





## **Selection & Specification Data**

Product No.MM-DTMDescriptionMascoat Marine-DTM is a multi-purpose coating that provides thermal insulation and anti-condensation protection. It combines painting and insulating solutions for marine vessels and provides a drastic reduction in temperatures for its thickness.Features• Excellent thermal insulation at low thickness • IMO/SOLAS Compatible • MED Certification • Fast cure times • Provides anti-condensation protection • Dramatically reduces heat absorption due to radiant heat gain • Low VOC Product • Extended recoat window • Easy application to irregular surfacesBaseWater-based Acrylic Marine Insulating Coating GlossGlossFlatColorWhite, grey. Custom tinting upon request.PrimingSelf priming over non-ferrous materials (stainless steel & aluminum). Primers required for carbon steel substrates.TopcoatsPlease consult Mascoat prior to use.Wet Weight5.0-5.1 lbs/gallon (0.60 kg/liter)Volume Solids Content80-82%Average Wet Coat Thickness22-25 mils WFT at 70°-130°F (0.63 mm WFT at 21°-54°CPractical Dry Coat Coverage (per gallon)22-25 mils WFT at 70°-130°F (0.63 mm WFT at 21°-54°CVOC Content.06 lbs/gal (7.1 grams/liter)LimitationsApplications should not exceed 350°F (177°C).Do not subject wet coating in pail form to freezing conditions. Coating should be kept in a warehouse between 60°F and 90°F.Vertical Sag Resistance60-70 mils (1.52-1.77 mm)	Product Name	Mascoat Marine-DTM	
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## **Substrates & Surface Protection** Surface should be dry and free of foreign matter. Surface Prep Surface prep can be used to NACE 1-3 (SSPC SP 5-6) when applicable. Ferrous Should be primed prior to application of MM-Surfaces DTM Insulating Coating. Since the coating is water-based, it is important to have a boundary layer of protection to prevent flash rusting. Non-ferrous The coating can be applied directly to nonferrous surfaces. Surface should be clean and Surfaces free of any oil, dirt or other foreign matter. **Application Equipment** Listed below are the general equipment guidelines for the application of this product. Airless Sprayer Pump Ratio: 33:1 or larger Volume: 1.5 gpm (5.7 lpm) or greater Hose: 3/8" or larger with no more than 3' of 1/4" whip. 1/2" hose recommended for length above 50'. Tip Size: 0.017" (for tight spots) 0.019"-0.023" (Normal use) Pressure: Minimum of 3000 PSI Small Spray Please consult Mascoat for the Small Application Application Gun. This gun is excellent for small applications and touch-ups. Brush Brushing is only recommended for touch-up of less than 0.5 ft<sup>2</sup> (0.04 m<sup>2</sup>). Brushing can inhibit coating performance. Please consult Mascoat for detailed brushing instructions. Rolling Not recommended for this coating **Application Conditions** Surface Surface temperatures for applications should be Temperatures greater than 60°F (15°C) or above. Lower surface temperatures will increase dry times. Ambient & Cold (60°-139°F, 15°-59°C): For Applications temperatures (surface or ambient – whichever is lower), an initial tack coat is recommended of 10 mils (0.25 mm or 250 microns). This tack coat will help eliminate sag on vertical wall applications. Tack Coat should be dry to touch prior to next pass. Typical coat thickness should not exceed

20–22 mils (0.5–0.55mm) wet. Coating can be reapplied after each coat is thoroughly dry. Hot (>140°F, >60°C): Please consult Mascoat.

Product can be applied in successive coats to

increase insulation ability. There are no upper

limitations.

