

MC-Zinc 100

primer

WASSER
ADVANCED COATINGS TECHNOLOGY

Product Description

Wasser's proven, high-performance, single-component, moisture-cure urethane, organic zinc-rich primer is now formulated to meet the strict VOC requirements for industrial maintenance coatings. 83% zinc in the dry film makes MC-Zinc 100 the optimum, zinc-rich primer for maximum resistance to rust and corrosion undercutting on steel structures.

Suitable for immersion applications.

Product Features

- Single component Moisture Cure Urethane
- No mixing errors, no need to mix multiple components
- No pot life: No induction time, no waste
- Zinc stays in solution – no need for continuous agitation
- Easy to apply by brush, roller, mitt or spray methods
- Meets SSPC Paint 40 and SSPC Paint 29
- Nepcoat List-B
- VOC Compliant at less than 100 g/l
- Weldable primer 1.0 mil DFT max.
- Various service applications
- Impact resistant
- Abrasion resistant
- No dew point restrictions (substrate must be visibly dry)
- Can be applied at 99% relative humidity (substrate must be visibly dry)
- Can be applied in below freezing temperatures (no ice or frost)
- Compatible with PURQuik® Accelerator for faster re-coat and cure times

Area of Use

Substrates

Over properly prepared:

- Ferrous Metal
- Corten/Weathering Steel
- Galvanized Metal
- Metallized Surfaces

Possible Uses

- Bridges
- Refineries
- Water and Wastewater Treatment Facilities
- Marine/Port Facilities Structural Steel
- Offshore Platforms
- Tank Exteriors and Interiors
- Hydro-power Facilities and Penstocks
- Food Processing Facilities
- Material Handling Equipment
- Pulp and Paper Mills
- Marine/Port Facilities
- Chemical Processing Facilities
- Work Boats

Ready Reference Information

Resin Type:	Single Component Moisture Cure Aromatic Urethane
Pigment type:	83% Zinc in the dry film
Sheen:	Flat
Colors:	Standard Grey/Pink (Red Oxide)
Volume Solids:	62.0% ± 2.0
VOC:	< 0.8 lb/gal (100g/l)
(Volatile Organic Content) HAPS Free	

Theoretical Coverage:

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

Recommended Film Thickness:

Wet: 4.8-8.0 mils (104-173 µm)
Dry: 3.0-5.0 mils (76-127 µm)

Recommended Coverage Per Coat:

199 ft²/gal at 5.0 mils DFT - 331 ft²/gal at 3.0 mils DFT
(4.9 m²/l at 127 µm DFT – 8.1 m²/l at 76 µm DFT)

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

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

*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	--	1 hour	--
Re-coat Minimum¹	6 hours	1 hour	4 hours	30 minutes	3 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.. Refer to Wasser's PURQuik® Accelerator Product Data for additional information.

¹No outer re-coat window on clean surfaces.

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Recommended Systems

Ferrous Metals (Full Removal):

1st Coat: MC-Zinc 100	3.0-5.0 mils DFT
2nd Coat: Polyflex 102 Rapid Thane	6.0-10.0 mils DFT
Total System DFT:	8.0-14.0 mils DFT

1st Coat: MC-Zinc 100	3.0-5.0 mils DFT
2nd Coat: MC-Miomastic 100	3.0-5.0 mils DFT
3rd Coat: MC-Ferrox A 100 (Nepcoat List-B)	2.0-4.0 mils DFT
Total System DFT:	8.0-14.0 mils DFT

Ferrous Metals (Overcoat):

1st Coat: MC-Zinc 100 (Spot Prime)	3.0-5.0 mils DFT
2nd Coat: MC-Universal 100	3.0-5.0 mils DFT
3rd Coat: MC-Ferrox A 100 Or MC-Luster 100	2.0-4.0 mils DFT
Total System DFT:	8.0-14.0 mils DFT

Ferrous Metals (Immersion/NSF):

1st Coat: MC-Zinc 100	3.0-5.0 mils DFT
2nd Coat: Polyflex 201 PW NSF	30.0-100.0 mils DFT
Total System DFT:	33.0-105.0 mils DFT

1st Coat: MC-Zinc 100	3.0-5.0 mils DFT
2nd Coat: Polyflex 59 PW NSF	9.0-12.0 mils DFT
3rd Coat: Polyflex 59 PW NSF	9.0-12.0 mils DFT
Total System DFT:	21.0-29.0 mils DFT

Ferrous Metals (Immersion/Severe Service):

1st Coat: MC-Zinc 100	3.0-5.0 mils DFT
2nd Coat: MC-Tar 100	5.0-7.0 mils DFT
3rd Coat: MC-Tar 100	5.0-7.0 mils DFT
Total System DFT:	13.0-19.0 mils DFT

Ferrous Metals (Immersion/Light Color Topcoat):

1st Coat: MC-Zinc 100	3.0-5.0 mils DFT
2nd Coat: MC-Tar 100	5.0-7.0 mils DFT
3rd Coat: MC-Ballastcoat 100	3.0-4.0 mils DFT
Total System DFT:	11.0-16.0 mils DFT

