



TBS COMPONENT DATA SHEET

Technical Barrier System Inc.

TEL: 905.842.9488

FAX: 905.842.1582

TOLL FREE: 888.537.2888

EMAIL: INFO@TBSPRODUCTS.COM

WEB: WWW.TBSPRODUCTS.COM

EMBE® TOP COAT

Industrial Floor Coating

Description

EMBE® TOP COAT is a two-component solvent free, 100% solids epoxy providing a tough chemical resistant coating with excellent gloss retention and an applicator friendly viscosity level. EMBE® Top Coat will provide a high gloss, with good chemical and skid resistance.

Typical Uses

- Protection of concrete in new or old floors
- Light to medium duty manufacturing facilities
- Schools, hospitals, dairies, service station bays
- Pharmaceutical Plants

Features

- 100% solids epoxy - No VOC's
- Low viscosity for leveling and adhesion.
- High gloss light reflective finish
- Options include the incorporation of various broadcast aggregates for slip resistance.
- Broad range chemical resistance to many alkalis and acids
- Canadian Food Inspection Agency approved

Limitations

- Only for indoor use
- Not for use on or below grade without an effective vapor barrier in place
- Not recommended for areas subject to extreme thermal shock
- Minimum cure temperature 50°F (10°C)

Product Data

- Finish – Glossy
- Volume Solids – 100%
- Coverage – Wet film – 200 sf /gal @ 8 mills
- Drying time @ 8 mil @ 50% RH
 - To touch – 6 hours
 - To Recoat – 8 hours
 - Foot Traffic – 12 hours
 - Heavy Traffic – 24 hours

Drying time depends on heat, humidity and thickness of film

- Shelf life – 12 months in dry safe area
- Flash point – n/a
- Recover /Cleanup – Xylene
- Surface preparation – Blasttrack (shot blast) or mechanical grinding

Physical Properties

Tensile Strength	6,400 psi 20.68 MPa
Impact Strength	10 ft/lbs
Abrasion Resistance ASTM D4060	CS10 wheel – 500 cycles – 500 gm load <50 mg loss
Elongation ASTM D638	23%
Shore D Hardness	65D
Bond Strength	Greater than 1 MPA
Compressive Yield Strength ASTM D695	17,200 psi
Flammability ASTM E-84	self extinguishing F.S. 14 F.C.0

Physical Properties Continued

Skid Resistance	ASTM D 2047-96
Average readings	Dry: 0.67 Wet: 0.61

Packaging

3 – gallon unit
15 - gallon unit
150 – gallon unit

Performance Tips

During the early stages of drying, the coating is sensitive to rain, dew, humidity and moisture condensation. Avoid these conditions during the first 16 – 24 hours of curing.

Spreading rates are based on percent of solids but are affected by surface profile, roughness or porosity of the concrete. Rate achieved will also be affected by technique and skill of the applicator.

Always test adhesion by applying a test patch 2 –3 square feet. Allow drying before checking adhesion.

Application Procedures:

- Substrate should be between 50°F (10°C) and 90°F (32°C)
- Substrate must be clean, free of dirt, waxes, grease oil and other foreign matter
- Concrete floors must have laitances removed, preferably by shot blasting, or mechanical sanding.
- Freestanding water must be completely dry prior to application.
- Must be installed by a TBS Approved Applicator.

Components

- EMBE Epoxy Topcoat Resin
- EMBE Epoxy Topcoat Hardener
- 2:1 ratio

Safety Precautions

Please refer to product MSDS sheet.

Chemical Resistance after Full Cure

Excellent = unaffected by chemistry

Good = Film integrity intact, slight discoloration, staining, softening

Not Recommended = Severe attack, swelling

Hydrochloric Acid 10%	- Excellent
Hydrochloric Acid 36%	- Good
Sulphuric Acid 10%	- Excellent
Sulphuric Acid 40%	- Good
Sodium Hydroxide 10%	- Excellent
Sodium Hydroxide 50%	- Excellent
Brake Fluid	- Excellent
Diesel Fuel	- Excellent
Engine Oil	- Excellent
Gasoline	- Excellent
Jet Fuel	- Excellent
Transmission Fluid	- Excellent
Acetone	- Not Recommended
Benzene	- Excellent
Methyl Ethyl Ketone	- Not Recommended
Varsol	- Excellent
Hydrogen Peroxide	- Excellent
Beer	- Excellent
Coffee	- Excellent
Lard	- Excellent
Pine Oil	- Excellent
Vegetable Oil	- Excellent