



CREATING A CLEANER, SAFER, HEALTHIER WORLD.

COATINGS



# Decorative Quartz

THE PROVEN SOLUTION™ FOR  
HIGH-PERFORMANCE DECORATIVE FLOORS

- **LEED®** – LEED green building certification program credits available:
  - Indoor Environmental Quality
  - 4.2 Low-Emitting Materials, Paint and Coatings
- **DURABLE** – With light stable Eco-TCU™ or UV-resistant Eco-URE™ seal coats, Eco-DQS™ is more UV-stable than standard epoxy systems and offers excellent resistance to heavy traffic when topcoated with optional Eco-HTS™ 100
- **BEAUTIFUL** – Complement any environment with a virtual rainbow of highly UV-stable colors and patterns
- **HIGH TRACTION** – Eco-TCU over quartz is NFSI certified



T16

Tennant Company is a world leader in indoor and outdoor environmental cleaning solutions and floor and wall coatings.

## CHEMICAL RESISTANCE PROPERTIES

	Eco-TCU 1 / 7 day(s)	Eco-URE 1 / 7 day(s)	Eco-HTS 100 1 / 7 day(s)
<b>Acids, Inorganic</b>			
10% Hydrochloric Acid	E / E	G / G	E / E
30% Hydrochloric Acid (Muriatic)	E / G	G / G	E / E
10% Nitric Acid	E / F	G / F	E / E
50% Phosphoric Acid	E / G	F / P	E / G
37% Sulfuric Acid (Battery Acid)	E / G	G / G	E / E
<b>Acids, Organic</b>			
10% Acetic Acid	E / F	G / G	E / E
10% Citric Acid	E / E	G / G	E / E
Oleic Acid	E / E	G / G	E / E
<b>Alkalies</b>			
10% Ammonium Hydroxide	E / E	E / G	E / E
50% Sodium Hydroxide	E / E	E / E	E / E
<b>Solvents (Alcohols)</b>			
Ethylene Glycol (Antifreeze)	E / E	G / G	E / E
Isopropyl Alcohol	F / P	F / F	E / E
Methanol	G / F	F / P	E / E
<b>Solvents (Aliphatic)</b>			
d-Limonene	E / G	E / E	E / E
Jet Fuel (JP-4)	E / E	E / E	E / E
Gasoline	E / G	E / E	E / E
Mineral Spirits	E / E	E / E	E / E
<b>Solvents (Aromatic)</b>			
Xylene	F / P	F / F	E / E
<b>Solvents (Chlorinated)</b>			
Methylene Chloride	P / P	P / P	P / P
<b>Solvents (Ketones &amp; Esters)</b>			
Methyl Ethyl Ketone (MEK)	P / P	P / P	E / E
Propylene Glycol Methyl Ether Acetate (PMA)	F / P	P / P	E / E
<b>Miscellaneous Chemicals</b>			
20% Ammonium Nitrate	E / E	E / G	E / E
Brake Fluid	G / F	F / F	E / E
Bleach	E / E	E / E	E / E
Motor Oil (SAE30)	E / E	E / E	E / E
Skydrol® 500B, LD4	G / P	G / G	E / E
20% Sodium Chloride	E / E	E / E	E / E
1% Tide® Laundry Soap	E / E	E / E	E / E
10% Trisodium Phosphate	E / E	E / E	E / E

Based on 1-day and 7-day spot testing on concrete. Coating cured 2 weeks prior to testing.

Note: Reduced chemical resistance and increased staining is possible in pigmented versions of this system.

Registered trademarks: Tide® of Procter and Gamble, Skydrol® of Solutia, Inc.

