



Selection & Specification Data

Product Name	Mascoat Industrial-HT
Product No.	MI-HT
Description	Mascoat Industrial-HT is a high temperature insulating coating that provides a thermal barrier intended to bring surfaces up to 575°F down to at least 350°F, at which time it would be topcoated with MI-DTI for energy retention and/or personnel protection benefits. The system offers energy retention, personnel protection, and process stability without the fear of CUI occurring.
Features	<ul style="list-style-type: none"> ◆ Able to withstand temperatures up to 575°F ◆ Long lasting durability ◆ Prevents Corrosion Under Insulation (CUI) ◆ Provides condensation protection ◆ Provides inspection ability w/o removal ◆ Easy cleanup with water ◆ Low VOC Product ◆ Easy application to irregular surfaces
Base	High-grade silicone water-based
Gloss	Flat
Priming	Self priming over non-ferrous materials (stainless steel & aluminum). Temperature appropriate primer required for carbon steel substrates. Consult Mascoat for recommended primer.
Topcoats	Please consult Mascoat.
Wet Weight	6.2–6.3 lbs/gallon (0.76 kg/liter)
Practical Volume Solids Content	70–75%
Average Thickness per Coat	20–22 mils WFT at 70°–130°F (0.5 mm WFT at 21°–54°C)
Practical Dry Coat Coverage	50–55 ft ² /gallon @ 20 mils (1.3 m ² /liter @ 0.5 mm)
VOC Content	0.06 lbs/gallon (7.6 grams/liter)
Limitations	Peak operational temperature should not exceed 575°F (301°C).
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.

Substrates & Surface Protection

Surface Prep	Surface should be dry and free of foreign matter. Surface prep can be used to NACE 1-3 (SSPC SP 5-6) when applicable.
Ferrous Surfaces	Should be primed prior to application of MI-HT Insulating Coating. Since the coating is water-based, it is important to have a boundary layer of protection to prevent flash rusting.
Non-ferrous Surfaces	The coating can be applied directly to non-ferrous surfaces. Surface should be clean and 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
	Output per Cycle:	220cc (Minimum) 290cc (Optimum)
	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 Application	Please consult Mascoat for the Small Application Sprayer. This sprayer is excellent for small applications and touch-ups.	
Brush or Roll	Not recommended for this coating	

Application Conditions

Surface Temperatures	Surface temperatures for applications should be greater than 60°F (15°C). Lower surface temperatures will increase dry times.
Applications	<p><i>Ambient & Cold (60°–139°F, 15°–59°C):</i> For 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.</p> <p><i>Hot (>140°F or >60°C):</i> Please consult Mascoat.</p>
Application Thickness	Product can be applied in successive coats to increase insulation ability. There are no upper limitations.
Dryfall	Dryfall within a 3 ft radius

Other Coating Specifications

Item	English Value (Metric Value)	Test Method
Cyclic Salt Fog	Excellent 2,000+ hours	ASTM B-117
UV-A Exposure	Excellent 2,000+ hours	ASTM D-5894
Humidity Cabinet	Excellent 2,000+ hours	ASTM D-4585
QUV	Excellent 2,000+ hours	ASTM G-154

Mixing & Thinning

Mixing	Only a mud mixing paddle should be used. Use 1/2" drill motor to stir contents with paddle. <i>Make sure drill is set to reverse to ensure that the paddle will not mar the bucket's inner wall.</i> Please consult Mascoat for paddle, if needed. DO NOT MECHANICALLY SHAKE.
Thinning	DO NOT THIN unless authorized in writing by Mascoat.
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)

Package, Handling & Storage

Container Wet (with pail/lid)	32.5 lbs/5 gallon pail (14.75 kg/18.92 liters)
Net Contents	31 lbs/5 gallon pail (14 kg/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	6 months shelf life from manufacture date.
Caution	Do not let product freeze.

Cleanup & Safety

Cleanup	Equipment may be cleaned with soap & water.
Safety	For minimum protection, Mascoat recommends an N95 particulate respirator mask. For additional protection, a half mask respirator with organic vapor cartridge can be utilized. Eye protection recommended due to spray application method.
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)
61–70°F (16–21°C)	10–30%	4.00
	31–50%	5.50
	51–70%	6.50
	>70%	8.00
71–80°F (22–26°C)	10–30%	2.00
	31–50%	3.00
	51–70%	3.50
	>70%	4.00
81–90°F (27–32°C)	10–30%	1.50
	31–50%	2.00
	51–70%	2.50
	>70%	3.00
91–100°F (33–37°C)	10–30%	1.25
	31–50%	1.50
	51–70%	1.75
	>70%	2.00
101–110°F (38–43°C)	10–30%	1.00
	31–50%	1.25
	51–70%	1.50
	>70%	1.75
111–120°F (44–49°C)	10–30%	0.75
	31–50%	1.00
	51–70%	1.25
	>70%	1.50
121–130°F (50–54°C)	10–30%	0.50
	31–50%	0.75
	51–70%	0.75
	>70%	1.00

Use 90° thumb test or moisture meter prior to recoat. Moisture readings should be less than 12% prior to recoat and 0% prior to topcoating. This is the estimated dry time for 15–20 mils (0.38–0.50 mm) of Mascoat Industrial-HT 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

Heat curing (at least 320°F (160°C) for one hour) is required prior full use of product and prior to topcoating with Mascoat Industrial-DTI. Heat curing can be performed after Mascoat Industrial-HT has been applied with proper dry times between coats. The heat curing is necessary to activate the resin system and its cross linking of the high heat binder to give best adhesion and mitigate blister formation. See application instructions for full details.