



PILING PRO

TECHNICAL DATA

HIGH PERFORMANCE COATING FOR STEEL PILINGS

THE PRODUCT AND ITS USES

PilingPro™ is an extremely tough, corrosion-resistant coating especially developed for the protection of steel pilings of all types, including pipe, sheet and H pilings. It is an instant setting, direct-to-steel, self-priming, one coat system. The underlying technology is a highly cross-linked structural polyurethane resin.

Starting with technology that has been approved by Underwriters' Laboratories since 1975 for protecting underground steel structures, PilingPro™ brings to the piling industry 5 important enhancements for extended service life. These enhancements briefly are: hybrid ceramic/polyurethane technology incorporating ceramic microspheres for double the impact resistance and triple the abrasion resistance; Madison's exclusive patent pending Edge Retention Technology developed in 2002 in conjunction with the U.S. Navy for critical military applications (ensures more even film build in hard-to-coat areas); a UV barrier additive; the inclusion of a unique hydrophobic aromatic polymer (HAP) for enhanced impermeability; and a proprietary corrosion inhibitor.

Other product features include superior adhesion, worker and environmental friendliness, resiliency, impermeability, excellent resistance to cathodic disbondment and extreme toughness. This system will outlast traditional coatings like coal tar epoxy by at least two-to-one. PilingPro™ is the only product on the market specifically formulated for protecting steel pilings.

TECHNICAL INFORMATION

PROPERTY	TEST DESCRIPTION	RESULTS
Application Temperatures	N/A	-20°C(0°F) to 65°C(150°F)
Initial Setting Time	@ 20°C/70°F	5 to 8 minutes
Curing Time Before Handling	@ 20°C/70°F	10-15 minutes
Ultimate Cure	@ 20°C/70°F	4-7 days
Recoat Time	@ 20°C/70°F	up to 1 hour
Solids Content	ASTM D-1259	99% +/- 1%
Volatile Organic Compounds (VOCs)	ASTM D-2369	Less than 8.1 grams/litre (0.07lbs/US gal)
Theoretical coverage	N/A	39m ² /litre/25microns (1604 ft ² /US gal/mil)
Adhesion to steel	ASTM D-4541 (SSPC -SP5)	Greater than 2000 p.s.i.
Hardness	ASTM D-2240 Shore D	70 +/- 5
Flexibility	ASTM D-522 (20 mils)	180° over 2" mandrel
Chemical Resistance	ASTM D-543	Suitable for continuous or intermittent immersion
Impact Resistance	ASTM D-2794 (25 mils)	80 in.lbs.
Abrasion Resistance	ASTM D-4060 (Taber CS-17)	25 mg loss
Resistance to Cathodic Disbondment	ASTM G-8 (STP, 28 days 20 mils)	Excellent (10 mm average radius)
Ultraviolet Resistance	ASTM G-53	Will chalk and fade but resistant to UV breakdown
Service Temperature	ASTM D-870, ASTM D-2485	-40°C(-40°F) to 60°C(140°F) Wet -40°C(-40°F) to 90°C(195°F)Dry
Edge Retention Capability	Custom U.S. Navy Standard	70%
Perm Rating	ASTM E-96 (15 mils)	.002 perm inches
Color Availability		Seafoam Green, Sandy Beige Metallic

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

Because of the specialized nature of this product, consult with your Madison representative for application instructions. Surface preparation requirements are aligned with established industry standards. Application of coating is achieved with heated, plural component, 1:1 airless spray equipment such as Graco Hydrocat or Glasscraft MH.

HEALTH AND SAFETY

PilingPro™ 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. Contains trace amounts of ingredients which may cause skin cancer following prolonged direct skin contact. Therefore, commonly used skin protection is recommended. See MSDS for more information. The finished product is completely inert.

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 consequential damage, injury or expense 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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