



GEMTHANE AQUATECH

TECHNICAL DATA

MULTI PURPOSE INDUSTRIAL COATING

THE PRODUCT AND ITS USES

GemThane AquaTech is a two-component (1:10 ratio) waterborne and water-reducible coating that combines low odor and excellent performance for interior and exterior applications. Very low VOCs (volatile organic compounds) and fast curing are other features of this tough, impermeable polymer coating.

GemThane AquaTech can be applied without primer in two coats, each approximately 4 wet mils in thickness. It is also compatible to apply on any water-based pre-coated surface. GemThane AquaTech cures at ambient temperatures. It provides excellent gloss retention, color fastness and protection. This two package system includes clear (semigloss & flat), pigmented and CM versions (see below). It can be applied to wood panelling and furniture, wood floors (CM version), walls, trim, doors and other surfaces made of metal, gypsum board, concrete etc. where odor-free application and high performance are key selection factors; e.g. pharmaceutical, hospitals, hotels, jails, restaurants, schools, food processing, airports and places of public assembly.

GemThane AquaTech (CM) is a ceramic modified version of GemThane AquaTech that offers excellent abrasion resistance - ideal for highly abrasive applications such as floors and handrails. The clear version is ideal for coating stone, marble and similar surfaces.

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 - 5 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	up to 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)
Film Hardness	ASTM D*3363	3H CM Version 5H
Adhesion to steel	Elcometer (SSPC - SP5)	1000 p.s.i.
Impact Resistance	Gardiner Impact Tester (@ mils)	100 in.lbs
Ultraviolet Resistance	Weatherometer and Q.U.V.	Excellent
Colors		see GemThane Color Guide

*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

- 1) **General** - This section applies to ALL substrates. The surface must be free of moisture, dust, oil and other contaminants. Degrease by scrubbing with hot water and detergent (preferably trisodium phosphate) or hot water high pressure wash. Humidity over 85% and temperatures below 10°C may delay drying time. On previously painted surfaces, remove loose coating, then test for compatibility and adhesion. If prior coating lifts or appears to be incompatible in any way, or if adhesion is poor, completely remove prior coating. When using over an aromatic base coat or primer, apply within the recoat window or roughen prior coating with sandpaper.
- 2) **Concrete** - Concrete must be fully cured. On floors, clean as above, then roughen with blasting or acid etching to remove laitance. Poured-in-place concrete and concrete block can be coated as-is but, for a pinhole-free result, a quality cementitious 'rendering' compound should be applied before coating.
- 3) **Marble** - Sand thoroughly with 80 - 100 grit sandpaper.
- 4) **Wood** - On most new wood, a light sanding will suffice. Do not coat green or damp wood. For previously painted surfaces, see 'General' above.
- 5) **Drywall** - On most drywall a light sanding will suffice. Also sand between coats. For previously painted surfaces, see 'General' above.

B. APPLICATION OF COATING

- 1) The correct mixture is 1 part 'A' and 10 parts 'B' by volume. Stir individual components, and then add together the 'A' side to the 'B' side and thoroughly mix until homogeneous mixture is obtained. A power mixer is the preferred method.
- 2) GemThane AquaTech can be applied by brush or roller.
- 3) This product should only be applied at a maximum thickness of 4 mils at a time for ultimate final surface appearance. If higher than 4 mils is to be applied, it has to be done in multiple coatings. On minor porous surfaces, GemThane AquaTech can be applied without a base coat. However, for highly porous surfaces, a rendering compound should be applied (see above).
- 4) Mix only the amount of product that will be immediately applied. **If mixed product is not used, ensure that it is not stored in a sealed container.**
- 5) 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.
- 6) Use a good quality brush and roller (low pile) designed for polyurethane application purposes.
- 7) 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.

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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