



EUCLID CHEMICAL

EUCOPOXY TUFCOAT VOX

WATER-BASED EPOXY FLOOR COATING

DESCRIPTION

EUCOPOXY TUFCOAT VOX is a two-component, water-based, low-odor, epoxy-polyamide coating. It acts as a tough, abrasion-resistant membrane that withstands wear and chemical attack in a variety of applications. EUCOPOXY TUFCOAT VOX should be used in many areas where a solvent-based product is not permitted. EUCOPOXY TUFCOAT VOX comes in a variety of colors and provides a semi-gloss finish.

PRIMARY APPLICATIONS

- Food processing plants
- Occupied buildings
- Warehouse floors
- Chemical plants
- Manufacturing plants
- Auto/truck repair bays
- Aisleways and docks

FEATURES/BENEFITS

- Low odor
- Provides excellent wear under traffic
- Excellent resistance to a variety of chemicals
- Easy to apply with standard equipment
- Can be applied as a non-slip floor finish
- Available in a variety of colors
- Hardens to a semi-gloss finish

TECHNICAL INFORMATION

The following are typical values obtained under laboratory conditions. Expect reasonable variation under field conditions.

VOC Content	< 125 g/L
Mixing ratio clear by vol, Part A to Part B	3.9 to 1
Mixing ratio color by vol, Part A to Part B	4.5 to 1
Re-Coat time	4 to 24 hours
Foot traffic	@ 24 hours
Wheel traffic	@ 48 hours
Dry to touch	4 to 6 hours
Pot life	1 to 1 1/2 hours
Total solids content	56%
Dry film thickness	3 to 4 mils
Flexibility	good
Weathering	very good
Abrasion resistance	excellent

CHEMICAL RESISTANCE

Acetic Acid, 5%	poor
Alkalies	excellent
Ammonia	excellent
Battery Acid	good
Beer	excellent
Bleach	excellent
Brake Fluid	poor
Ethanol	poor
Ethylene Glycol	excellent
Gasoline	excellent
Hydrochloric Acid, 10%	poor
MEK	poor
Methylene Chloride	poor
MIBK	poor

Nitric Acid, 5%	poor
Oil	excellent
Phosphoric Acid, 30%	poor
Salt Water	excellent
Skydrol®	poor
Toluene	poor
Urine	excellent
Xylene	excellent

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

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

Appearance: EUCOPOXY TUFCOAT VOX is a two-component, epoxy-polyamide system consisting of a Part A and Part B. This product is available in white, light reflective, tile red, tan, concrete gray, black, & clear (amber).

Important: The clear has a slight amber appearance and may not be suitable for some applications. EUCOPOXY TUFCOAT DBS or DURALTEX should be used if a water clear appearance is required.

PACKAGING

EUCOPOXY TUFCOAT VOX is packaged in 1 gal (3.8 L) and 5 gal (18.9 L) kits.

SHELF LIFE

1 year in original, unopened containers

SPECIFICATIONS/COMPLIANCES

Canadian Food Inspection Agency

COVERAGE

100 to 250 ft²/gal (2.5 to 6.1 m²/L) will produce a wet film thickness of 6 to 7 mils (dry film thickness 3.4 to 3.9 mils)

Note: Coverage rates are approximate. Actual coverage depends on temperature, texture, and substrate porosity.

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 2-5 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 EUCOPOXY TUF COAT VOX, 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 70% 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 EUCOPOXY TUF COAT VOX using a low-speed drill and a mixing paddle. Pre-mix Part A and Part B separately for approximately 1 minutes each. Combine all of Part A with all of Part B, then mix thoroughly for 3 minutes. For ease of mixing, add the Part B into the Part A (not the reverse). 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: See the "Epoxy & Urethane Coatings Application Guide" for installation means and methods. Note that any coverage rates or mixing ratios for epoxy or epoxy-aggregate combinations found in the "Epoxy & Urethane Coatings Application Guide" are approximations, and are for general reference only. For product-specific coverage rates and mixing ratios, refer to this technical data sheet.

Two coats of EUCOPOXY TUF COAT VOX are recommended for most applications. If desired, additional coats of this product or a EUCOTHANE seal coat may be applied just after the initial coating has become tack free, or up to 24 hours later.

Tack free time for EUCOPOXY TUF COAT VOX is 4 to 6 hours (at 70°F (21°C)). EUCOPOXY TUF COAT VOX requires 24 hours (at 70°F (21°C)) to cure sufficiently for foot traffic. EUCOPOXY TUF COAT VOX requires 48 hours (at 70°F (21°C)) to cure sufficiently for wheel traffic.

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 EUCOPOXY TUF COAT VOX will require mechanical abrasion for removal.

PRECAUTIONS/LIMITATIONS

- Store EUCOPOXY TUF COAT VOX indoors, protected from moisture, at temperatures between 45°F and 110°F (7°C and 43°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 EUCOPOXY TUF COAT VOX 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 EUCOPOXY TUF COAT VOX
- When a vapor barrier is utilized in on-grade applications of EUCOPOXY TUF COAT VOX, it must be installed directly under the slab