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EUCOPOXY TUFCOAT DBS

EUCLID CHEMICAL

DECORATIVE EPOXY FLOOR COATING AND BROADCAST SYSTEM

PACKAGING

Duraltex

15 gal (56.8 L) unit

Code: TD4305215§ (Clear & Std Colors)

3 gal (11.4 L) unit

Code: TD4305203§ (Clear & Std Colors)

High Performance Epoxy

15 gal (56.8 L) unit

Code: CEPK G015 000 (Clear & Std Colors)

3 gal (11.4 L) unit

Code: CEPK G003 000 (Clear & Std Colors)

1 gal (3.8 L) unit

Code: CEPK G001 000 (Clear & Std Colors)

Increte Chroma-Quartz

50 lb (22.7 kg) bag

Code: CQUM P050§ (Std Colors)

CLEAN UP

Clean tools and application equipment immediately with acetone, xylene, or MEK. Clean spills or drips with the same solvents while still wet. Hardened material will require mechanical abrasion for removal.

SHELF LIFE

2 years in original, properly stored, unopened package

SPECIFICATIONS/COMPLIANCES

• Canadian Food Inspection Agency

DESCRIPTION

EUCOPOXY TUFCOAT DBS provides an attractive seamless floor that is chemical and abrasion resistant. Utilizing a clear 100% solids epoxy (DURALTEX or INCRETE HIGH PERFORMANCE EPOXY) with a colored quartz aggregate (INCRETE CHROMAQUARTZ), this system can be applied to provide positive footing or a smoother, high gloss appearance. The colored quartz aggregate may be blended to produce an aesthetic tile like pattern.

PRODUCT CHARACTERISTICS

PRIMARY APPLICATIONS

- Manufacturing plants
- Kitchens
- Chemical processing
- Jails
- Food processing
- Schools
- Hospitals
- Restaurants
- Locker rooms
- Rest rooms
- Walkways
- Lobbies

FEATURES/BENEFITS

- Decorative, aesthetic appearance
- Alternative to trowel applied systems
- Easy to maintain
- Seamless
- Quartz aggregate is available in 17 standard colors

APPEARANCE

EUCOPOXY TUFCOAT DBS is a 3-part clear epoxy system consisting of DURALTEX or INCRETE HIGH PERFORMANCE EPOXY Part A (resin), and Part B (hardener), and INCRETE CHROMA-QUARTZ Part C (colored aggregate).

Standard INCRETE CHROMA-QUARTZ aggregate colors include black, blue, buff, camel, cayman green, chocolate, gray, green, medium gray, peach, plum, red, smoke, white, tan, teal, yellow. Others available upon request. A color chart can be found on the Euclid Chemical website.

COVERAGE

Material Requirements/1000 ft² (92.9 m²) Double Broadcast: 0.80 lb/ft² (3.9 kg/m²) Single Broadcast: 0.45 lb/ft² (2.2 kg/m²)

	Slip-resistant Texture		Standard Texture	
	1/16" (1.6 mm)	1/8" (3.2 mm)	1/16" (1.6 mm)	1/8" (3.2 mm)
Coating:	18 gal (68.1 L)	33 gal (124.9 L)	24 gal (90.8 L)	39 gal (147.6 L)
Aggregate:	450 lb (204 kg)	800 lb (363 kg)	450 lb (204 kg)	800 lb (363 kg)

Note: Broadcast rate will vary with surface texture of bare concrete as well as thickness of epoxy film on the surface.

TECHNICAL INFORMATION

The following are typical values obtained under laboratory conditions. Expect reasonable variation under field conditions. *Material properties @ 75 °F (24 °C)

Test Method	Test Property	Values	
N/A	Abrasion Resistance	Taber Abrader with CS-17 Calibrese wheel 1,000 gm load 500 cycles 48 mg loss	
ASTM C882	Bond Strength	2,100 psi (14.5 MPa)	
ASTM C109	Compressive Strenth	1 Day	
N/A	Dynamic Coefficient of Friction	Test sample application rate: Base - Duraltex Clear 100 ft²/gal (2.5 m²/L), Chroma Quartz broadcast @ 1 lb/ft² (4.9 kg/m Seal coat - Duraltex Clear 100 ft²/gal (2.5 m²/L) Wet	
N/A	Dynamic Coefficient of Friction	Test sample application rate: Base - Duraltex Clear 100 ft²/gal (2.5 m²/L), Chroma Quartz broadcast @ 1 lb/ft² (4.9 kg/m Seal coat - Tamoshield Clear 300 ft²/gal (7.4 m²/L) Wet	
N/A	Full cure time	7 Days	
N/A	Pot life	73 °F (23 °C)	
N/A	Re-coat time	5 to 7 hours	
N/A	Suitable for foot traffic	24 hours	
N/A	Suitable for wheel traffic	48 hours	
ASTM D638	Tensile strength	5,000 psi (34.7 MPa)	
N/A	VOC Content	≤ 5 g/L	
N/A	Working time	Over concrete at 73 °F (23 °C)	

