



ChemMasters®

Quality • Innovation • Service

GreenThane™ 310WB

Waterborne Chemical
Resistant Urethane for Bridge &
Wall Coatings

P R O D U C T D A T A

DESCRIPTION

GreenThane 310WB is a two component, waterbourne, aliphatic polyurethane coating. It is used as a topcoat over ChemMasters **Safe-Cure & Seal EPX** epoxy primer to improve chemical and ultraviolet light resistance.

USES

- Concrete topcoat for D.O.T. applications including Municipal-Bridge Parapets, Bridge Columns, Precast Spans, Bridge Substructure & Superstructure.
- Use on vertical and overhead, interior and exterior projects requiring UV, chemical & abrasion protection.

ADVANTAGES

- Optimum chemical resistant coating for use inside or out
- Water-based formula is environmentally friendly and easy clean up
- Passes NCHRP 244 testing to protect concrete from chloride ion penetration when used in conjunction with **Safe-Cure & Seal EPX**
- Superior resistance to staining and deterioration caused by foodstuffs, acids, alkalis, hydrocarbons
- Exceptional color retention and stability
- Virtually no odor and <100 g/L VOC

Packaging

Package	Part Number
GreenThane 310WB Part A Resin 3.2 gal	F3105.05SC1
GreenThane 310WB Part B Hardener 0.8 gal	F3105.01B

Estimated Coverage Rates

3 dry mils	300 ft ² /gal (7 m ² /L)*
* Use recommended DOT rates where applicable	

TECHNICAL DATA

- ASTM Type V, aliphatic polyurethane coating
- ACI 302, Table 1.1 Class 1, 2, 3, 4, and 5 floors
- Ohio and New York State D.O.T. preapproved as topcoat for epoxy/urethane system for bridges and barrier walls
- Complies with 40 CFR Part 59 <350 g/L V.O.C. for Architectural Coatings

NCHRP 244 Test Data

	Control percent reduction	GreenThane 310WB percent reduction
Chloride Ion Content		
Series II	0	83
Series IV	0	84

Physical Properties

Volatile Organic Compound	<100 g/L
Solids - pigmented	66 to 72%
ASTM B117-73 Salt Resistance	No effect
ASTM C642 Water Absorption	<2%
ASTM D3363 (Pencil Hardness)	> 2 H
ASTM C672 Scaling Resistance	0 (no scaling)
Solvent Resistance (100 double rubs)	No effect
Abrasion Resistance-Taber 1000g/1000 cycles CS-17 wheels	36 mg
Dry Time @ 70°F (21°C): Tack Free	5 hours

DIRECTIONS

GreenThane 310WB may be used as a top coat for ChemMasters epoxy/urethane systems. Apply **GreenThane 310WB** to primed concrete surfaces only. Use **Safe-Cure & Seal EPX** or **Duraguard 100** as a primer. Refer to primer recoat window to determine when **GreenThane 310WB** must be applied.

Surface preparation is important; follow the recommendations for the selected primer. If the recoat window is missed, for the chosen primer, or the urethane is being applied over an older coating the basecoat must be sanded or screened then swept and solvent wiped prior to urethane application. Contact ChemMasters for additional details.

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DIRECTIONS CONT'D:

Surface preparation is important; follow the recommendations for the selected primer. If the recoat window is missed, for the chosen primer, or the urethane is being applied over an older coating the basecoat must be sanded or screened then swept and solvent wiped prior to urethane application. Contact ChemMasters for additional details.

Coverage Rate: 300 ft²/gal (7 m²/L) yields 5 wet mils and dries to 3 mils. **When doing DOT work those individual requirements take precedence over any other coverage rates.**

Mixing: Stir or mix **GreenThane 310WB Part A, Resin** to disperse pigments, then add the entire contents of 1 gallon of **GreenThane 310WB Part B Hardener** to the 5 gallon pail of **Part A**.

Mix at low speed using a drill fitted with a mixing blade for 2 minutes. Pigmented materials must be mixed until color is uniform with no streaks. Apply material within 90 minutes. Working time is drastically reduced when kept in large quantities.

Vertical and Overhead applications: Apply mixed **GreenThane 310WB** onto primed area using a short nap solvent resistant roller. Apply uniformly leaving no pinholes or gaps. Do not allow material to run or puddle.

GreenThane 310WB may be applied with solvent resistant brushes & rollers or sprayed using a GRACO (Gmax 5900 HD) sprayer rated at minimum 1 GPM or comparable airless sprayer combined with a minimum 0.025 GHD fan tip, depending on desired output rate. If using a sprayer flush hoses with solvent prior to spraying **GreenThane 310WB**.

Recoat: If using **Safe-Cure & Seal EPX** as the primer, recoat window for application of **GreenThane 310WB** is 7 days so long as substrate remains clean and dry.

Clean Up: Clean tools and equipment with warm soapy water immediately after use. Rinse thoroughly. Spray equipment should have a final rinse of PM acetate to prevent clogging.

STORAGE: Store unmixed factory sealed containers in cool dry place out of direct sunlight. Shelf life of properly stored material is 12 months from the date of manufacture.

LIMITATIONS

Do not apply when:

- the surface or air temperature is or is expected to be below 60°F (15.6°C) within 6 hours of application.
 - temperature at the time of application is within 5°F(2.7°C) of the dew point
 - dew, fog, or high humidity is expected within 4 hours of application.
 - rain is expected within 24 hours of application
 - if surface is frozen or frost filled
- Do not apply in areas of immersion or where a negative head pressure may exist.
 - Application in direct sunlight or during times of extreme heat may cause wrinkling, pinholes, or blistering.
 - Schedule application for early morning or late afternoon when ambient and substrate temperatures are at their lowest.

- Do not use strong caustic or solvent based cleaner. For additional data on good coating practice consult SSPC, NACE, or ICRI.
- Adhere to recommended application rates. Over application may result in foaming.
- Not recommended for waterproofing or damp proofing of exterior horizontal surfaces, floors or below grade interior walls. Iron particles in block, brick or mortar may cause discoloration through the coating. Keep from freezing.

PRECAUTIONS.

Consult Safety Data Sheet for complete hazard information.

For professional use only

Keep out of reach of children

THIS PRODUCT IS FOR COMMERCIAL USE ONLY – IT IS NOT A CONSUMER PRODUCT.

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