procedures. All cracks, holes, spalls, and other surface defects must be sealed / repaired prior to the coating application. Review the current Substrate Repair and Patching Materials as well as the EP / EP5 primer slurry patching procedures. Once the substrate is prepared, primed, and all cracks are stripped in with KEMPEROL® 2K-PUR reinforced membrane, the KEMPERDU® TC application may commence.

Mixing of Coating

When applying directly to KEMPEROL® two component polyurethane resin, TC traffic coating must be applied within a 48 hour window. If that is not possible due to the logistics of the projects the surface of the membrane must be first be lightly abraded. KEMPEROL® two component polyurethane resin must not be primed prior to the application of the coating.

Step 1: Pre-mix Component A (white formulation) with a spiral KEMPEROL® agitator for 1 minute, until the liquid is a uniform color and all solids that may have settled to the bottom of the can have been mixed. When working on a sloped area, from 3-20%, such as a ramps, add approximately 90 g of KEMPERTEC® TX Thixotropic additive to Component A before adding Component B.

Step 2: Add Component B (dark brown formulation) and mix with a spiral agitator for 1 minute, until the liquid is a uniform dark beige color without light or dark streaks.

Step 3: Gradually add Component C (white mineral filler) to the liquid while mixing continuously for an additional 1 minute until a smooth, lump free mixture is produced.

NOTE: DO NOT break down units into smaller quantities – mix the entire work pack.

Coating Application

Step 1: Empty the pail of KEMPERDUR® TC Traffic Coating mixture onto the primed concrete surface or over fully cured membrane and spread with a ¼" square-notched steel trowel at the rate of approximately 40 ft²/12.5 kg unit. If applying over cured membrane follow membrane re-coating guidelines.

Step 1a: When applying the KEMPERDUR® TC traffic coating on an incline with the TX Thixotropic additive ensure that the coating does not run down the slope. If the coating shows signs of sag add additional additive.

Step 1b: Due to the TX Thixotropic additive the coating will no longer self level. Use the flat side of the trowel to level out the coating on sloped surfaces.

Step 2: Immediately de-aerate the coating in a cross direction with a porcupine (spiked) roller in order to release the air bubbles that may develop within the coating.

Step 3: Allow the KEMPERDUR® TC Traffic Coating mix to self-level and reach an initial set for 10-20 minutes, depending on ambient and surface temperatures, until material will retain a peak after being touched by a gloved finger.

Step 4: Broadcast selected aggregate to excess into TC Traffic Coating until a uniform dry aggregate layer has been achieved. Aggregate will initially sink into surfacing, requiring the application of additional aggregate. Sufficient aggregate application is achieved when there are no wet spots remaining. Aggregate application rate is typically 100 lbs./100 ft.

- Surfacing Sand (0) #18 (0.5 – 1.2 mm) for applications utilizing a colored finish top coat
- Surfacing Sand (1) #14 (0.8 – 1.5 mm) for a more coarse surfaces, such as ramps
- Ceramaquartz (30 mesh) (0.3-0.6mm) (S-Grade blend) for aesthetic color quartz finished surfacing

Step 5: Allow the aggregate-filled KEMPERDUR® TC Traffic Coating to cure for approximately 4 hours. Times may vary depending on temperatures. Remove excess aggregate by brooming and vacuuming.

Step 6: Roller-apply appropriate sealer or finish evenly onto the surface. Ensure to lap each preceding path to erase squeeze out from the edge of roller.

- KEMPERDUR® EP-FR FINISH (NOT UV-STABLE) at the rate of approximately 80 ft²/6 kg.
- KEMPERDUR® DEKO FINISH at the rate of approximately 80 ft²/6 kg.
- KEMPERDUR® FINISH at the rate of approximately 360 ft²/10 kg.

Disposal

Cured KEMPERDUR® TC Traffic Coating may be disposed of in standard landfills. This is accomplished by thoroughly mixing all surfacing components together. Uncured KEMPERDUR® TC Traffic Coating resin must be handled as such, in accordance with local, state and federal regulations. Do not throw away uncured resin.

Ordering Information

KEMPERDUR® TC Traffic Coating:

Item #:	Size:
325-77-125	12.5 kg Work pack (Components A, B and C)

DISCLAIMER: NO WARRANTY, EXPRESS OR IMPLIED, IS MADE IN THIS DOCUMENT. THE PRODUCT IS NOT CLAIMED TO BE MERCHANTABLE OR FIT FOR ANY PARTICULAR PURPOSE. User and certified Kemper System America, Inc. (KSA) applicators determine suitability only. See individual KSA product data sheets, SDS sheets, guide specifications and details for complete information regarding the suitability, application and handling of KSA products.