Drvfall within a 3 ft radius

Application

Thickness

Dryfall

## MARINE-DTM -

Other Coating Specifications				
ltem	English Value (Metric Value)	Test Method		
Cyclic Salt Fog	Excellent 2000 hrs	ASTM B-117		
UV-A Exposure	Excellent 2000 hrs	ASTM D-5894		
Humidity Cabinet	Excellent 2000 hrs	ASTM D-4585		
QUV	Excellent 2000 hrs	ASTM G-154		
Permeability	Less than 5 Perms	ASTM 1653-03		
Transmission	Low – 4.14 grains/hr/ft <sup>2</sup>	ASTM 1653-03		
Cross Hatch Adhesion	100% 5 B	ASTM D-3359		
Pull Apart Strength	260—300 psi	ASTM D-4541		
Elongation Rate	Above 30%	ASTM D-638		
Thermal Conductivity	0.4381 Btu-in/ft <sup>2</sup> -hr-°F (0.0698 W/m/K)	Thermal Probe Study		
Reflectivity	0.85	ASTM E-903		
Transmittance	0.00	Calculated		
Emissivity/ Absorptance	0.15	Calculated		
Flame Spread	Class A	ASTM E-84/87		
Smoke Developed	Class A	ASTM E-84/87		
Cone Calorimiter	>6	ASTM E- 1384-97		

	Mixing & Thinning	
Mixing	Only a mud mixing paddle should be used. Use 1/2" drill motor to stir contents with paddle. Make sure drill is set to reverse to ensure that the paddle will not mar the bucket's inner wall. Please consult Mascoat for paddle, if needed.	
Thinning	Thinning is normally not needed. Please consult Mascoat for specific instructions if thinning is desired.	
Pot life	Coating is one part, so no catalyzation is needed. Pail can be reused if properly sealed.	
Container	5 gallon pail (18.92 liters)	
Packa	age, Handling & Storage	
Container Wet (with pail/lid)	27.5–28.0 lbs per 5 gallon pail (12.47–12.7 kg per 18.92 liters)	
Net Contents	25.9 lbs per 5 gallon pail (11.7 kg per 18.92 liters)	
Flash Point (Setaflash)	None	
Storage	Do not subject wet coating in pail form to freezing conditions. Coating should be kept in a warehouse between 60°F and 90°F.	
Shelf Life	One year shelf life from manufacture date.	

Caution Do not let product freeze.

	Cleanup & Safety
Cleanup	Equipment may be cleaned with soap & water.
Safety	Half-face respirator recommended with ammonia cartridge or better. Eye protection recommended.
Ventilation	Recommended for constricted areas.
Caution	This material is not for human consumption.
Clothing	Safety clothing & gloves are recommended.

## Dry Times vs. Humidity

Surface Temperature	% Humidity	Time Between Coats (hours)
	10—30%	6.00
51–60°F (10–15°C)	31—50%	8.00
	51—70%	10.00
	>70%	12.50
	10—30%	4.00
61—70°F (16—21°C)	31—50%	5.50
	51-70%	6.50
	>70%	8.00
	10—30%	2.00
71 00°E (22 26°C)	31—50%	3.00
71—80°F (22—26°C)	51-70%	3.50
	>70%	4.00
	10—30%	1.50
81—90°F (27—32°C)	31—50%	2.00
01-90 F (27-32 C)	51—70%	2.50
	>70%	3.00
	10—30%	1.25
91–100°F (33–37°C)	31—50%	1.50
91–100 F (33–37 C)	51—70%	1.75
	>70%	2.00
	10—30%	1.00
101–110°F (38–43°C)	31—50%	1.25
	51—70%	1.50
	>70%	1.75
	10—30%	0.75
111—120°F (44—49°C)	31—50%	1.00
	51—70%	1.25
	>70%	1.50
	10—30%	0.50
121–130°F (50–54°C)	31—50%	0.75
	51—70%	0.75
Γ	>70%	1.00

This is the estimated dry time for 15–20 mils (0.38–0.50 mm) of Mascoat Marine-DTM wet. Dry time may vary depending on other conditions such as wind or enclosed environments. Lighter thickness passes will expedite dry times. Forced ventilation in confined areas will also expedite dry times.

Cure Times				
Temperature	Cure Time			
50–60°F (10–15°C)	60—72 hrs			
61–70°F (16–21°C)	48–60 hrs			
71–80°F (22–26°C)	36–48 hrs			
81–90°F (27–32°C)	20–24 hrs			
91—100°F (33—37°C)	18–20 hrs			
>100°F (>37°C)	14—16 hrs			

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The data within is true to the best of our knowledge on the date of publication and is subject to change without prior notice. We guarantee our products to conform to Mascoat quality control. We assume no responsibility for coverage, performance or injuries resulting from use. Liability, if any, is limited to replacement of products. All logos are property of their respective owners.





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