



# TBS SYSTEM DATA SHEET

## TECHNICAL BARRIER SYSTEMS INC.



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## EMBE® MORRICITE

THIN SET EPOXY MORRICITE (CANADA ONLY)

### Description

EMBE® MORRICITE is a lightweight terrazzo flooring system that combines the ageless beauty of terrazzo, with the modern technology of epoxy chemistry to produce thin lightweight decorative flooring. Designed to handle heavy traffic and to provide a beautiful and durable seamless floor, EMBE® MORRICITE will provide a finish with permanent gloss and long lasting performance.

### Typical Uses

- Institutions – hospitals, schools, churches
- Prestige offices, showrooms and lobbies
- Supermarkets, hotels, restaurants
- Public transit facilities – airports, bus, train, rapid transit stations
- Animal care and holding areas

### Features

- Over 30 years of proven performance
- Short installation cycle – floors can be finished within 72 hours
- Life cycle costs are very competitive compared to other flooring systems
- 100% solids epoxy - No VOC's
- High gloss light reflective finish
- Unlimited color options
- Chemical and stain resistant
- Seamless surface
- Color plates in TTMAC

### Limitations

- Only for indoor use
- Minimum cure temperature 50°F (10°C)
- Shelf life one year

### Application

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

### Physical Properties

<b>Compressive Strength</b>	6,500 psi
ASTM D-695	44.82 Mpa
<b>Hardness Shore D</b>	85 D
ASTM D-1706	
<b>Tensile Strength</b>	5,900 psi
ASTM D-638	40.68 Mpa
<b>Tensile Elongation</b>	6%
ASTM D-638	
<b>Impact Resistance</b>	120 in/lbs
<b>Flammability</b>	self
ASTM D-635	extinguishing
<b>Abrasion Resistance</b>	0.5 grams
ASTM D-968	0.018 Ounces
<b>Bond Strength</b>	300 psi
ACI Committee#403	2.07 MPa
Bulletin 59-43	
<b>Flexural Strength</b>	6500 psi
ASTM D-790	

**Physical Properties Con't**

<b>Linear Shrinkage</b> ERF-64	.001 in./in max
<b>Fading Resistance</b> ASTM E-188	Epoxy Resin showed no Discoloration Or other physical changes
<b>Impact Strength</b> MIL D-3134 F	16 ft/lbs no chipping detachment, or Indentation
<b>Indentation</b> MIL D-3134, section 4-7-4	No indentation
<b>Resistance to elevated Temperature</b> MIL D-3134 Section 4-7-5	Will not slip or flow, no softening
<b>Thermal Coefficient of Linear Expansion</b> ASTM D-696	25x10 <sup>-6</sup> in./in. Temp. range -12°F to 140°F

Alcohol	
Mineral Oil	No Effect
Mineral Spirits	No Effect
Trichloroethylene	Slight softening
Xylol	No Effect

**Packaging**

Resin only  
 Mix Ratio: 5 Resin: 1 Hardener  
 30 gallon (113.56 Litres) units  
 Aggregate sold separately

**Safety Precautions**

Please refer to product MSDS sheet.

**Household/Miscellaneous**

Coffee	No Effect
Cola Beverage	No effect
Detergent Solution 0.025%	No effect
ASTM No. 3 Oil	No effect

**Chemical Resistance**

<b>ACIDS</b>	<b>SPECIMEN INTEGRITY</b>
Acetic 20%	No Effect
Chromic 20%	No Effect
Hydrochloric 10%	No Effect
Lactic 40%	No Effect
Nitric 40%	No Effect
Phosphoric 60%	No Effect
Sulphuric 60%	No Effect
<b>Alkalis</b>	<b>Specimen Integrity</b>
Potassium Hydroxide 30%	No Effect
Sodium Hydroxide 10%	No Effect
<b>Solvents</b>	<b>Specimen Integrity</b>
Carbon Tetrachloride	No Effect
Gasoline	No Effect
Isopropanol Alcohol	Very slight softening
Methyl Isobutyl	No Effect