Formulated to provide thermal insulation and anti-condensation 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 ceramic and silica beads 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 currently insulates thousands of marine vessels from Alaska to Antarctica, and is designed to improve boat efficiency while solving persistent moisture issues. Traditional blanket insulation tends to absorb water, which leads to Corrosion Under Insulation (CUI), mold buildup and dangerous deck pooling.

When Marine-DTM is used in place of conventional insulation, marine owners and operators prevent moisture damage costs, reduce maintenance and eliminate costly CUI.

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, 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 industry-specific insulation problems. Call today to learn more about how Marine-DTM can maximize crew and passenger safety and comfort while saving money.
How does the coating work? Mascoat Industrial-DTM applies the common physics principles of reflectivity, conduction, emissivity and absorptance. Its microscopic particle structure reflects upwards of 85% of the radiant heat gain back to the environment from which it originated. Each ceramic particle encapsulates air, thereby offering a slow path of thermal transfer. This high content of entrapped and stagnant air blocks thermal transfer very efficiently. In addition, the coating’s low emissivity allows for low heat flux. The combination of these factors allows for total thermal dissipation across the surface of the coating. The unique composition of the coating makes it extremely efficient for its thickness and prevents substrates from gaining heat, making those surfaces cooler to the touch.

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 ft² at 20 mils
(COVERAGE PER LITER): 1.3 m² at 0.5 mm
WEIGHT: 5.0 - 5.1 lbs/gallon (0.6 kg/liter)
VOLUME SOLIDS: 80 - 82%
COLOR: White, grey
Custom tinting upon request.
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: 0.15
ABSORPTANCE: Class A
FLAME SPREAD: Class A
SMOKE DEVELOPED: IMO A653 (16) approved
APPLICATION TEMPS: 60 – 300°F (10 - 148°C)
OPERATION TEMPS: 350°F maximum (204°C maximum)
TOPCOATING: Please contact Mascoat
APPLICATION METHOD: Airless sprayer

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 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: Thinning should not exceed on quart per five-gallon pail. Latex conditioners or water is a standard thinning medium. If the product appears to require more than the recommended amount of thinning medium, please contact your Mascoat representative.

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.

Warranty: Five-year specific limited warranty if product is applied by a Mascoat Certified Applicator. To find a certified applicator in your area, please contact your Mascoat representative.

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 © 2010 Mascoat.