



# THE EUCLID CHEMICAL COMPANY

19218 REDWOOD ROAD • Cleveland, OH 44110  
(216) 531-9222 • (800) 321-7628 • FAX (216) 531-9596  
www.euclidchemical.com

## EUCOPOXY TUFCOAT DBS

### DECORATIVE EPOXY BROADCAST SYSTEM

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**EUCOPOXY TUFCOAT DBS** provides an attractive seamless floor that is chemical and abrasion resistant. Utilizing a 100% solids epoxy and 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.

#### TYPICAL APPLICATIONS

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

#### FEATURES/BENEFITS

- Decorative, aesthetic appearance
- Excellent chemical and abrasion resistance
- Alternative to trowel applied systems
- V.O.C. compliant-100% solids system
- Available in a variety of color combinations
- Easy to maintain

#### PACKAGING

EUCOPOXY TUFCOAT DBS is a two component epoxy packaged in 3 gal (11.4 liter) kits.

Part A	2.0 gal (7.6 liter)
Part B	1.0 gal (3.8 liter)
Total Liquid	3.0 gal (11.4 liter)

Part C, colored aggregate is packaged in 50 lb (22.7 kg) bags.

#### Appearance

EUCOPOXY TUFCOAT DBS is a 3 part epoxy system consisting of a Part A, (resin), a Part B (hardener) and a 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.

After placement and curing, the product has a textured, glossy appearance. The degree of texture is determined by the amount of final topcoat and can be specified by the owner.

This product meets V.O.C. contents in accordance to EPA 40 CFR Part 59 Table I Subpart D for Industrial Maintenance Coatings with a maximum V.O.C. content of 450 g/l.

#### TECHNICAL INFORMATION

##### Typical Engineering Data

The following results were developed under laboratory conditions.

Re-Coat time	@5-7 hours
Suitable for foot traffic	@72 hours
Suitable for wheel traffic	@48-72 hours
Pot life at 73°F (23°C)	16 minutes

Working time over

Concrete at 73°F (23°C)	70 minutes
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	1 - 3,000 psi (89.7 MPa)

##### Tensile Strength ASTM D-638 - 2,000 psi (13.8 MPa)

##### Bond Strength ASTM C-882 - 2,100 psi (14.5 MPa)

##### Full Cure Time: 7 days

##### V.O.C. - 72 g/l

##### Shelf Life: 2 years in unopened container.

**Abrasion Resistance:** Taber Abrader with CS-17 Calibre wheel with 1,000 gm load/500 cycles yield a 48 gm loss.

#### 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
Hydrochloric Acid, 10%	good
MEK	poor
Methylene Chloride	poor
MIBK	poor
Nitric Acid, 5%	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

**NOTE:** Where chemical resistance is rated as poor, check the ratings on EUCOTHANE as a possible topcoat for up-graded chemical resistance.

**RATINGS:** Poor-affected within 24 hours; Good-no effect for 24 hours; Excellent-no effect after 2 weeks.

## COVERAGE

\*Double Broadcast Rate: .80 lb/ft<sup>2</sup> (3.9 kg/m<sup>2</sup>) (approx)

\*Single Broadcast Rate: .45 lb/ft<sup>2</sup> (2.2 kg/m<sup>2</sup>) (approx)

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

## Material Requirements per 1000 ft<sup>2</sup> (92.9 m<sup>2</sup>)

	Slip-resistant Texture	Standard Texture
<u>1/16" (1.6 mm)</u>		
coating:	18 gal (68.1 liter)	24 gal (90.8 liter)
aggregate:	450 lb (204 kg)	450 lb (204 kg)
<u>1/8" (3.2 mm)</u>		
coating:	33 gal (124.9 liter)	39 gal (147.6 liter)
aggregate:	800 lb (363 kg)	800 lb (363 kg)

## 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 using sandblast, shotblast or scarifier which will give an open surface profile with the cement paste removed from the surface.

The above surface preparation is that recommended by The Euclid Chemical Company. 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 such as EUCO #456 MORTAR to fill wide cracks, joints and keyed edges.

**Mixing**-All materials should be in the proper temperature range of 60°F (16°C) - 90°F (32°C).

Mix the Part A and Part B together for 2-3 minutes using a drill and mixing prop. The epoxy must be well mixed to ensure proper chemical reaction. After mixing, place immediately.

**Placement**-Application for nominal 1/16" (1.6 mm) coating-Apply the mixed EUCOPOXY TUF COAT DBS to the clean, prepared surface using a roller or squeegee at a coverage rate of 115 ft<sup>2</sup>/gal (2.8 m<sup>2</sup>/liter) 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 100-200 ft<sup>2</sup> (9.3-18.6 m<sup>2</sup>) is covered with the EUCOPOXY 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. Do not broadcast to the edge that will be adjoining the next section leave a 12" to 14" (305-356 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/ft<sup>2</sup> (2.2 kg/m<sup>2</sup>)

**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 (see section below).

**Application for Nominal 1/8" (3.2 mm) 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, apply a tie coat by placing EUCOPOXY TUF COAT DBS coating at an application rate of 65 ft<sup>2</sup>/gal (1.6 m<sup>2</sup>/liter). Perform the second broadcast at a rate of .35 lb/ft<sup>2</sup> (1.7 kg/m<sup>2</sup>). 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 EUCOPOXY TUF COAT DBS coating at an application rate of 115 ft<sup>2</sup>/gal (2.8 m<sup>2</sup>/liter).

**Standard Finish**-Topcoat the final aggregate broadcast with EUCOPOXY TUF COAT DBS coating at an application rate of 65 ft<sup>2</sup>/gal (1.6 m<sup>2</sup>/liter).

If a smoother surface is desired additional EUCOPOXY 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 solvent such as EUCO SOLVENT, xylene, xylol, 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° - 110°F (7° - 43°C).



Form Eucopoly Tufcoat DBS-3.01

**WARRANTY:** The Euclid Chemical Company ("Euclid") solely and expressly warrants that its products shall be free from defects in materials and workmanship for six (6) months 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.