

# Eco-TCP™

## Thick Coat Polyaspartic



**DESCRIPTION** – A neutral, two-component light-stable coating. Eco-TCP is used to seal functional broadcasts and decorative quartz and flake applications up to 14 mils (0.36 mm) per coat.

- **LEED® v4** – Indoor Air Quality credits available.
  - Meets requirements per CDPH-CA Section 01350 Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental chambers Version 1.2.

### ENVIRONMENTALLY & USER FRIENDLY

- Reduced solvent means less evaporation and less waste.
- Low Odor. Can be applied during normal business hours.
- Complies with SCAQMD VOC regulations--<100 g/L.

### PRIMARY APPLICATIONS

Seal coat / topcoat for full broadcast flake and quartz floors

#### APPLICATION COVERAGE RATE

Coverage Rate, ft <sup>2</sup> /gal [m <sup>2</sup> /L]	115-267 [10.7-24.8]
Application Thickness, wet mils [mm]	6-14 [0.20-0.36]

#### MATERIAL PROPERTIES (LIQUID)

Property	Test Method	Results
Percent Solids, by wt [by vol]	ASTM D1475	A+B = 91.59 [91.74]
Volatile Organic Compound, VOC, lb/gal [g/L]	ASTM D3960	A+B = 0.30 [37]

#### SYSTEM PROPERTIES

Property	Test Method	Results
Abrasion Resistance Taber Abraser CS-17 Taber Abrasion Wheel, 1,000 gram load, 1,000 revolutions	ASTM D4060	43 mg/loss
Wet Static Coefficient of Friction, BOT 3000	ANSI/NFSI B101.1	0.99
Resistance to Yellowing As measured using ASTM D2244 after 1000 consecutive hours UV exposure in QUV.	ASTM G154	<20 increase of yellow units (CIE Lab Δb)
Tensile Strength, psi [MPa] (seal coat)	ASTM D2370	6,913 [47.66]
Percent Elongation (seal coat)	ASTM D2370	8
Thermal Stability / Heat Resistance	MIL-D-3134J Section 4.6.3	No slip/flow, softening or change in appearance
Water Absorption, 24-hour immersion	ASTM C413	0.2% weight increase

Results are based on conditions at 77°F (25°C)

#### GENERAL PRODUCT INFORMATION

<b>STORAGE:</b>	Materials should be stored indoors between 65°F (18°C) and 90°F (32°C).
<b>SHELF LIFE:</b>	One year from date of manufacture.
<b>PACKAGING OPTIONS / PART NUMBERS:</b>	4.0 gallons (15.12 litres) / 9012532
<b>OPTIONS:</b>	<i>Colors:</i> Use Colorants at a rate of one unit per 1-gallon (3.78 litres) of Eco-TCP. Standard Colorant—White, Yellow and Light Gray will not impart total hide. Use this colorant at a rate of two units per 1-gallon (3.78 litres) mix. Similar colorants also may not hide as well. Refer to Color Selection Guide or consult Tennant Technical Support.
<b>LIMITATIONS:</b>	<i>Contamination (Fisheyes):</i> Product may fisheye if oil, silicones, mold release agents or other contaminants are present.

TENNANT COATINGS

For First Impressions That Last™

## CHEMICAL RESISTANCE PROPERTIES

Eco-TCP		
Coating cured 2 weeks prior to testing.	Spill / Splash - Uncovered	1 Day / 7 Days Covered
<b>Acids, Inorganic</b>		
10% Hydrochloric Acid	G	G / F
30% Hydrochloric Acid (Muriatic)	G	F / P
10% Nitric Acid	F	F / P
50% Phosphoric Acid	G	E / G
37% Sulfuric Acid (Battery Acid)	G	E / G
<b>Acids, Organic</b>		
10% Acetic Acid	G	G / G
10% Citric Acid	E	E / E
Oleic Acid	E	E / G
<b>Alkalies</b>		
10% Ammonium Hydroxide	E	E / E
50% Sodium Hydroxide	E	E / E
<b>Solvents (Alcohols)</b>		
Ethylene Glycol (Antifreeze)	E	E / E
Isopropyl Alcohol	E	F / F
Methanol	E	F / F
<b>Solvents (Aliphatic)</b>		
d-Limonene	E	E / F
Jet Fuel - JP-4	E	E / E
Gasoline	E	E / E
Mineral Spirits	E	E / E
<b>Solvents (Aromatic)</b>		
Xylene	E	G / G
<b>Solvents (Chlorinated)</b>		
Methylene Chloride	P	P / P
<b>Solvents (Ketones &amp; Esters)</b>		
Methyl Ethyl Ketone (MEK)	F	F / P
Propylene Glycol Methyl Ether Acetate (PMA)	E	G / G
<b>Miscellaneous Chemicals</b>		
20% Ammonium Nitrate	E	E / E
Brake Fluid	G	G / F
Bleach	G	E / E
Motor Oil (SAE 30)	E	E / E
Skydrol® 500-B4	F	F / F
Skydrol® LD4	F	F / F
20% Sodium Chloride	E	E / E
1% Tide® Laundry Soap	E	E / E
10% Trisodium Phosphate	E	E / E
Jet Fuel Phillips "Blue" Aviation Gasoline	E	E / E
Unleaded Gas + Ethanol	E	E / G

