MC-Ferrox B 2.8

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

<table>
<thead>
<tr>
<th>Substrates</th>
<th>Possible Uses</th>
<th>Structural Steel</th>
<th>Food Processing Facilities</th>
<th>Refineries</th>
<th>Hydropower Facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Over properly prepared:</td>
<td>Bridges</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Ferrous Metal</td>
<td>Tank Exteriors</td>
<td></td>
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</tr>
<tr>
<td>Galvanized Metal</td>
<td>Material Handling Equipment</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Aluminium/Non-Ferrous Metal</td>
<td>Pulp and Paper Mills</td>
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<tr>
<td>Metallized</td>
<td>Chemical Processing Facilities</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Previously Existing Coatings</td>
<td>Water and Wastewater Treatment Facilities</td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Ready Reference Information

<table>
<thead>
<tr>
<th>Resin Type:</th>
<th>Urethane</th>
<th>Theoretical Coverage:</th>
<th>At 1 mil DFT: 994 ft²/gal</th>
<th>At 25 μm DFT: 24.4 m²/l</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pigment type:</td>
<td>Micaceous Iron Oxide (3.5 lbs/gal)</td>
<td>Recommended Film Thickness:</td>
<td>Wet: 4.8-8.0 mils (122-203 microns)</td>
<td>Dry: 3.0-5.0 mils (76-127 microns)</td>
</tr>
<tr>
<td>Sheen:</td>
<td>Flat</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Colors:</td>
<td>Standard Brownish Grey</td>
<td>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)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Volume Solids:</td>
<td>62.0% ± 2.0</td>
<td>Thinning: MC-Thinner, MC-Thinner 100, MC-Thinner XMT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VOC: (*)</td>
<td>&lt; 2.8 lb/gal (340 g/l)</td>
<td>Clean Up: MC-Thinner, MC-Thinner 100, MC-Thinner XMT</td>
<td></td>
<td></td>
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</tbody>
</table>

Drying Times and Temperatures

<table>
<thead>
<tr>
<th>*At 50% Humidity</th>
<th>50°F/10°C Without PURQuik®</th>
<th>50°F/10°C With PURQuik®</th>
<th>75°F/24°C Without PURQuik®</th>
<th>75°F/24°C With PURQuik®</th>
<th>95°F/35°C Without PURQuik®</th>
<th>95°F/35°C With PURQuik®</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tack Free</td>
<td>1 hour</td>
<td>--</td>
<td>30 minutes</td>
<td>--</td>
<td>20 minutes</td>
<td>--</td>
</tr>
<tr>
<td>Recoat Minimum¹</td>
<td>8 hours</td>
<td>1 hour</td>
<td>6 hours</td>
<td>30 minutes</td>
<td>4 hours</td>
<td>20 minutes</td>
</tr>
<tr>
<td>Full Cure</td>
<td>10 Days</td>
<td>7 Days</td>
<td>7 days</td>
<td>5 days</td>
<td>5 days</td>
<td>4 days</td>
</tr>
</tbody>
</table>

*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):

1st Coat: MC-Zinc
2nd Coat: MC-Ferrox B
3rd Coat: MC-Ferrox A
Or MC-Luster

Total System DFT: 8.0-14.0 mils DFT

Ferrous Metals (Overcoat):

1st Coat: MC-Miozinc (Spot Prime)
2nd Coat: MC-Ferrox B
3rd Coat: MC-Ferrox A
Or MC-Luster

Total System DFT: 8.0-14.0 mils DFT

Aluminum/Galvanized Metal:

1st Coat: MC-Ferrox B
2nd Coat: MC-Ferrox A
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

Compatable 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.

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
inursion 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 ⅜"
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: (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.

Reducers: 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
**MC-FerroxB 2.8**

### Ordering Information

<table>
<thead>
<tr>
<th>Product Numbers:</th>
<th>W11.61 Standard Grey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Package Size:</td>
<td>1 gallon and 5 gallon pails (Std. Grey)</td>
</tr>
<tr>
<td>Shelf Life:</td>
<td>12 months from date of shipment when stored unopened at 75°F (24°C)</td>
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### Shipping Information

<table>
<thead>
<tr>
<th>Flash Point:</th>
<th>75.2°F (24°C)</th>
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<tbody>
<tr>
<td>Weight/gallon:</td>
<td>13.5 ± 1.0 lbs. (3.2 ± .12 kg/l)</td>
</tr>
<tr>
<td>DOT HAZARD CLASS</td>
<td>3</td>
</tr>
<tr>
<td>DOT PACKAGING GROUP</td>
<td>III</td>
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<tr>
<td>DOT LABEL</td>
<td>FLAMMABLE LIQUID</td>
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<td>DOT SHIPPING NAME</td>
<td>PAINT</td>
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<tr>
<td>DOT PLACARD</td>
<td>FLAMMABLE LIQUID</td>
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<tr>
<td>UN/NA NUMBER</td>
<td>1263</td>
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</tbody>
</table>

### Safety Precautions

**DANGER!**

VAPOUR 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.

**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 REACTIONS TO ISOCYANATES MUST NOT BE EXPOSED TO VAPOUR 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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