MARINE-DTM

THERMAL BARRIER AND CONDENSATION CONTROL COATING



Formulated to provide a thermal barrier and condensation control protection for harsh marine environments, Mascoat Marine-DTM is a water-based, low-VOC coating that applies like paint and cures quickly to prevent vessel downtime. Comprised of air-filled particulates in various shapes suspended in an acrylic binder, Marine-DTM is ideal for use in all types of workboats, barges, yachts and leisure crafts.

Mascoat's Marine-DTM is currently installed on thousands of marine vessels from Alaska to Antarctica, and is designed to improve vessel safety and comfort while solving persistent condensation/sweat issues. Traditional blanket insulation tends to absorb water, which leads to corrosion, mildew buildup

and dangerous deck pooling. When Marine-DTM is used in place of or in conjunction with conventional insulation, marine owners and operators prevent moisture damage costs, reduce maintenance, and eliminate costly corrosion.

Each bead represents a particle that is air filled.	
These particles are round and	
also popcorn shaped.	

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Each coat is 0.020", 20 mils, 0.50mm or 508 microns

In addition to its moisture resistance, Mascoat Marine-DTM is proven to stabilize cargo and passenger temperatures when applied to sidewalls, stiffeners, overheads and other substrates. And since the lightweight coating is easily installed in tight spaces and on complex geometry, it helps vessel owners meet stringent marine classifications by reducing watercraft weight.

At Mascoat, our goal is to offer cost-effective products that address your specific problems. Call today to learn more about how Marine-DTM can maximize crew and passenger safety and comfort while saving money.



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USES

- Stiffeners
- Hulls
- Sidewalls Overheads
- Pipes
- Pipes
- Pilot houses

BENEFITS

 Reduces or prevents condensation, lessening the chance of slip-and-fall accidents

Topsides

Interiors

And much

more...

HVAC

Storage tanks

DTM

- Stops radiant transfer into a ship's interior environment
- Saves installation time compared to pinand-blanket insulators
- Reduce overall construction time-frame
- Prevents corrosion
- Lightweight
- NAVSEA approved for anti-sweat (No. 311354Z)
- Meets IMO/SOLAS guidelines



Qualifies under IMO and SOLAS guidelines.



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How does the coating work? Condensation is formed due to the temperature differentials found between a substrate and the air surrounding the substrate. As the temperature of a surface reaches approximately 1.5°F from the dew point temperature, the air (gas) nearest the surface becomes laden with water weight and it changes from a gas to a liquid state. This liquid state forms into water droplets and appears on the substrate. Condensation development can be more severe in high humidity areas where there is more latent water vapor. This presents faster formation of condensation (sweat). To control condensation, it is important to be above 1.5°F of the dew point at a specific temperature.

To combat or control condensation, Mascoat Marine-DTM is designed to form a barrier between the dew point and the surface. Our formulation uses air encapsulating particulates that are specifically designed to help limit the interface between the surface and the surrounding dew point, thereby reducing or eliminating possible condensation development.

APPLICATION INSTRUCTIONS

Surface Preparation: The minimum requirements for carbon steel substrates is a solvent wipe in accordance with SSPC SP1 followed by power tool cleaning in accordance with SSPC SP3. Abrasive blasting in accordance with SSPC SP6 is preferred for longer service life. Surface must be free of all contaminants, both visible and non-visible, prior to application of the coating.

Primers: Primers are recommended for carbon steel substrates. Please consult Mascoat prior to application for the appropriate type of primer for a given environment. Mascoat Marine-DTM is self-priming over non-ferrous materials such as stainless steel and aluminum.

Airless Sprayer: An airless sprayer is the best method for application of the coating. The sprayer should have a capacity of at least 1.5 gallon per minute at 3,000 PSI. We highly recommend a tip size of 0.019"-0.023" for normal use and a tip size of 0.017" for tight spots, always with a reversible nozzle. Remove all strainers and filters from gun and sprayer before application. Failure to do so will result in the filtering of insulation particles. Please consult Mascoat for detailed instruction sheet, including list of sprayers, prior to application. A Small Application (SA) Kit can also be used for small applications under 100 square feet or touch ups. This specially-made kit can be obtained by contacting Mascoat. **Brushing and Rolling:** Except for small touch-ups, it is not recommended to brush or roll on Mascoat Marine-DTM, as the insulating particles can be damaged and coating performance inhibited.

Thinning: Do not thin unless authorized in writing by Mascoat.

Mixing: Only mud mixing paddles (available from Mascoat) should be used to mix the contents of the pail. Use a 1/2 inch drill motor to stir. Make sure that drill is set to the reverse setting to ensure that the paddle will not mar the pail's inner wall and contaminate the coating.

Cleaning: All equipment can be cleaned with soap and water.

All data on this sheet was collected using ASTM procedures when applicable. Findings may be different due to application techniques and environmental conditions. Thermal conductivity is based on equivalency testing.

All information listed on this sheet is ©Mascoat.



TECHNICAL DATA

All data is to ASTM standards when applicable

CONTAINER SIZE:	5 Gallons
COMPONENTS:	One-part (inclusive)
COAT THICKNESS:	20 mils (0.5 mm) dry
COVERAGE PER GALLON:	50–55 ft ² at 20 mils
(COVERAGE PER LITER):	(1.3 m ² at 0.5 mm)
WEIGHT:	5.0–5.1 lbs/gallon (0.6 kg/liter)
VOLUME SOLIDS:	80-82%
SHEEN:	Flat
BASE:	High-grade acrylic water- based
CHLORIDES:	Low to none
VOC CONTENT:	0.06 lbs/gallon
	(7.1 grams/liter)
ELONGATION:	Above 30%
PERMEABILITY:	Less than 5 Perms
ACCELERATED AGING:	Excellent (2,000+ hours)
ABRASION RESISTANCE:	Moderate to high
SOLAR REFLECTIVITY:	0.85
TRANSMITTANCE:	0.0
EMISSIVITY/	
ABSORPTANCE:	0.15
FLAME SPREAD:	
SMOKE DEVELOPED:	Class A
FIRE RATING:	IMO A653 (16) approved
APPLICATION TEMPS:	60–300°F
	(10–148°C)
OPERATION TEMPS:	
	(204°C maximum)
	Please contact Mascoat.
APPLICATION METHOD:	Airless sprayer