

## Product Description

MC-Ferrox A 100 is a micaceous iron oxide (MIO) enriched, matte-finish, aliphatic moisture cure urethane topcoat. MC-Ferrox A 100 offers the best possible resistance to UV, weathering and abrasion. The addition of MIO also provides film reinforcement, inter and intra-coat adhesion properties and additional barrier protection to the applied coating system. MC-Ferrox A 100 is the topcoat of choice for system service life considerations and aesthetic change over time, even in harsh environments.

## Area of Use

### Substrates

Over properly prepared:  
Ferrous Metal  
Galvanized Metal  
Aluminum/Non-Ferrous Metal  
Metallized  
Previously Existing Coatings  
Concrete

### Possible Uses

Water Treatment Facilities  
Wastewater Treatment Facilities  
Food Processing  
Pulp and Paper Mills  
Tank Exteriors  
Pipes  
Hydropower Facilities  
Marine/Port Facilities  
Offshore Platforms

Highway Barriers/ Sound Walls  
Chemical Processing Facilities  
Refineries  
Floors  
Structural Steel  
Work Boats  
Bridges

## Ready Reference Information

**Resin Type:** Aliphatic Urethane

**Pigment type:** 2.0 – 4.0 lbs./gal Micaceous Iron Oxide depending on color

**Sheen:** Matte

**Colors:** Standard and various colors  
See color chart. Not available in white or safety colors.

**Volume Solids:** 63.0% ± 3.0

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

**Theoretical Coverage:** At 1 mil DFT: 1010 ft<sup>2</sup>/gal  
(At 25µm DFT: 24.7 m<sup>2</sup>/l)

### Recommended Film Thickness:

**Wet:** 3.1-6.3 mils (71-142 microns)  
**Dry:** 2.0-4.0 mils (51-102 microns)

### Recommended Coverage Per Coat:

252 ft<sup>2</sup>/gal at 4.0 mils DFT – 505 ft<sup>2</sup>/gal at 2.0 mils DFT  
(6.2 m<sup>2</sup>/l at 102 microns DFT – 12.3 m<sup>2</sup>/l at 51 microns DFT)

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

## Drying Times and Temperatures

*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	--
Recoat Minimum <sup>1</sup>	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 recoat and curing times

<sup>1</sup>On clean surface, recoat within 48 hours. After 48 hours, do a test patch. Surface may require light sanding to provide sufficient anchor profile.

Refer to Wasser's PURQuik® Accelerator Product Data for additional information

## Product Features

- Single component Moisture Cure Urethane
- No mixing errors, no pot life
- Easy to apply by brush, roller or spray methods
- 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 recoat and cure times

## Recommended Systems

### Ferrous Metals (Full Removal):

1 <sup>st</sup> Coat: MC-Zinc 100	3.0-5.0 mils DFT
2 <sup>nd</sup> Coat: MC-Ferrox B 100	3.0-5.0 mils DFT
3 <sup>rd</sup> Coat: MC-Ferrox A 100	2.0-4.0 mils DFT
Optional Clear Coat	
4 <sup>th</sup> Coat: MC-Antigraffiti 100	1.5-2.0 mils DFT
Total System DFT:	9.5-16.0 mils DFT

1 <sup>st</sup> Coat: MC-Miozinc 100	3.0-5.0 mils DFT
2 <sup>nd</sup> Coat: MC-Miomastic 100	3.0-5.0 mils DFT
3 <sup>rd</sup> Coat: MC-Ferrox A 100	2.0-4.0 mils DFT
Total System DFT:	8.0-14.0 mils DFT

### Ferrous Metals (Overcoat):

1 <sup>st</sup> Coat: MC-Miozinc 100 (Spot Prime)	3.0-5.0 mils DFT
2 <sup>nd</sup> Coat: MC-Miomastic 100	3.0-5.0 mils DFT
3 <sup>rd</sup> Coat: MC-Ferrox A 100	2.0-4.0 mils DFT
Total System DFT:	8.0-14.0 mils DFT

### Aluminum/Non-Ferrous Metal/Galvanized

#### Metal:

1 <sup>st</sup> Coat: MC-Miomastic 100	3.0-5.0 mils DFT
2 <sup>nd</sup> Coat: MC-Ferrox A 100	2.0-4.0 mils DFT
Total System DFT:	5.0-9.0 mils DFT
1 <sup>st</sup> Coat: MC-Ferrox A 100	2.0-4.0 mils DFT
2 <sup>nd</sup> Coat: MC-Ferrox A 100	2.0-4.0 mils DFT
Total System DFT:	4.0-8.0 mils DFT