E = Excellent (No Adverse Effect)    F = Fair (Moderate Adverse Effect)  
G = Good (Limited Adverse Effect)    P = Poor (Unsatisfactory)

## PHYSICAL/PERFORMANCE PROPERTIES

### MATERIAL PROPERTIES (LIQUID)

Property	Test Method	Eco-TCU™ Results	Eco-URE™, Eco-URE/OP™ Results	Eco-HTS™ 100 Results
Volatile Organic Compound	ASTM D3960	A/B: 0.8 (100)	A/B: 0.05 (6)	A/B/C: 0.04 (5)
VOC lb/gal (g/L)				
Flash Point, °F (°C)	ASTM D3278	A: 125 (52) B: 138 (59)	A: >200 (93) B: >200 (93)	A: >200 (93) B: >200 (93)
Seta Closed Cup				
Percent Solids, by weight	ASTM D2369	A/B: 90.6	URE A/B: 99.49 URE/OP A/B: 99.51	A/B/C: 94.00
Density, lb/gal (kg/L)	ASTM D1475	A/B: 8.91 (1.07)	URE A/B: 9.08 (1.09) URE/OP A/B: 9.12 (1.09)	A/B/C: 11.93 (1.43)

### MATERIAL PROPERTIES OF AGGREGATE (QUARTZ)

Property	Test Method	Results
Aggregate Hardness	Mohs Mineral Scale	6.5-7
Aggregate Particle Size	ASTM D451	<u>US Sieve</u> 20 30 40 50 70 -70
		<u>% Retained</u> 0-10 5-15 50-70 15-30 0-5 0-1

### CURED COATING PROPERTIES (DRY FILM)

Property	Test Method	Eco-TCU Results	Eco-URE, Eco-URE/OP Results	Eco-HTS 100 Results
Abrasion Resistance, mg loss* Taber Abraser	ASTM D4060	70-90	80-90	18.0
Abrasion to Substrate / Bond Strength (primer)	ASTM D4541	Substrate failure	Substrate failure	Substrate failure
Coefficient of Friction (COF) James Friction Tester	ASTM D2047	≥0.52** (depending on texture)	≥0.50** (depending on texture)	0.63
Flammability / Rate of Burn, mm/minute (resins)	ASTM D635	-	115	182
Tensile Strength, psi (MPa)	ASTM D2370	7,000 (48.3)	8,000 (55.2)	6,250 (43.1)
Percent Elongation	ASTM D2370	7	5	6 (resin only)
König Hardness	ASTM D4366	154 (1 mil (0.03 mm) film)	-	171.3 (3 mil (0.08 mm) resin only)
Resistance to Yellowing As measured using ASTM D2244 after 1000 consecutive hours UV exposure in QUV	ASTM G154	<20 increase to yellow units (CIE Δb)	<40 increase to yellow units (CIE Δb)	<10 increase to yellow units (CIE Δb)
Water Absorption (24-hour immersion) (resins)	ASTM D570	-	2.48%	1.73%

\*CS-17 Taber Abrasion Wheel, 1,000 gram load, 1,000 revolutions. Results are based on 2-week ambient cure.

\*\* Full broadcast quartz floors with multiple topcoats that have a virtually smooth texture will need grit to get COF values >0.50.

### APPLICATION CHARACTERISTICS

Property	Eco-TCU   Eco-URE, Eco-URE/OP <sup>1</sup>   Eco-HTS 100	Full Broadcast
Coverage Rate, ft <sup>2</sup> /gal (m <sup>2</sup> /3.78 L)	107-267 (9.9-24.8)   107-500 (9.9-46.5)   500 (46.5)	0.4-0.5 lbs/ft <sup>2</sup> (0.18-0.23 kg/0.09 m <sup>2</sup> )
Application Thickness, mils (mm)	6-15 (0.15-0.38)   3-15 (0.08-0.38)   3.2 (0.08)	1/8" (3.18)

<sup>1</sup> Eco-URE/OP will "ghost" or appear cloudy if applied at >8 mils (0.20 mm) per coat.

Testing performed at ambient conditions unless stated otherwise. Specifications subject to change without notice.

## FOR FIRST IMPRESSIONS THAT LAST™

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