

MC-CR 100

intermediate

WASSER
ADVANCED COATINGS TECHNOLOGY

Product Description

MC-CR 100 is a versatile single component MCU (moisture cure urethane) product that can be used as an intermediate coat when overcoating Wasser primers or a wide variety generic coatings in an overcoat system. This MC-CR 100 has aromatic chemical resistance properties and offers outstanding barrier protection under a variety of topcoats including, MCU, Polyaspartic, and Polyurea as well as many other industrial topcoats. MC-CR 100 can be used as an ideal primer for concrete.

Product Features

- Single Component Moisture Cure Urethane
- No mixing errors – no pot life
- Protective coating for various substrates
- Easy to apply by brush, roller, mitt or spray methods
- VOC compliant at < 100g/L
- Can be applied at 99% relative humidity
- Can be topcoat-ed with Polyaspartic or Polyurea in as little as 2 hours.
- Can be applied in below freezing temperatures (no ice or frost)
- No dew point restrictions (substrate must be visibly dry)
- No outer re-coat window on clean surfaces
- Compatible with PURQuik® Accelerator for faster re-coat and cure times (Do not accelerate when used as primer coat on concrete)
- Can be applied to green concrete in 7 days for atmospheric exposure and 14 days for immersion service

Area of Use

Substrates

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

Possible Uses

- Water and Wastewater Treatment Facilities
- Food Processing
- 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
- Bridges

Ready Reference Information

Resin Type: Single Component Moisture Cure Aromatic Urethane

Theoretical Coverage:

At 1 mil DFT: 994 ft²/gal (25 µm DFT: 24.3 m²/l)

Pigment Type: Barrier protection

Recommended Film Thickness:

Wet: 4.8-6.4 mils (122-163 µm)

Dry: 3.0-4.0 mils (76-102 µm)

Sheen: Flat

Recommended Coverage Per Coat:

249 ft²/gal at 4.0 mils DFT - 330 ft²/gal at 3.0 mils DFT
(6.1 m²/l at 102 µm DFT - 8.1 m²/l at 76 µm DFT)

Colors: Off-white or Buff

Volume Solids: 62.0% ± 2.0

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

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

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

*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	2 hours	--	1 hour	--	20 minutes	--
Re-coat Minimum¹	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 re-coat and curing times. ¹No outer re-coat window on clean surfaces. Refer to Wasser's PURQuik® Accelerator Product Data for additional information.

MC-CR 100 may be substituted with MC Universal 100.

Ver. 17.08.29A

Recommended Systems

Concrete¹/Concrete Block:

1st Coat: MC-CR 100 Or MC Universal100	3.0-5.0 mils DFT
2nd Coat: Polyflex 201 PW NSF Total System DFT:	30.0-100.0 mils DFT 33.0-105.0 mils DFT
1st Coat: MC-CR 100 Or MC Universal100	3.0-5.0 mils DFT
2nd Coat: Polyflex 102 Rapid Thane Total System DFT:	6.0-10.0 mils DFT 9.0- 15.0 mils DFT
1st Coat: MC-CR 100 Or MC Universal100	3.0-5.0 mils DFT
2nd Coat: MC-Luster 100	2.0-4.0 mils DFT
Optional Clear Coat	
3rd Coat: MC-Antigraffiti 100 Total System DFT:	1.5-2.0 mils DFT 6.5-11.0 mils DFT

Ferrous Metals (Overcoat):

1st Coat: MC-Miozinc 100 (Spot Prime)	3.0-5.0 mils DFT
2nd Coat: MC-CR 100	3.0-4.0 mils DFT
3rd Coat: MC-Ferrox A 100 Or MC-Luster 100	2.0-4.0 mils DFT
Total System DFT:	8.0-13.0 mils DFT

Aluminum/ Non-Ferrous Metals/ Galvanized Metal:

1st Coat: MC-CR 100	3.0-4.0 mils DFT
2nd Coat: MC-Ferrox A 100 Or MC-Luster 100	2.0-4.0 mils DFT
Total System DFT:	5.0-8.0 mils DFT

1. Prime coat for concrete must be reduced by 15-25% to facilitate coating penetration. Subsequent coating applications may be reduced as necessary up to 10%. Thin in accordance with local and federal regulations.

*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

Coating Accelerator

PURQuik® Accelerator

Topcoats:

MC-Ferrox A 100
MC-Luster 100
MC-Shieldcoat 100
MC-Tar 100
MC-Ballastcoat 100
MC-Antigraffiti 100

All Wasser Polyflex Products

Surface Preparation

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 (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 sufficient surface profile for mechanical adhesion to occur. Ensure surface is thoroughly rinsed 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.

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 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

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

When using MC-CR 100 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.

Application Information

MC-CR 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 per gallon 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: 2100-2800psi
Hose: ¼" to ⅜"
Tip Size: 0.013 - 0.019
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. (Do not accelerate when used as prime coat on concrete)

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 (≤ 0.8 lbs/Gal) (National Standard for Industrial Maintenance Coating, Ozone Transportation Commission and SCAQMD Rule 1113 IM Coating effective 1/1/04). Qualified for use in USDA and FDA inspected facilities.

Performance Testing Data

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

Ordering Information

Product Numbers: W171.71 Off white
W171.75 Buff

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:	75°F (24°C)
Weight/gallon:	12.2 ± 1.0 lbs. (1.5 ± .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!

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.

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