

MC-Ferrox A 100

topcoat

WASSER
ADVANCED COATINGS TECHNOLOGY

Product Description

MC-Ferrox A 100 is a micaceous iron oxide (MIO) enriched, aliphatic single component moisture cure urethane topcoat. It offers the best possible resistance to UV, weathering and abrasion. The addition of MIO also provides film reinforcement, enhanced adhesion properties and additional barrier protection to the applied coating system. MC-Ferrox A 100 is the topcoat of choice for extended life cycle considerations and consistent aesthetic stability, even in harsh environments.

Product Features

- Meets SSPC Paint 38
- Nepcoat List-B
- Single Component Moisture Cure Urethane
- No mixing errors – no pot life
- Easy to apply by brush, roller, mitt or spray methods
- Micaceous iron oxide (MIO), maintains build on edges, threads, and weld seams
- VOC compliant at less than 100 g/l
- Impact and abrasion resistant
- Resistant to UV and weathering
- Can be applied at 99% relative humidity (substrate must be visibly dry)
- No dew point restrictions (substrate must be visibly dry)
- Can be applied in below freezing temperatures (no ice or frost)
- Compatible with PURQuik® Accelerator for faster re-coat and cure times
- Color matching service is available to support your needs

Area of Use

Substrates

Over properly prepared:

- Galvanized Metal
- Metallized
- Aluminum/Non-Ferrous Metal
- Previously Existing Coatings
- Concrete

Possible Uses

- Water and Wastewater Treatment Facilities
- Pulp and Paper Mills
- Tank Exteriors
- Hydro-power Facilities and Penstocks
- Marine/Port Facilities
- Offshore Platforms
- Highway Barriers/ Sound Walls
- Chemical Processing Facilities
- Refineries
- Floors
- Structural Steel
- Work Boats
- Bridges

Ready Reference Information

Resin Type: Single Component Moisture Cure Aliphatic Urethane

Pigment Type: Micaceous Iron Oxide depending on color and gloss

Sheen: Matte Finish

Colors: Standard and various colors
See color chart.

Volume Solids: 63.0% ± 3.0

VOC: <0.8 lb/gal (100 g/l)
(Volatile Organic Content)

Theoretical Coverage:

At 1 mil DFT: 1010 ft²/gal

At 25 micron DFT: 24.7 m²/l

Recommended Film Thickness:

Wet: 3-7 mils

Dry: 2-4 mils

Recommended Coverage Per Coat:

252 ft²/gal at 4.0 mils DFT – 505 ft²/gal at 2.0 mils DFT

Thinning: MC-Thinner, MC-Thinner 100, MC-Thinner XMT

Clean Up: MC-Thinner, MC-Thinner 100, MC-Thinner XMT

*At 50% Humidity	50°F/10°C		75°F/24°C		95°F/35°C	
	Without PURQuik®	With PURQuik®	Without PURQuik®	With PURQuik®	Without PURQuik®	With PURQuik®
Tack Free	3 hours	--	1.5 hours	--	45 minutes	--
Re-coat Minimum¹	10 hours	1 hour	8 hours	30 minutes	6 hours	20 minutes
Full Cure	10 days	7 days	7 days	5 days	5 days	4 days

*Humidity, temperature and coating thickness will affect re-coat and curing times. Wasser does not require or recommend heating after application. Refer to Wasser's PURQuik® Accelerator Product Data for additional information. No outer re-coat window on clean surfaces.

Recommended Systems

Ferrous Metals (Full Removal):

1st Coat: MC-Zinc 100	3-7 mils DFT
2nd Coat: MC-Miomastic 100	3-5 mils DFT
3rd Coat: MC-Ferrox A 100 (Nepcoat List-B)	2-4 mils DFT
Optional Clear Coat	
4th Coat: MC-Antigraffiti 100	1-2 mils DFT
Total System DFT:	9-18 mils DFT

1st Coat: MC-Zinc 100	3-7 mils DFT
2nd Coat: MC-Ferrox B 100	3-5 mils DFT
3rd Coat: MC-Ferrox A 100	2-4 mils DFT
Total System DFT:	8-16 mils DFT

1st Coat: MC-Miozinc 100	3-5 mils DFT
2nd Coat: MC-Miomastic 100	3-5 mils DFT
3rd Coat: MC-Ferrox A 100	2-4 mils DFT
Total System DFT:	8-14 mils DFT

1st Coat: MC-Universal 100	3-5 mils DFT
2nd Coat: MC-Universal 100	3-5 mils DFT
3rd Coat: MC-Ferrox A 100	2-4 mils DFT
Total System DFT:	8-14 mils DFT

Ferrous Metals (Overcoat):

1st Coat: MC-Miozinc 100 (Spot Prime)	3-5 mils DFT or
1st Coat MC-Zinc 100 (Spot Prime)	3-7 mils DFT
2nd Coat: MC-Universal 100	3-5 mils DFT
3rd Coat: MC-Ferrox A 100	2-4 mils DFT
Total System DFT:	8-16 mils DFT

