



TUFSHEEN PRECATALYZED

TECHNICAL DATA

SINGLE COMPONENT UNIVERSAL ALIPHATIC COATING

THE PRODUCT AND ITS USES

TufSheen PreCatalyzed is a single component, exterior-grade polyurethane coating system designed for the protection of steel, wood, concrete, concrete block, and other surfaces subject to deterioration or corrosion. As its name implies, TufSheen PreCatalyzed consists of a pre-catalyzed blend of aliphatic polyurethane resins exhibiting excellent UV resistance and weathering characteristics. There is nothing to add; simply stir and apply. It will cure to a tough, corrosion resistant coating, which resists acids, alkali, solvents, oils, salts and ultra violet light.

TufSheen PreCatalyzed is a low VOC compliant coating, providing a non-toxic protective film for a variety of applications; examples include aboveground storage tanks, boats, aircraft, trailers, metal buildings, rail cars, balcony railings, maintenance and construction equipment and machinery, walls, doors, beams and girders. Color availability is unlimited. If faster setting and higher pre-coat film build are required, please consider Madison's AcrylaThane, a 1:4 component aliphatic acrylic polyurethane coating system. Where instant cure, unlimited one-coat build, high throughput and much higher solids content are desired, please refer to our TufSheen II family of 1:1 plural component aliphatic polyurethane coating products. For high build brush-applied applications (e.g. rock and/or concrete) TufSheen PreCatalyzed can be obtained in a mastic consistency.

TECHNICAL INFORMATION

PROPERTY	TEST DESCRIPTION	RESULTS
Application Temperatures	N/A	-10°C(15°F) to 60°C(120°F)
Viscosity	Brookfield Viscometer	Paint-Like
Initial Setting Time	@ 70°F/20°C	4-6 hours
Curing Time Before Handling	@ 70°F/20°C	12 hours
Ultimate Cure	@ 70°F/20°C	7-10 days
Recoat Time*	@ 70°F/20°C	Up to 48 hours
Solids Content	Conversion to Solids by Volume	68%
Volatile Organic Compounds VOC's		Less than 2.7 lb per US gallon or 320 grams per litre
Theoretical Coverage		24 m ² /litre/25 microns (1000 ft ² /US gal/mil)
Adhesion	ASTM D-4541 (SSPC-SP5)	Greater than 600 psi
Flexibility	ASTM D-412 @23°C	180° over knife edge @ 10 mils
Abrasion Resistance	ASTM D-4060 (Taber CS-17 1kg)	82 mg loss per 1000 rev
Ultraviolet Resistance	ASTM G-154	Excellent
Chemical Resistance	ASTM D-543	Splash and spill
Hardness	ASTM D-2240 (Shore D)	40 ±5
Water Absorption	ASTM D-471	Less than 3%
Temperature Resistance	ASTM D-870, D-2485	-40°C (-40°F) to +50°C (120°F)
Colors		Various colors available, Contact Madison representative.

*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) Ensure that surface is clean, dry and uncontaminated. Proceed only if the substrate temperature is more than 3°C(5°F) above the dew point temperature during surface preparation and coating application.
- 2) Abrasive blast clean with sand or grit (G40 or coarser). DO NOT USE steel shot or non-angular media. For **steel** surfaces in atmospheric service, blast to a Commercial Blast (SSPC-SP6; NACE 3; SA 2). Acid etching or chemical cleaning methods may be appropriate for certain substrates. For **top coating** over primer or base coat, apply within recoat window of the primer or base coat. Otherwise, it may be necessary to roughen the base coat using sandpaper.
- 3) See Madison Application Instructions for details.

B. APPLICATION OF COATING

- 1) Stir thoroughly.
- 2) TufSheen PreCatalyzed may be applied by any conventional means - roller, brush or a single component airless spray. The viscosity is paint-like. For thinning use only Madison VR-1 Reducer or M.E.K.
- 3) For atmospheric (non immersion) service, apply two coats of 3-5 wet mils per coat. The second coat can be applied as soon as the first coat becomes tacky (normally in 2-4 hours). Re-abrade in 48 hours. For immersion service such as ponds and pools, a third coat is recommended (NOTE: clear product will become milky if immersed continuously).

C. CLEAN-UP AND STORAGE

- 1) This material will react with humidity and moisture. Keep containers tightly sealed and store upside down. Avoid dropping or subjecting the material to strong force. For clean-up, use Madison VR-3 Viscosity Reducer, M.E.K. or a 50:50 blend of M.E.K. and Xylol. Other solvents may react with product.
- 2) Store between 10°C(50°F) and 27°C(80°F). DO NOT FREEZE. Use product within 6 months of receiving.

HEALTH AND SAFETY

TufSheen PreCatalyzed might build up gas over time. To avoid any sudden burst of gas, open container carefully, thus allowing the gas to escape slowly. Avoid dropping or subjecting the material to strong force. Tufsheen Precatalyzed is intended for industrial use only. It contains no monomeric isocyanates but may nevertheless cause respiratory distress in some people. Provide ample ventilation. Wear a fresh air respirator when using in confined areas or when spraying. Wear rubber gloves, safety goggles and protective clothing. 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. See MSDS for more information. The finished product is completely inert.

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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