Galvanized Metal:

1st Coat: MC-Zinc 100 (Spot Prime)	3.0-5.0 mils DFT
2nd Coat: MC-Miomastic 100	3.0-5.0 mils DFT
3rd Coat: MC-Ferrox A 100 Or MC-Luster 100	2.0-4.0 mils DFT
Total System DFT:	8.0-14.0 mils DFT

Corten/Weathering Steel:

1st Coat: MC-Zinc 100	3.0-5.0 mils DFT
2nd Coat: MC-Ferrox B 100	3.0-5.0 mils DFT
3rd Coat: MC-Ferrox A 100 Or MC-Luster 100	2.0-4.0 mils DFT
Total System DFT:	8.0-14.0 mils DFT

Two-Coat System Option

1st Coat: MC-Zinc 100 (Spot Prime)	3.0-5.0 mils DFT
2nd Coat: Polyflex 102 Rapid Thane	6.0-10.0 mils DFT
Total System DFT:	9.0-15.0 mils DFT

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

Compatible Coatings

Primers:

MC-Miozinc 100
MC-Ferroclad 100
MC-Universal 100
MC Prepbond 100

Intermediates:

MC-Miomastic 100
MC-Ferrox B 100
MC-CR 100
MC-Tar 100
MC-Universal 100

Coating Accelerator*

PURQuik® Accelerator

**Only use with a Wasser recommended intermediate*

Topcoats:

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

Thick Film Topcoats:

Polyflex 102, 103 and 106
Rapid Thane Polyaspartic products
All Wasser Polyflex Polyurea products

Surface Preparation

Ferrous Metal, Corten/Weathering Steel

Use SSPC-SP1 solvent cleaning to remove oil and grease or other contaminants prior to employing surface preparation methods.

Blast clean surfaces for severe or immersion service projects to SSPC-SP10/NACE No. 2 Near White Metal finish. Prepare surfaces for atmospheric service projects to SSPC-SP6/NACE No. 3 Commercial Blast Clean finish. For minimum surface preparation use conscientious SSPC-SP2 hand tool cleaning or SSPC-SP3 power tool cleaning methods to remove corrosion and loose or failing paint (feather edges of sound, existing paint back to a firm edge).

High Pressure Water Cleaning SSPC-SP12/NACE No.5 to a minimum WJ3/NV2 may also be used to prepare ferrous metal surfaces for atmospheric service projects. Surface preparation methods should produce a surface profile of 1.5 - 3.5 mils (38.1-88.9 µm).

Galvanized 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 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.

Good Practices

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.

Areas of oxidation, after surface preparation and prior to coating application, should be prepared to specified standard. Consult the referenced standards, SSPC-PA1 and your Wasser Representative for additional information or recommendations.

Application Information

MC-Zinc 100 can be applied by brush, roll, mitt, 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 ⅜"
Core: Phenolic
Reduction: Typically not required. If necessary, reduce with MC-Thinner 100 or MC-Thinner XMT

Airless Spray:

Pump Ratio: 28 - 40:1
Pressure: 2400 - 2800 psi
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, MC-Thinner 100, or MC-Thinner XMT

Conventional Spray/HLVP:

(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, MC-Thinner 100, or MC-Thinner XMT

Reducer:

MC-Thinner, MC-Thinner 100, or MC-Thinner XMT
Reduction is typically not required. If desired, thin up to 15% with MC-Thinner or MC-Thinner 100. MC-Thinner XMT is an exempt solvent specially formulated for Series 100 MCU. Thin in accordance with local and federal regulatory standards.

Clean up:

MC-Thinner or MC-Thinner 100
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.

Storage:

Store containers 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

Nepcoat Approved Primer list-B
Meets SSPC Paint 40 and SSPC Paint 29
VOC Compliant ≤0.8 lbs/gal (100 gr/ltr) (National Standards for Industrial Maintenance Coating, and SCAQMD Rule 1113 IM Coating, Zinc Rich IM Primer)
Cal Trans – Qualified Product List– "Organic Zinc-Rich Primer"
Meets Slip B 0.5 coefficient

Performance Testing Data

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

Ordering Information

Product Numbers: W011.6 Standard Grey
W011.0080 Pink (Red Oxide)

Package Size: 1 gallon and 3 gallon pails

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

Shipping Information

Flash Point: 59°F (15°C)
Weight/gallon: 24.8 ± 1.0 lbs
(2.97 ± .12 kg/l)

DOT HAZARD CLASS 3
DOT PACKAGING GROUP II
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.

Wasser Corporation's liability on any claim of any kind, including claims based upon Wasser Corporation's negligence or strict liability, for any loss or damage arising out of, connected with or resulting from the use of the Products, shall in no case exceed the purchase price allowable for the Products or part thereof that give rise to the claim. In no event shall Wasser Corporation be liable for consequential or incidental damages. Published Product Data Sheets are subject to change without notice. Contact your Wasser Representative or the Wasser website for the most current Product Data Sheets.