Galvanized Metal:

1st Coat: MC-Miomastic 100	3-5 mils DFT
or	
1st Coat: MC-Ferrox B 100	3-5 mils DFT
2nd Coat: MC-Ferrox A 100	2-4 mils DFT
Total System DFT:	5-9 mils DFT

Aluminum/Non-Ferrous Metal:

1st Coat: MC-Universal 100	3-5 mils DFT
2nd Coat: MC-Ferrox A 100	2-4 mils DFT
Total System DFT:	5-9 mils DFT

Concrete /Concrete Block:

1st Coat: MC-Universal 100 (Thinned 15-20%)	3-5 mils DFT
2nd Coat: MC-Ferrox A 100	2-4 mils DFT
Total System DFT:	5-9 mils DFT

Thermal Spray Metallizing:

1st Coat: MC-Metallization Sealer (mist coat)	0.6-0.8 mils DFT
Flash off 15 minutes	
2nd Coat: MC-Metallization Sealer	1-1.5 mils DFT
3rd Coat: MC-Ferrox A 100	2-4 mils DFT
Total System DFT:	3.6-6.3 mils DFT

*Other Systems are available. Contact your Wasser Representative to answer any questions.

Compatible Coatings

Primers:

MC-Zinc 100
MC-Miozinc 100
MC-Prepbond 100
MC-Universal 100
MC-Metallization Sealer

Intermediates:

MC Universal 100
MC-Ferrox B 100
MC-Miomastic 100

Topcoats:

MC-Antigraffiti 100
MC-Clear 100

Coating Accelerator

PURQuik® Accelerator

Surface Preparation

Ferrous Metal

Apply to clean, dry, Wasser recommended primers. Refer to the primer Product Data for additional information.

Aluminum/Galvanized/Non-Ferrous Metals

Prepare surfaces using SSPC-SP1 Solvent Cleaning and SSPC-SP12/NACE No. 5 Low Pressure Water Cleaning methods to remove surface contamination. Supplement weathered galvanized surface preparation with SSPC-SP2 and SP3 Hand and Power Tool cleaning to remove excessive corrosion and impart surface profile on bare metal. Supplement new galvanized surface cleaning with SSPC-SP16 to impart surface profile and support mechanical adhesion.

Previously Existing Coatings

Prepare surfaces using SSPC-SP12/NACE No. 5 Low Pressure Water Cleaning methods to remove surface contamination. Supplement SSPC-SP 12 LPWC with SSPC-SP1 Solvent Cleaning and SSPC-SP2 and 3 Hand and Power Tool clean areas of corrosion and loose or flaking paint (feather edges of sound, existing paint back to a firm edge). Spot prime clean, bare metal with Wasser recommended primer. Sand glossy surfaces to provide profile. Apply a test sample to a small area to determine coating compatibility.

Concrete/CMU

The surface must be dry, free of surface contaminants, and in sound condition. Grease, and oil should be removed by ASTM D4258-83 (Re-approved 1999) and release agents should be removed by ASTM D4259 - 88 (Re-approved 1999). Refer to SSPC-SP13/NACE No 6 Mechanical or Chemical Surface Preparation methods for preparing concrete to suitable cleanliness for intended service. Surface preparation methods should impart a minimum of CSP1 profile for mechanical adhesion to occur. Ensure surface is thoroughly clean (all traces of latence removed) and dry prior to coating application. For atmospheric service allow a minimum 7 days cure time for new concrete and 14 days for immersion service prior to preparation and application.

Good Practices

MC-Ferrox A 100 is designed for application to a variety of substrates and tightly adhering, previously existing coatings. Apply a test sample to a small area to determine coating adhesion and/or compatibility. Spot prime any areas cleaned to bare metal with a Wasser recommended primer.

The surface to be coated must be dry, clean, dull, and free from dirt, grease, oil, rust, mill scale, salts or any other surface contaminants that interfere with adhesion.

Ensure welds, repair areas, joints, and surface defects exposed by surface preparation are properly cleaned and treated prior to coating application.

When surfaces are cleaned to bare metal, areas of oxidation after surface preparation and prior to coating application, should be prepared to specified standard prior to applying the Wasser recommended primer.

Consult the referenced standards, SSPC-PA1 and your Wasser Representative for additional information or recommendations.

Application Information

MC-Ferrox A 100 can be applied by brush, roll, airless spray, mitt and conventional spray application. Follow proper mixing instructions before applying.

Mixing:

Material temperature must be 5°F above the dew point before opening and agitating. Power mix thoroughly prior to application. **Do not keep under constant agitation.** Apply a 3-6 oz solvent float over material to prevent moisture intrusion and cover pail.

Brush/Roller:

Brush: Natural Fiber
Roller: Natural or synthetic fiber cover
Nap: ¼" to ⅜"
Core: Phenolic
Reduction: Typically not required. If necessary, reduce with MC-Thinner 100.