### Concrete/Concrete Block:

1 <sup>st</sup> Coat: MC-CR 100	3.0-4.0 mils DFT
2 <sup>nd</sup> Coat: MC-Ferrox A 100	5.0-8.0 mils DFT
Total System DFT	mils DFT

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

## Performance Testing Data

\*Contact Wasser Corporation for detailed testing of this product

## Compatible Coatings

### Primer:

MC-Zinc 100  
MC-Miozinc 100  
MC-Ferroclad 100  
MC-Prepbond 100  
MC-Ultra Build DTM 100

### Intermediates :

MC-CR 100  
MC-Ferrox B 100  
MC-Miomastic 100

### Topcoats:

MC-Antigraffiti 100

### Coating Accelerator

PURQuik® Coating 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 Metal

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 3 Hand and Power Tool cleaning to remove excessive corrosion and impart surface profile on bare metal. Supplement new galvanized surface cleaning with mechanical abrasion 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.

### 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 spot primer.

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

## Application Information

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MC-Ferrox A 100 can be applied by brush, roll, airless spray 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.

**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 10% with recommended thinner. Thin in accordance with local and federal regulatory standards.

### Brush/Roller:

Brush: Natural Fiber  
Roller: Natural or synthetic fiber cover  
Nap: ¼" to ¾"  
Core: Phenolic

Reduction: Typically not required. If necessary, reduce with MC-Thinner 100.

### Clean up:

MC-Thinner or MC-Thinner 100  
If Wasser thinners are not available, use MEK, MIBK, Xylene, or 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.

### Airless Spray:

Pump Ratio: 28 - 40:1  
Pressure: 2100 - 2800 psi  
Hose: ¼" to ¾"  
Tip Size: .013 - .019  
Filter Size: 60 mesh (250 µm)  
Reduction: Typically not required. If necessary, reduce with MC-Thinner or MC-Thinner 100.

## Application Conditions

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### Temperature:

20° - 100°F (-8° - 38°C)  
This temperature range should be achieved for ambient, surface and material temperature. Substrate must be visibly dry. MC-Thinner 100 is recommended for spray application in temperatures above 90°F.

### Relative Humidity:

6% - 99%

### Conventional Spray: (DeVilbis MBC, JGA or equivalent)

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.

### 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

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VOC Compliant (National Standard for Industrial Maintenance Coating and SCAQMD Rule 1113)

Qualified for use in USDA and FDA inspected facilities

## 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:** 102.2°F (39°C)

**Weight/gallon:** 13.7 ± 1.0 lbs  
(1.79 ± .12 kg/l)

DOT HAZARD CLASS 3

DOT PACKAGING GROUP III

DOT LABEL FLAMMABLE LIQUID

DOT SHIPPING NAME PAINT

DOT PLACARD FLAMMABLE LIQUID

UN/NA NUMBER 1263

## Safety Precautions

### DANGER!

VAPOR AND SPRAY MIST HARMFUL. OVEREXPOSURE MAY CAUSE LUNG DAMAGE. MAY CAUSE ALLERGIC SKIN AND RESPIRATORY REACTION, EFFECTS MAY BE PERMANENT, MAY AFFECT THE BRAIN OR NERVOUS SYSTEM CAUSING DIZZINESS HEADACHE OR NAUSEA. CAUSES EYE, SKIN, NOSE AND THROAT IRRITATION. FLAMMABLE LIQUID AND VAPOR.

**CONTAINS: Petroleum Distillates, Xylene, Ethylbenzene, Modified MDI, Modified Polymeric MDI, 4,4'-Diphenylmethane Diisocyanate**

**NOTICE:** Reports have associated repeated and prolonged occupational over-exposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling contents may be harmful or fatal. INDIVIDUALS WITH LUNG OR BREATHING PROBLEMS OR PRIOR REACTION TO ISOCYANATES MUST NOT BE EXPOSED TO VAPOR OR SPRAY MIST. **Use Only With 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 the Material Safety Data Sheet Before Using.

**INTENDED FOR PROFESSIONAL USE ONLY.**

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

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