

Product Description

MC-Ferrox B is a unique single-component, moisture-cure urethane intermediate coating based on micaceous iron oxide (MIO). This is Wasser's most specified intermediate for new construction and maintenance project applications. It also serves as an excellent primer for non-ferrous metal surfaces.

Area of Use

Substrates

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

Possible Uses

Bridges
Tank Exteriors
Material Handling Equipment
Pulp and Paper Mills
Chemical Processing Facilities
Water and Wastewater Treatment Facilities

Structural Steel
Food Processing Facilities
Refineries
Hydropower Facilities

Ready Reference Information

Resin Type:	Urethane
Pigment type:	Micaceous Iron Oxide (3.5 lbs/gal)
Sheen:	Flat
Colors:	Standard Brownish Grey
Volume Solids:	62.0% ± 2.0
VOC: (Volatile Organic Content)	< 2.8 lb/gal (340 g/l)

Theoretical Coverage: At 1 mil DFT: 994 ft²/gal
At 25 µm DFT: 24.4 m²/l

Recommended Film Thickness:

Wet: 4.8-8.0 mils (122-203 microns)
Dry: 3.0-5.0 mils (76-127 microns)

Recommended Coverage Per Coat:

199 ft²/gal at 5.0 mils DFT - 331 ft²/gal at 3.0 mils DFT
(4.87 m²/l at 127 microns DFT - 8.11 m²/l at 76 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	1 hour	--	30 minutes	--	20 minutes	--
Recoat Minimum ¹	8 hours	1 hour	6 hours	30 minutes	4 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

¹No outer recoat window on clean surfaces

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

Product Features

- Single component Moisture Cure Urethane
- No mixing errors – no pot life
- Superior adhesion to most aged coatings
- Easy to apply by brush, roller or spray methods
- High performance intermediate coating for primed steel and aluminum
- Low VOC
- Impact and abrasion resistant
- Maintains build on edges, threads and weld seams
- Can be applied at 99% relative humidity (substrate must be visibly dry)
- Can be applied in below freezing temperatures (no ice or frost)
- No dew point restrictions above 32°F (substrate must be visibly dry)
- No outer recoat window on clean surfaces
- Compatible with PURQuik® Accelerator for faster recoat and cure times
- Use as a prime coat over new or weathered galvanized surfaces

Recommended Systems

Ferrous Metals (New Construction / Full Removal):

1 st Coat: MC-Zinc	3.0-5.0 mils DFT
2 nd Coat: MC-Ferrox B	3.0-5.0 mils DFT
3 rd Coat: MC-Ferrox A	2.0-4.0 mils DFT
Or MC-Luster	
Total System DFT:	8.0-14.0 mils DFT

1 st Coat: MC-Miozinc	3.0-5.0 mils DFT
2 nd Coat: MC-Ferrox B	3.0-5.0 mils DFT
3 rd Coat: MC-Ferrox A	2.0-4.0 mils DFT
Or MC-Luster	
Total System DFT:	8.0-14.0 mils DFT

Ferrous Metals (Overcoat):

1 st Coat: MC-Miozinc (Spot Prime)	3.0-5.0 mils DFT
2 nd Coat: MC-Ferrox B	3.0-5.0 mils DFT
3 rd Coat: MC-Ferrox A	2.0-4.0 mils DFT
Or MC-Luster	
Total System DFT:	8.0-14.0 mils DFT

Aluminum/Galvanized Metal:

1 st Coat: MC-Ferrox B	3.0-5.0 mils DFT
2 nd Coat: MC-Ferrox A	2.0-4.0 mils DFT
Or MC-Luster	
Total System DFT:	5.0-9.0 mils DFT

Use as an Intermediate over recommended primers for ferrous metal. Not recommended for direct to ferrous metal applications.

***Other Systems are available and appropriate. Contact your Wasser Representative for any questions.**

Performance Testing Data

System*: MC-Zinc

MC-Ferrox B
MC-Ferrox A

*At 75°F and 50% RH 7 day min. cure

Abrasion Resistance: (ASTM D4060–CS-17 Wheel, 1,000 cycles/kg load)
147 mg loss

Adhesion: (ASTM D4541)
1510 psi

Impact: (ASTM 2794)
Direct: 160 Reverse: 20

Prohesion: (ASTM G85 @ 5000 hrs)

Blistering: None
Scribe Rate: 9.0

Dry Heat Resistance:

Continuous: 250°F (120°C)

*Contact Wasser Corporation for detailed testing of this product

Compatible Coatings

Primer:

MC-Prepbond 100	MC-Prepbond 2.8
MC-Zinc 100	MC-Zinc 2.8
MC-Miozinc 100	MC-Miozinc 2.8

Topcoats:

MC-Ferrox A 100	MC-Ferrox A 2.8
MC-Luster 100	MC-Luster 2.8
MC-Shieldcoat 100	MC-Shieldcoat 2.8
MC-Tar 100	MC-Tar 2.8
MC-BallastCoat 2.8	

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 SSPC-SP3 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 SSPC-SP3 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 B is designed for application to tightly adhering, previously existing coatings. Apply a test sample to a small area

to determine coating 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, heavy rust, 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 B 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.

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.

Airless Spray:

Pump Ratio: 28 - 40:1
Pressure: 2400 - 2800psi
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.

Conventional Spray: (DeVilbiss 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.

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.

Clean up: MC-Thinner, 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.

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. 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 Standards – Industrial Maintenance Coating)

Tested in accordance with AASHTO R31 Standard

Qualified for use in USDA and FDA inspected facilities

Ordering Information

Product Numbers: W11.61 Standard Grey

Package Size: 1 gallon and 5 gallon pails (Std. Grey)

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

Shipping Information

Flash Point: 75.2°F (24°C)

Weight/gallon: 13.5 ± 1.0 lbs. (3.2 ± .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, Methyl-n-Amyl Ketone, Toluene, Modified MDI

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.

W11.61

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

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