Airless Spray:

Pump Ratio: 28 - 40:1
Pressure: 2100-2800 psi
Hose: ¼" to ⅜"
Tip Size: 0.013-0.017
Filter Size: 60 mesh (250 µm)
Reduction: Typically not required. If necessary, reduce with MC-Thinner or MC-Thinner 100.

Conventional Spray/HLVP:

Fluid Nozzle: E Fluid Tip
Air Cap: 704 or 765
Atomizing Air: 45 - 75 lbs.
Fluid Pressure: 15 - 20 lbs.
Hose: ½" ID; 50' Max
Reduction: Typically not required. If necessary, reduce with MC-Thinner or MC-Thinner 100.

Reducer:

MC-Thinner, MC-Thinner 100, (if VOC regulations restrict thinning, use MC-Thinner XMT).
Reduction is typically not required. If necessary, thin up to 15% with recommended thinner. Thin in accordance with local and federal regulatory standards.

Clean up:

MC-Thinner, MC-Thinner 100, or MC-Thinner XMT.
If Wasser thinners are not available, use MEK, MIBK, Xylene, a 50:50 blend of Xylene and MEK or MIBK, or acetone for clean up only. Do not add unauthorized solvents to a Wasser coating.

Application Conditions

Temperature: 20° - 100° F (-8° - 38° C). This temperature range should be achieved for ambient, surface and material temperature. Substrate must be visibly dry and frost free. On applications below 33° F (0.5° C), Steel temperatures should be 5°F above the dew point temperature. MC-Thinner 100 is recommended for spray application in temperatures above 90° F.

Relative Humidity: 6% - 99%.

Coating Accelerator: PURQuik® Accelerator. See Wasser's PURQuik® Accelerator Product Data for information.

Storage: Store off the ground in a dry, protected area in temperature between 40 - 100°F (4 - 38°C). MCU containers must be kept sealed when not in use. Use a solvent float to reseal partial containers.

Certifications and Qualifications

VOC Compliant (National Standard for Industrial Maintenance Coating, Ozone Transportation Commission and SCAQMD Rule 1113 IM Coating effective 1/1/04*)
Meets SSPC Paint 38, Nepcoat Approved Topcoat list-B

**MC-Ferrox A 100 tint based products may have higher VOC than 100g/l, please consult Wasser for specific VOC levels for these products.*

Performance Testing Data

**Contact Wasser Corporation for detailed testing of this product.*

Ordering Information

Product Numbers: W231.XX

Package Size: 1 gallon and 5 gallon pails

Shelf Life: 12 months from date of shipment when stored unopened at 75°F (24°C).

Shipping Information

Flash Point:	59°F (15°C)
Weight/gallon:	13.77 ± 1.0 lbs (1.65 ± .12 kg/l)
DOT HAZARD CLASS	3
DOT PACKAGING GROUP	II
DOT LABEL	FLAMMABLE LIQUID
DOT SHIPPING NAME	PAINT
DOT PLACARD	FLAMMABLE LIQUID
UN/NA NUMBER	1263

Safety Precautions

DANGER!

Intended for professional use only. Obtain and Read Wasser's Safety Data Sheet for this before using.

Adequate Ventilation. Do not breathe dust, vapors or spray mist. Ensure fresh air entry during application and drying. If you experience eye watering, headache or dizziness or if air monitoring demonstrates vapor/mist levels are above applicable limits, wear an appropriate, properly fitted respirator (NIOSH approved) during and after application. Follow respirator manufacturer's directions for respirator use. Do not get in eyes, on skin or on clothing. Wash thoroughly after handling. Keep away from heat, sparks and flame. Vapor may cause flash fire.

KEEP OUT OF REACH OF CHILDREN

FIRST AID: If affected by inhalation of vapor or spray mist, remove to fresh air. If breathing difficulty persists or occurs later, consult a physician and have label information available. In case of eye contact, flush immediately with plenty of water for at least 15 minutes and get medical attention; for skin, wash thoroughly with soap and water. If swallowed, get medical attention immediately. If swallowed, do not induce vomiting. Get medical attention immediately. Wash clothing before reuse.

Thoroughly clean or destroy contaminated shoes.

Keep container closed when not in use. If spilled, contain spilled material and remove with inert absorbent. Dispose of contaminated absorbent, container and unused contents in accordance with local, state and federal regulations.

WARNING: This product contains a chemical known to the state of California to cause cancer and birth defects, or other reproductive harm.

Obtain and Read Wasser's Safety Data Sheet for this before using.

INTENDED FOR PROFESSIONAL USE ONLY.

Note: Ingredients and VOC may vary for products with catalysts, tint bases, and other colors.

Wasser Corporation's liability on any claim of any kind, including claims based upon Wasser Corporation's negligence or strict liability, for any loss or damage arising out of, connected with or resulting from the use of the Products, shall in no case exceed the purchase price allowable for the Products or part thereof that give rise to the claim. In no event shall Wasser Corporation be liable for consequential or incidental damages. Published Product Data Sheets are subject to change without notice.

Contact your Wasser Representative or the Wasser website for the most current Product Data Sheets.