CHEMICAL RESISTANCE

Acetic Acid, 5%	Poor	MEK	Poor	
Alkalies	Excellent	Methylene Chloride	Poor	
Ammonia	Excellent	MIBK	Poor	
Battery Acid	Good	Nitric Acid, 5%	Poor	
Beer	Excellent	Oil	Excellent	
Bleach	Excellent	Power Steering Fluid	Excellent	
Brake Fluid	Good	Phosphoric Acid, 30%	Poor	
Diesel Fuel	Excellent	Salt Water	Excellent	
Ethanol	Poor	Skydrol®	Good	
Ethylene Glycol	Excellent	Transmission Fluid	Excellent	
Gasoline	Excellent	Toluene	Good	
Hydraulic Oil	Excellent	Urine	Excellent	
Hydrochloric Acid, 10%	Good	Xylene	Excellent	

NOTE: Where chemical resistance is rated as poor, check the ratings on Eucothane as a possible topcoat for increased chemical resistance. **RATINGS:** Poor - affected within 24 hours; **Good** - no effect for 24 hours; **Excellent** - no effect after 2 weeks.

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DIRECTIONS FOR USE

Surface Preparation: The surface must be structurally sound, clean and free of grease, oil, curing compounds, soil, dust and other contaminants. See note in "Precautions/Limitations" section if coating is to be placed over old/existing epoxy or urethane coatings. New concrete and masonry must be at least 28 days old. Surface laitance must be removed. Concrete surfaces must be roughened and made absorptive, preferably by mechanical means, and then thoroughly cleaned of all dust and debris. If the surface was prepared by chemical means (acid etching), a water/baking soda or water/ammonia mixture, followed by a clean water rinse, must be used for cleaning, in order to neutralize the substrate. The Concrete Surface Profile (CSP) should be equal to CSP 2-3 in accordance with Guideline 310.2R-2013, published by the International Concrete Repair Institute (ICRI). Allow substrate to dry before coating application. Following surface preparation, the strength of the surface can be tested if quantitative results are required by project specifications. An elcometer or similar tensile pull tester may be used in accordance with ASTM C1583, and the tensile pull-off strength should be at least 250 psi (1.7 MPa).

Do not apply epoxy or urethane coatings if there is excessive moisture in the concrete, or if the moisture vapor emission rate (MVER) is high. Before application of DURALTEX, perform either of these tests: ASTM F2170 - Standard Test Method for Determining Relative Humidity in Concrete Floor Slabs Using In-Situ Probes, or ASTM F1869 - Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride. If the relative humidity is 85% or greater, or the MVER is 3 lbs/1000 ft²/24 hrs or greater, use a moisture mitigation system such as Dural Aquatight 100 PLUS or Dural Aquatight WB. After surface preparation and moisture testing, a test section application is recommended to confirm good adhesion and compatibility of the coating with the surface, and to confirm appearance and aesthetics. When coating steel, all contamination should be removed and the steel surface prepared to a "near white" finish (SSPC SP10) using clean, dry blasting media.

Mixing: Mix epoxy using a low-speed drill and a mixing paddle. Pre-mix Part A and Part B separately for approximately 1 minute each. Combine Part A and Part B in a 2:1 ratio by volume, then mix thoroughly for 3 to 5 minutes. Scrape the bottom and sides of the containers at least once during mixing. Do not scrape bottom or sides of the container once mixing operations have ceased; doing so may result in unmixed resin or hardener being applied to the substrate. Unmixed resin or hardener will not cure properly. Do not aerate the material during mixing. To keep aeration to a minimum, the recommended mixing paddles are #P1 or #P2 as found in ICRI Guideline 320.5R-2014.