ASTM D1308 Test Method 3.1.1 spot test, covered. Results are based on 1-day and 7-day. Coating cured 2 weeks prior to testing.

**Legend:** E - Excellent (No Adverse Effect) - Recommended. F - Fair (Moderate Adverse Effect) - Not recommended.  
G - Good (Limited Adverse Effect) - Use for short-term exposure only. P - Poor (Unsatisfactory) - Little or no resistance to chemical.

**NOTE:** *Reduced chemical resistance and staining is possible in pigmented versions of the system.*

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**IMPORTANT: READ AND FOLLOW ALL PRECAUTIONS AND INSTRUCTIONS BEFORE PROCEEDING.**

**PLEASE SEE SAFETY DATA SHEET (SDS) FOR HANDLING PROCEDURES.  
USE PRODUCT AS DIRECTED.  
KEEP OUT OF THE REACH OF CHILDREN.**

### PRELIMINARY FLOOR INSPECTIONS

**CHECK THE TEMPERATURE AND HUMIDITY:** Floor temperature and materials should be between 65°F (18°C) and 85°F (29°C). **Humidity must be less than 70%** or the result may be a hazy appearance. **DO NOT** coat unless floor temperature is more than five degrees over the current, local dew point.

### APPLICATION EQUIPMENT

<ul style="list-style-type: none"> <li>Protective clothing</li> <li>Jiffy® Mixer Blade [Tennant Part No. 08643-1 (1 gal) or 08643-5 (5 gal)]</li> <li>Slow speed drill (500 rpm or less)</li> <li>18-24" Flat squeegee</li> </ul>	<ul style="list-style-type: none"> <li>18-24" 1/16" Notched squeegee</li> <li>Roller Assembly (18")</li> <li>Medium (3/8") Nap Roller</li> <li>Spiked shoes</li> </ul>
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**ASSEMBLE EQUIPMENT:** Due to the limited pot life of the material, all application equipment, etc. should be ready for immediate use. (Clean roller with tape to remove any residual lint.)

## RECOAT

Eco-TCP may be used to coat over an existing epoxy or urethane coating in sound condition. Detergent scrub and rinse with clean water to remove surface dirt, grease, oil and contaminants. Floor must be sanded thoroughly with 80 grit paper/60 grit screen prior to recoating. We recommend thorough sanding with a swing-type buffer so that multiple scratch marks cause an obvious gloss loss on all areas (depressions will remain shiny), and the floor is uniformly dulled. The ability to see individual scratch marks is an indication that sanding is not adequate. Scrub with detergent and rinse with clean water before coating.

## BARE CONCRETE APPLICATION

**ECO-TCP IS NOT APPLIED DIRECT TO CONCRETE.** IT IS TYPICALLY USED TO SEAL FULL BROADCAST FLAKE AND QUARTZ FLOORS. (See directions below.)

## APPLICATION – FIRST GROUT COAT (12-14 mils / 0.30-0.36 mm)

**COVERAGE RATE:** One gallon (3.78 litres) of Eco-TCP will cover:

134 ft<sup>2</sup> (12.4 m<sup>2</sup>) @ 12 mils (0.30 mm) wet/dry film  
123 ft<sup>2</sup> (11.4 m<sup>2</sup>) @ 13 mils (0.33 mm) wet/dry film  
115 ft<sup>2</sup> (10.7 m<sup>2</sup>) @ 14 mils (0.36 mm) wet/dry film

**NOTE: DO NOT APPLY ECO-TCP THICKER THAN 15 MILS (0.38 mm) IN ONE COAT** or the result may be a hazy appearance caused by the entrapment of small bubbles.

**PREMIX PART A** using a Jiffy® mixer blade and slow speed drill.

**POUR 75 OUNCES (0.58 GALLON) MIXED ECO-TCP PART A INTO EMPTY 2 GALLON BUCKET. ADD 50 OUNCES (0.39 GALLON) OF ECO-TCP PART B TO PART A** (the A:B mix ratio is 1.5:1 by volume). Check the following chart for work times at various temperatures.

