

Product Description

This corrosion resistant intermediate coating is a versatile overcoat product that shows superior adhesion to various substrates. MC-CR has aromatic chemical resistant properties and offers outstanding barrier film protection under recommended topcoats. It provides a smoother surface for topcoat application over zinc and micaceous iron oxide (MIO) primers and is recommended for application when lighter color topcoats are desired. MC-CR is also Wasser's standard MCU primer for concrete.

Area of Use

Substrates

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

Possible Uses

Bridges
Tanks
Material Handling Equipment
Pulp and Paper Mills
Chemical Processing Facilities
Pipes
Water and Wastewater Treatment Facilities

Structural Steel
Food Processing Facilities
Refineries
Dry Holds/Wet Holds
Concrete Structures
Floors

Ready Reference Information

Resin Type: Aromatic Urethane
Pigment type: Coloring and Anticorrosive
Sheen: Flat
Colors: Buff or Off-White
Volume Solids: 62.0% ± 2.0
VOC: < 2.8 lb/gal (340 g/l)
(Volatile Organic Content)

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

Recommended Film Thickness:

Wet: 4.8-6.4 mils (122-163 microns)
Dry: 3.0-4.0 mils (76-102 microns)

Recommended Coverage Per Coat:

249 ft²/gal at 4.0 mils DFT - 331 ft²/gal at 3.0 mils DFT
(6.1 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
- Protective coating for various substrates
- Easy to apply by brush, roller or spray methods
- Low VOC
- Can be applied at 99% relative humidity
- Can be applied in below freezing temperatures (no ice or frost)
- No dew point restrictions (substrate must be visibly dry)
- No outer recoat window on clean surfaces
- Compatible with PURQuik® Accelerator for faster recoat and cure times (Do not accelerate prime coat on concrete)

Recommended Systems

Ferrous Metals (New Construction / Full Removal):

1 st Coat: MC-Zinc	3.0-5.0 mils DFT
Or MC-Miozinc	
2 nd Coat: MC-CR	3.0-4.0 mils DFT
3 rd Coat: MC-Ferrox A	2.0-4.0 mils DFT
Or MC-Luster	
Total System DFT:	8.0-13.0 mils DFT

Ferrous Metals (Overcoat):

1 st Coat: MC-Miozinc (Spot Prime)	3.0-5.0 mils DFT
2 nd Coat: MC-CR	3.0-4.0 mils DFT
3 rd Coat: MC-Ferrox A	2.0-4.0 mils DFT
Or MC-Luster	
Total System DFT:	8.0-13.0 mils DFT

Aluminum/ Non-Ferrous Metals/ Galvanized Metal:

1 st Coat: MC-CR	3.0-4.0 mils DFT
2 nd Coat: MC-Ferrox A	2.0-4.0 mils DFT
Or MC-Luster	
Total System DFT:	5.0-8.0 mils DFT

Concrete¹:

1 st Coat: MC-CR	3.0-4.0 mils DFT
2 nd Coat: MC-Luster	2.0-4.0 mils DFT
Optional Clear Coat	
3 rd Coat: MC-Antigrffiti 100	1.5-2.0 mils DFT
Total System DFT:	6.5-10.0 mils DFT

1. Prime coat for concrete may be reduced up to 25% to facilitate coating penetration. Subsequent coating applications may be reduced as necessary up to 10%. Thin in accordance with local and federal regulations.

Note: 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-Miozinc
MC-Ferrox B
MC-Ferrox A
*At 75°F and 50% RH 7 day min. cure

Abrasion Resistance: 150 mg loss
(ASTM D4060 – CS-17 Wheel, 1,000 cycles/kg load)

Prohesion:
(ASTM G85 @ 5000 hrs)

Blistering: None
Scribe Rate: 9.0

Adhesion: (ASTM D4541)
1400 psi

Impact: (ASTM 2794)
Direct: 130
Reverse: 20

Dry Heat Resistance:
Continuous: 250°F (120°C)

*Contact Wasser Corporation for detailed testing of this product

Compatible Coatings

Primer:
MC-Zinc 100
MC-Miozinc 100
MC-Ferroclad 100 PW
MC-Prepbond 100
MC-Zinc 2.8
MC-Miozinc 2.8
MC-Prepbond 2.8

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

Polyflex 102 Rapid Thane
Polyflex 201 PW
Polyflex 202 High Chem
Polyflex 401 Polar Serve

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.

Concrete/Concrete Block

The surface must be dry, free of surface contaminants, and in sound condition. Grease, and oil should be removed by ASTM D4258-83 (Reapproved 1999) and release agents should be removed by ASTM D4259 - 88 (Reapproved 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 sufficient surface profile for mechanical adhesion to occur. Ensure surface is thoroughly rinsed and dry prior to coating application. Allow a minimum 7 - 14 days cure time for new concrete prior to preparation and application.

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 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-SP12 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.

Application Information

MC-CR 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 paint.

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 - 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: (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.

Good Practices

Spot prime any areas cleaned to bare metal with a Wasser recommended primer.

When using MC-CR as an immersion service intermediate, apply to clean, dry, Wasser recommended primers. Refer to the primer product data for additional information.

The surface to be coated must be dry, clean, dull, and free from dirt, grease, oil, 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.

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° - 120°F (-8° - 49°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.