Application for nominal 1/16" (1.6 mm) broadcast coating: Apply the mixed epoxy to the clean, prepared surface using a roller or squeegee at a coverage rate of approximately 115 ft²/gal (2.8 m²/L). Coverage rates will vary due to surface texture. Backrolling may be necessary to ensure complete wetting, uniform thickness and removal of any roller or squeegee marks. A uniform basecoat application is the key to a successful, level, and seamless floor. Quartz broadcast: Once 100 to 200 ft² (9.3 to 18.6 m²) of the floor is covered with the epoxy base coat, begin broadcasting the colored quartz aggregate. Spiked shoes should be worn to facilitate walking on the wet epoxy to broadcast the aggregate. Broadcast the aggregate by allowing it to fall as vertically as possible from a chest high level. Broadcast uniformly onto the wet substrate until the substrate is no longer visible and the quartz appears and remains dry in appearance. Do not broadcast to the edge that will be adjoining the next section, leave a 12" to 14" (305 mm to 356 mm) unseeded strip to allow for overlapping of the base coat. This prevents a line from appearing where the sections meet. Broadcast rate: 0.45 lb/ft² (2.2 kg/m²). Sweeping and sanding: Allow a minimum of 6 hours at 73 °F (23 °C) drying time prior to walking onto the surface and beginning this step. Cover shoes with plastic to prevent heel marking. Sweep or vacuum excess quartz aggregate from the surface. If areas appear to be uneven or unlevel, sanding may be required. The surface is now ready for the topcoat.

Application for nominal 1/8" (3.2 mm) broadcast coating: To achieve a more uniform color and increase thickness to a nominal 1/8" (3.2 mm), a double broadcast is recommended. Follow the procedures above for a 1/16" (1.6 mm) coating. After the initial broadcast, cure and sweeping, apply a tie coat by placing epoxy coating at an application rate of approximately 65 ft²/gal (1.6 m²/L). Perform the second colored quartz broadcast at a rate of 0.35 lb/ft² (1.7 kg/m²). Sweep and sand (if necessary) as indicated above. The surface is now ready for the topcoat.

Top Coat: Depending upon job requirements, several finishes are available as the final wear surface:

Slip-Resistant Finish: Topcoat the final aggregate broadcast with DURALTEX or INCRETE HP EPOXY, coating at an application rate of approximately 115 ft²/gal (2.8 m²/L).

Standard Finish: Topcoat the final aggregate broadcast with DURALTEX or INCRETE HP EPOXY, coating at an application rate of approximately 65 ft²/gal (1.6 m²/L).

UV Resistant Finish: To achieve a UV resistant finish, apply epoxy in the manner described above. Increase aggregate amount to fully absorb epoxy. Must top coat with EUCOTHANE or EUCO TAMMOSHIELD urethane coatings. Note: If a smoother surface is desired, additional epoxy coating may be applied to the surface. Additional gloss, abrasion and chemical resistance may be achieved with a final finish coat of EUCO TAMMOSHIELD or EUCOTHANE (high performance, urethane coatings).

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PRECAUTIONS/LIMITATIONS

DURALTEX and INCRETE HIGH PERFORMANCE EPOXY:

- Store indoors, protected from moisture, at temperatures between 50 °F and 90 °F (10 °C and 32 °C)
- Surface and ambient temperature during coating applications should be between 50 °F and 90 °F (10 °C and 32 °C)
- Material temperatures should be at least 50 °F (10 °C) and rising
- Do not apply if surface temperature is within 5 °F (3 °C) of the dew point in the work area
- Working time and cure time will decrease as the temperature increases, and will increase as the temperature decreases
- Do not thin
- When a vapor barrier is utilized in on-grade applications, it must be installed directly under the slab
- Although these products are chemically resistant, surface staining of the coating may occur after contact with some chemicals. Consider the use of a urethane topcoat such as EUCOTHANE for improved stain resistance.
- These products will discolor upon prolonged exposure to ultraviolet light and high-intensity artificial lighting. An aliphatic urethane topcoat such as EUCOTHANE can minimize these effects.
- Depending on the condition of the substrate, minor surface defects can appear in the coating when applied. Proper surface prep, patching of substrate imperfections, and priming will ensure a better overall finish.
- If coating over old/existing epoxy or urethane coatings, or if more than 24 hours elapses between coats: sand the previous coat, wipe clean, and proceed with coating operations. If old/existing coatings are peeling, flaking, etc., all unsound material must be removed prior to new coating applications.
- · Application of a test area is recommended to confirm final appearance and texture of the system with the end user
- In all cases, consult the product Safety Data Sheet before use

INCRETE CHROMA QUARTZ:

- The use of resins and coatings over this product may cause slight variance in the final color of the aggregate in comparison to color chart and uncoated aggregate
- For professional use only
- In all cases, consult the product Safety Data Sheet before use

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