<b>APPROXIMATE WORK TIME - °F (°C) / % RH:</b>	<b>75 (23.9) / 15</b> 20-25 minutes	<b>75 (23.9) / 50</b> 15-20 minutes	<b>85 (29.4) / 70</b> 15 minutes
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**MIX FOR 3 MINUTES** using a Jiffy® mixer blade and slow speed drill. (Failure to do so could result in lower/diminished coating properties.)

**IMMEDIATELY POUR ALL OF THE MIXED MATERIAL** onto the floor in a single bead.

**PUSH THE FLAT SQUEEGEE** at an even speed with down pressure.

**START THE SECOND AND REMAINING PASSES** by pushing material parallel to the first stroke. Hold the bead of material near the center of the bar and push at an even speed with slight down pressure.

**IMMEDIATELY AFTER THE ECO-TCP IS APPLIED** and there is room to roll, a second person will **BACKROLL THE MATERIAL** with a 3/8" roller to a smooth and uniform appearance. **NOTE:** *Get off the Eco-TCP as soon as possible.*

## APPLICATION – SECOND GROUT COAT (6-8 mils / 0.15-0.20 mm)

Apply an additional coat of Eco-TCP to reduce the surface texture.

**COVERAGE RATE:** One gallon (3.78 litres) of Eco-TCP will cover:

267 ft<sup>2</sup> (24.8 m<sup>2</sup>) @ 6 mils (0.15 mm) wet/dry film  
200 ft<sup>2</sup> (18.6 m<sup>2</sup>) @ 8 mils (0.20 mm) wet/dry film

**RECOAT WINDOW:** Apply the second coat within 24 hours at 65-85°F (18.3-23.9°C) / 70% RH.

**NOTE:** *The seal coat of Eco-TCP has to be set up enough to walk on before coating.*

<b>APPROXIMATE WALK TIME - °F (°C) / % RH:</b>	<b>75 (23.9) / 15</b> 14 hours	<b>75 (23.9) / 50</b> 7.25 hours	<b>85 (29.4) / 70</b> 5.75 hours
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**REPEAT THE STEPS USED FOR MIXING AND SPREADING THE FIRST SEAL COAT OF ECO-TCP.**

**ALLOW FINAL COAT TO CURE** 24 hours at 75°F (24°C) before opening to light traffic. Allow more time at low temperatures or for heavier traffic. Full coating properties take 14 days to develop.

## TECHNICAL SUPPORT

For any preparation or application questions, please call Tennant technical support at 800-228-4943, option 3 (US & Canada), 800-832-8935 (International).

## DISPOSAL

Dispose of all excess material, packaging and other waste in accordance with federal, state and local regulations.

## MAINTENANCE GUIDELINES

**Allow floor coating to cure at least one week before cleaning by mechanical means (e.g., sweeper, scrubber, disc machine).**

**Care:** Proper maintenance will increase the life and help maintain the appearance of your new Tennant floor coating. Sweep and scrub your new coating regularly, as dirt and dust are abrasive and can quickly dull the finish, decreasing the life of your coating. Remove spills quickly as certain chemicals may stain and could possibly permanently damage the finish.

**Use soft nylon brushes or white pads on your new floor coating. Any brush more abrasive than a soft nylon or white pad can cause premature loss of gloss.**

**Detergent:** Tennant has a full range of detergents--general purpose to heavy duty--for your cleaning needs. For assistance in determining which detergent is right for your facility or for additional technical information call: 800-228-4943, option 3 (US & Canada), 800-832-8935 (International).

**Caution:** Avoid scratching or gouging the surface. All floor coatings will scratch if heavy objects are dragged across the surface.

Do not drop heavy or pointed items on the floor as this may causing chipping or concrete popouts in the case of a weak cap.

Rubber tires can permanently stain the floor coating from plasticizer migration. Plexiglass® between the tire and the floor coating can prevent discoloration.

Rubber burns from quick stops and starts can heat the coating to its softening temperature, causing permanent marking.

**Repair:** Repair gouges or scratches or chip outs as soon as possible to prevent moisture or chemical contamination.

#### CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

Tennant offers a limited warranty on all products. Please see the Tennant Coatings Limited Product Warranty Statement on our website at [www.tennantcoatings.com/warranty](http://www.tennantcoatings.com/warranty). Please contact the Tennant Coatings Technical Support team for additional questions at 800-228-4943, option 3 (US & Canada), 800-832-8935 (International).