



GEMTHANE AQUATECH STC

TECHNICAL DATA

THEATRE STAGE FLOOR COATING

THE PRODUCT AND ITS USES

GemThane AquaTech STC is a two-component, 1:10 ratio, waterborne and water-reducible, fully cross-linked polyurethane coating that combines low odor with excellent performance. GemThane AquaTech STC is specifically designed for use as a theatre stage floor finish topcoat. The GemThane AquaTech STC finish cures to a remarkable flat black appearance, allowing an exceptional ability to control light reflections during live stage performances. The formulation has been modified with special anti-wear additives that provide performance characteristics that are equal to solvent-dispersed products such as GemThane PC Aromatic. The coefficient of friction is ideal for performers who require an optimum amount of slide. Very low VOC's and a fast curing cycle are other features of this tough, impermeable polymer coating.

Bare wood should be sealed with a Madison approved sealer (including GemThane PC Aromatic) then topcoated with GemThane AquaTech STC. GemThane AquaTech STC can be applied in two coats of approximately 4 wet mils in thickness. It should be applied 6 - 24 hours after the application of GemThane PC Aromatic (recommended sealer). GemThane AquaTech STC cures at ambient temperatures and provides excellent color fastness.

Please refer to the technical data sheet for GemThane PC Aromatic for more information on this product.

TECHNICAL INFORMATION

PROPERTY	TEST DESCRIPTION	RESULTS
Application Temperatures	N/A	0°C(32°F) to 50°C(120°F)
Viscosity	Brookfield Viscometer	Paint-Like
Pot Life	@ 20°C/70°F	2 - 6 hours
Initial Setting Time	@ 20°C/70°F	60 minutes
Curing Time Before Handling	@ 20°C/70°F	2 to 3 hours
Optimum Curing Time		72 hours
Recoat Time*	@ 20°C/70°F	24 hours
Solids Content	ASTM D-1259	45-50%
Volatile Organic Compounds (VOCs)	ASTM D-2369	less than 100 grams/litre
Theoretical coverage	N/A	20 m ² /litre/micron (760 ft ² /US gallon/mil)
Abrasion Resistance	ASTM D-4060	78 mg
Adhesion to steel	Elcometer (SSPC -SP5)	1000 p.s.i.
Ultraviolet Resistance	Weatherometer and Q.U.V.	Excellent
Colors		Opaque Black

*However, recoat window varies depending on the spray equipment temperature setting, the ambient conditions, product temperature/thickness, and the temperature of the substrate being coated.

NOTE: All statements, technical information and recommendations contained herein are typical of results obtained under laboratory conditions and are not intended to be used as contract specifications. For specification guidelines please contact Madison Chemical.

APPLICATION INSTRUCTIONS

CONTACT MADISON FOR DETAILED APPLICATION INSTRUCTIONS.

A. SURFACE PREPARATION FOR TOPCOAT

- 1) The basecoat must be free of moisture, dust, oil, surface defects and other contaminants. If necessary, degrease by scrubbing with hot water and detergent (preferably trisodium phosphate) or hot water high pressure wash. If surface has pimpling, sand to smooth the surface. Humidity over 85% and temperatures below 10°C/50°F may delay drying time.
- 2) The topcoat should be applied to the basecoat within 6 - 24 hours after basecoat application at 21°C/70°F for intercoat adhesion.
- 3) If this recoat window is exceeded, buffing before product application is recommended. Use a 3M Scotch Brite (black) to achieve the best results. Alternatively, roughen with 180 grit sandpaper.
- 4) In coating over bare wood, apply a Madison approved sealer, then use a sanding disc (120 grit) to prepare the surface for topcoating with GemThane AquaTech STC.

B. APPLICATION OF COATING

Before applying the product, read the general surface preparation instructions on this page. Contact a Madison representative for detailed application instructions.

- 1) The 'B' component has a tendency to settle. It is very crucial to **STIR THE 'B' COMPONENT THOROUGHLY TO ENSURE THAT THERE IS NO SEDIMENTATION AT THE BOTTOM AND THAT COMPLETE DISPERSION HAS OCCURRED. DO THIS PRIOR TO MIXING THE COMPONENTS TOGETHER.** Power mixing is the preferred method.
- 2) The correct mixture is 1 part 'A' and 10 parts 'B' by volume. After stirring component 'B' as above, then add the 'A' side to the 'B' side and thoroughly mix for at least 5 minutes until a homogenous mixture is obtained. Again, a power mixer is the preferred method.
- 3) GemThane AquaTech STC can be applied by brush or roller.
- 4) This product should only be applied at a maximum thickness of 4 wet mils per coat for ultimate final surface appearance. If higher than 4 mils is to be applied, it has to be done in multiple coats.
- 5) Mix only the amount of the product that will be immediately applied. Short term storage of mixed product within its pot life is possible **only if the container is not sealed.** This will prevent any gas build up from occurring.
- 6) Usable pot life decreases at high temperature and humidity. Therefore, in such conditions it is recommended to mix only the product that will be immediately applied.
- 7) Use a good quality brush and roller (3/16 inch nap low pile) designed for polyurethane purposes.
- 8) Use a new roller and brush every time. Otherwise, ensure that the used brush or roller is cleaned immediately after initial use and wrapped in a plastic bag to maintain moisture. It should be brushed or rolled out on a dry cloth to remove excess moisture before subsequent use.

C. CLEAN-UP AND STORAGE

- 1) Store at or near room temperature. **DO NOT FREEZE.** Use product within 6 months of receiving.
- 2) All unwanted product should be mixed to react and solidify before disposing of it.

HEALTH AND SAFETY

GemThane AquaTech is intended for industrial / commercial use. It contains no monomeric isocyanate but may nevertheless cause respiratory distress in some people. Provide ample ventilation. If swallowed, **DO NOT** induce vomiting as this will cause additional throat irritation; contact physician. If splashed on skin, remove immediately with rubbing alcohol and then wash with soap and water. If splashed in eyes, wash liberally with clean water and contact physician; temporary irritation of eyes may last several days. Contains no proven carcinogens or mutagens. However, prudence dictates that applicators use rubber gloves, safety goggles and protective clothing. Resins are inert when cured. See MSDS for more information.

LIMITED TWO YEAR WARRANTY

Madison will replace any product which, in service for which it is suitable, fails to meet specifications within two years of sale and which is proven to be defective when applied according to instructions by a Madison Approved Applicator or Certified OEM Applicator. Madison accepts no responsibility or liability for any other loss, claim, damage, injury or expense, direct or consequential, in contract or negligence. This product replacement warranty is in lieu of any other right, warranty, guarantee or condition, statutory or otherwise, expressed or implied, whether as to fitness for a particular purpose or as to merchantable quality or otherwise.

The information contained herein is believed to be accurate as of the date of publication. Madison reserves the right to change product specifications without notice.

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