

EUCOPOXY TUFCOAT DBS

DECORATIVE EPOXY COATING AND BROADCAST SYSTEM

DESCRIPTION

EUCOPOXY TUFCOAT DBS provides an attractive seamless floor that is chemical and abrasion resistant. Utilizing a 100% solids epoxy with an optional colored quartz aggregate, EUCOPOXY TUFCOAT DBS can be applied to provide positive footing or a smooth, high gloss appearance. The colored quartz aggregate may be blended to produce an aesthetic tile like pattern.

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
- Available in clear & 9 pre-pigmented colors
- ▲ Can contribute to LEED points

TECHNICAL INFORMATION

Typical Engineering Data

The following results were developed under laboratory conditions.

Re-coat time..... 5 to 7 hrs
Suitable for foot traffic..... 24 hrs
Suitable for wheel traffic..... 48 hrs
Pot life @ 73°F (23°C)..... 16 min
Working time over concrete at 73°F (23°C)..... 70 min
Thickness..... 1/16" to 1/8" (1.6 mm to 3.2 mm)
Compressive strength ASTM C 109
1 day >6,200 psi (42.8 MPa)
28 days..... 10,000 psi (69.4 MPa)
Tensile strength ASTM D 638..... 5,000 psi (34.7 MPa)
Bond strength ASTM C 882..... 2,100 psi (14.5 MPa)
Full cure time..... 7 days
VOC content..... 72 g/L
Abrasion resistance: Taber Abrader with CS-17 Calibre
wheel with 1,000 gm load 500 cycles 48 mg loss

Appearance: EUCOPOXY TUFCOAT DBS is a 3 part epoxy system consisting of a Part A, (resin), a Part B (hardener) and an optional Part C (colored aggregate). Standard aggregate colors include black, blue, blue gray, buff, camel brown, light beige, chocolate, green, gray, red, tan, teak, white, yellow, OSHA yellow. DBS resin is available in clear & 9 standard colors; white, light reflective, tan, concrete gray, light gray, medium gray, tile red, dark gray and black.

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

Chemical Resistance

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

PACKAGING

EUCOPOXY TUFCOAT DBS is packaged in 3 gal (11.4 L kits) consisting of Part A: 2.0 gal (7.6 L), Part B: 1.0 gal (3.8 L). Colored aggregate packaged in 50 lb (22.7 kg) bags.

SHELF LIFE

2 years in original, unopened package.

COVERAGE

Material Requirements/1000 ft² (92.9 m²) ***Double Broadcast:** .80 lb/ft² (3.9 kg/m²) ***Single Broadcast:** .45 lb/ft² (2.2 kg/m²).

Slip-resistant Texture

	1/16" (1.6 mm)	1/8" (3.2 mm)
Coating:	18 gal (68.1 L)	33 gal (124.9 L)
Aggregate:	450 lb (204 kg)	800 lb (363 kg)

Standard Texture

	1/16" (1.6 mm)	1/8" (3.2 mm)
	24 gal (90.8 L)	39 gal (147.6 L)
	450 lb (204 kg)	800 lb (363 kg)

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



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An **RPM** Company



DIRECTIONS FOR USE

Surface Preparation: New concrete must be a minimum of 28 days old and possess an open surface texture with all curing compounds and sealers removed. The concrete must be clean and sound. All oil, dirt, debris, paint and unsound concrete must be removed. The surface should be prepared mechanically, which will give an open surface profile with the cement paste removed from the surface. Surface profile should be equal to CSP 2 to 3 in accordance with ICRI Guideline 03732. **Important:** Acid etching is acceptable only when mechanical preparation is impractical.

Joints and edges: If the floor is subjected to wheel traffic the edges of the floor area should be sawcut 1/4" (6 mm) deep to provide a locked in edge. Moving joints as in the case of expansion joints should be brought up through the coating. All cracks over 1/16" (1.6 mm) wide should be filled. Use a 100% solids epoxy such as DURAL FAST SET EPOXY GEL to fill wide cracks, joints and keyed edges.

