

CREATING A CLEANER, SAFER, HEALTHIER WORLD.



# **Decorative Flake**

# THE PROVEN SOLUTION™ FOR HIGH-PEFORMANCE 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<sup>™</sup> or UV-resistant Eco-URE<sup>™</sup> seal coats, Eco-DFS<sup>TM</sup> is more UV-stable than standard epoxy systems and offers excellent resistance to heavy traffic when topcoated with optional Eco-HTS<sup>TM</sup> 100
- **BEAUTIFUL** Complement any environment with a virtual rainbow of highly UV-stable colors and patterns



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)
Acids, Inorganic 10% Hydrochloric Acid 30% Hydrochloric Acid (Muriatic) 10% Nitric Acid 50% Phosphoric Acid 37% Sulfuric Acid (Battery Acid)	E / E E / G	G/G G/G	E / E E / E
	E/F E/G E/G	G / F F / P G / G	E / E E / G E / E
Acids, Organic 10% Acetic Acid 10% Citric Acid Oleic Acid	E / F E / E E / E	G / G G / G G / G	E / E E / E E / E
Alkalies 10% Ammonium Hydroxid 50% Sodium Hydroxide	le E/E E/E	E/G E/E	E / E E / E
Solvents (Alcohols) Ethylene Glycol (Antifreeze Isopropyl Alcohol Methanol	E/E F/P G/F	G / G F / F F / P	E / E E / E E / E
Solvents (Aliphatic) d-Limonene Jet Fuel (JP-4) Gasoline Mineral Spirits	E / G E / E E / G E / E	E / E E / E E / E E / E	E / E E / E E / E E / E
Solvents (Aromatic) Xylene	F / P	F/F	E/E
Solvents (Chlorinated) Methylene Chloride	P / P	P / P	P / P
Solvents (Ketones & Esters) Methyl Ethyl Ketone (MEK) Propylene Glycol Methyl Ether Acetete (PMA)	P / P F / P	P / P P / P	E / E E / E
Miscellaneous Chemicals 20% Ammonium Nitrate Brake Fluid Bleach Motor Oil (SAE30) Skydrol® 500B, LD4 20% Sodium Chloride 1% Tide® Laundry Soap 10% Trisodium Phosphate	E / E G / F E / E E / E G / P E / E E / E	E / G F / F E / E E / E E / E E / E	E / E E / E E / E 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 (LI	QUID)	Eco-TCU™	Eco-URE™, Eco-URE/OP™	Eco-HTS™ 100
Property	Test Method	Results	Results	Results
Volatile Organic Compound VOC lb/gal (g/L)	ASTM D3960	A/B: 0.8 (100)	A/B: 0.05 (6)	A/B/C: 0.04 (5)
Flash Point, °F (°C) Seta Closed Cup	ASTM D3278	A: 125 (52) B: 138 (59)	A: >200 (93) B: >200 (93)	A: >200 (93) B: >200 (93)
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)

#### **CURED COATING PROPERTIES (DRY FILM)**

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 $\triangle$ b)	<40 increase to yellow units (CIE △b)	<10 increase to yellow units (CIE △b)
Water Absorption (24-hour immersion) (resins)	ASTM D570	-	2.48%	1.73%
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<sup>\*</sup>CS-17 Taber Abrasion Wheel, 1,000 gram load, 1,000 revolutions. Results are based on 2-week ambient cure.

#### APPLICATION CHARACTERISTICS

741 Electron Chiatres				
Property	Eco-TCU   Eco-URE, Eco-URE/OP†   Eco-HTS 100	Full Broadcast Flake		
Coverage Rate, ft²/gal (m²/3.78 L)	107-267 (9.9-24.8)   107-500 (9.9-46.5)   500 (46.5)	0.2 lbs/ft² (0.09 kg/0.9 m²)		
Application Thickness, mils (mm)	6-15 (0.15-0.38)   3-15 (0.08-0.38)   3.2 (0.08)	Nominal 1/8" (3.18) (2 layers)		
mils (mm)		(2 layers)		

<sup>†</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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<sup>\*\*</sup> Random flake or full broadcast flake floors with multiple topcoats that have a virtually smooth texture will need grit to get COF values >0.50.