



COMPONENT DATA SHEET



EMBE[®] NOVOLAC

Description

EMBE[®] NOVOLAC epoxy binder is a premium topcoat system with excellent film appearance. EMBE[®] NOVOLAC provides the best overall chemical resistance, suitable for continuous immersion service against many reagents.

Typical Uses

- Self-levelling and trowelable floors
- Chemically resistant grout
- Mortars
- Topcoat

Features

- Easy to apply
- Good abrasion resistance
- Excellent chemical resistance
- Resistant to amine blush and water spotting
- VOC compliant
- Excellent low temperature cure
- Excellent strength and modulus
- Approved by Canadian Food Inspection Agency

Limitations

- New concrete surfaces should be cured a minimum 28 days before coating or delamination may occur
- Substrate must be free of dirt, waxes, grease, oil and other foreign materials
- Cracks and surface defects should be prepared prior to priming
- Concrete substrate must have laitance removed via shot blast or mechanical sanding

- Free standing water **MUST** be removed and substrate should be completely dry prior to installation
- Substrate must be 4% or less moisture content
- Surface and air temperatures **MUST** be at least 10°C (50°F) during installation and initial cure

Application

- Mix ratio: 2 parts Resin: 1 part Hardener
- Mix well, 1-2 minutes, using a mechanical/drill mixer
- Pour product in a bead and spread with suitable squeegee for appropriate coverage
- Back roll with medium-low pile roller to attain desired finish

Physical Properties

•Viscosity	
5°C (40°F)	2200 cps
15°C (55°F)	1400 cps
20°C (55°F)	1100 cps
25°C (77°F)	950 cps
•Thin Film Set/Walk on Time	
5°C (40°F)	21hrs/30hrs
15°C (55°F)	9.5hrs/16hrs
20°C (55°F)	6.5hrs/10hrs
25°C (77°F)	5.5hrs/9hrs

WITHOUT AGGREGATE:

•Compressive Strength (ASTM D695-85)	6880 psi (47.44 Mpa)
•Compressive Modulus (ASTM D695-85)	215,000 psi (1482.37 MPa)
•Tensile Strength (ASTM D638-86)	5200 psi (35.85 MPa)
•Tensile Modulus (ASTM D638-86)	174,000psi (1200 MPa)
•Tensile Elongation (ASTM D638-86)	16% to break
•Flexural Strength (ASTM D790-86)	8000 psi (55.16MPa)

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- Flexural Modulus (ASTM D790-86) 257,000psi (1771.95 MPa)
- Hardness (Shore D) (ASTM D2240-86) 81
- Abrasion Resistance (ASTM D4060-90) 0.034 g weight loss
1000 cycles, #10 wheel

Safety Precautions

Please refer to product Safety Data Sheet

WITH AGGREGATE:

- Compressive Strength (ASTM C579) 5900 psi (24hrs)
9300 psi (7days)
- Compressive Modulus (ASTM C579) 275,000 psi (1896 MPa)
- Tensile Strength (ASTM C307) 2400 psi (16.55 MPa)
- Tensile Modulus (ASTM C307) 99,000psi (682.58 MPa)
- Flexural Strength (ASTM C580) 4300 psi (29.65 MPa)
- Flexural Modulus (ASTM C580) 1,200,000psi (8273.7 MPa)
- Vicac – Walk on Time (ASTM C191-82) 5.2 hrs @ 25°C (77°F)

Chemical Resistance

Reagent	3 hrs	24 hrs	3 days	7 days	28 days
Deionized water	E	E	E	E	E
Methanol	E	E	E	E	G
Ethanol	E	E	E	E	G
Toluene	E	E	E	E	G
Xylene	E	E	E	E	E
Butyl Cellosolve	E	E	E	E	G
Ferric Chloride	E	E	E	E	E
Ferric Sulfate	E	E	E	E	E
MEK	E	E	E	G	G
Lactic Acid,10%	E	E	E	E	E
Acetic Acid,10%	E	E	E	E	E
Sulfuric Acid,10%	E	E	E	E	E
Sulfuric Acid,70%	E	E	E	E	E
Sulfuric Acid,98%	E	E	E	G	G
50% Sodium Hydroxide	E	E	E	E	E
10% Sodium Hypochlorite	E	E	E	E	E
1,1,1 Trichloroethane	E	E	E	G	G
HCl, 10%	E	E	E	E	E
Nitric Acid,20%	E	E	E	E	E

E=Excellent G=Good

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