Mixing: All materials should be in the proper temperature range of 60°F (16°C) to 90°F (32°C). Mix the Part A and Part B together for 2 to 3 minutes using a drill and mixing prop. The epoxy must be well mixed to ensure proper chemical reaction. After mixing, place immediately.

Placement: Two coat application for nominal 20 mil total thickness: Apply the mixed EUACOXY TUF COAT DBS to the clean, prepared surface using a roller or squeegee at a coverage rate of 160 ft²/gal (4 m²/L) or to specifications. 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. No primer is needed. After the initial coat has dried tack free (but no more than 24 hours), apply the second coat following the same procedures.

Application for nominal 1/16" (1.6 mm) broadcast coating: Apply the mixed EUACOXY TUF COAT DBS to the clean, prepared surface using a roller or squeegee at a coverage rate of 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 seamless floor. **Quartz broadcast:** Once 100 to 200 ft² (9.3 to 18.6 m²) is covered with the EUACOXY TUF COAT DBS base coat, begin broadcasting the 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 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:** .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 EUACOXY TUF COAT DBS coating at an application rate of 65 ft²/gal (1.6 m²/L). Perform the second broadcast at a rate of .35lb/ft² (1.7 kg/m²). Sweep and sand (if necessary) as indicated above.

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

Slip-Resistant Finish: Topcoat the final aggregate broadcast with EUACOXY TUF COAT DBS coating at an application rate of 115 ft²/gal (2.8 m²/L). **Standard Finish:** Topcoat the final aggregate broadcast with EUACOXY TUF COAT DBS coating at an application rate of 65 ft²/gal (1.6 m²/L). **UV Resistant Finish:** To achieve a UV resistant finish, apply DBS epoxy in pre-described manner. Increase aggregate amount to fully absorb epoxy. Must top coat with Eucothane or Eucothane VOX. **Note:** If a smoother surface is desired additional EUACOXY TUF COAT DBS coating may be applied to the surface. Additional gloss, abrasion and chemical resistance may be achieved with a final finish coat of EUCOTHANE (high performance, urethane coating).

CLEAN-UP

Clean tools and equipment with acetone, toluene or MEK. Do not allow the epoxy to harden on equipment.

PRECAUTIONS/LIMITATIONS

- Cool temperatures extend working times and cure schedules, while warmer temperatures reduce them.
- For large jobs in higher than usual temperatures, consult The Euclid Chemical Company for alternative epoxy base coat.
- Avoid application at air and floor temperatures below 50°F (10°C).
- Store indoors at 45°F to 110°F (7°F to 43°C).
- For UV resistance, top coat with Eucothane or Eucothane VOX.
- In all cases, consult the Material Safety Data Sheet before use.

WARRANTY: The Euclid Chemical Company ("Euclid") solely and expressly warrants that its products shall be free from defects in materials and workmanship for one (1) year from the date of purchase. Unless authorized in writing by an officer of Euclid, no other representations or statements made by Euclid or its representatives, in writing or orally, shall alter this warranty. EUCLID MAKES NO WARRANTIES, IMPLIED OR OTHERWISE, AS TO THE MERCHANTABILITY OR FITNESS FOR ORDINARY OR PARTICULAR PURPOSES OF ITS PRODUCTS AND EXCLUDES THE SAME. If any Euclid product fails to conform with this warranty, Euclid will replace the product at no cost to Buyer. Replacement of any product shall be the sole and exclusive remedy available and buyer shall have no claim for incidental or consequential damages. Any warranty claim must be made within one (1) year from the date of the claimed breach. Euclid does not authorize anyone on its behalf to make any written or oral statements which in any way alter Euclid's installation information or instructions in its product literature or on its packaging labels. Any installation of Euclid products which fails to conform with such installation information or instructions shall void this warranty. Product demonstrations, if any, are done for illustrative purposes only and do not constitute a warranty or warranty alteration of any kind. Buyer shall be solely responsible for determining the suitability of Euclid's products for the Buyer's intended purposes.