MC-Prepbond

Product Description

W051.81.002

MC-Prepbond 100 is Wasser's universal, low VOC, moisture-cure urethane primer for ferrous and non-ferrous metal substrates. The design benefit of the penetrating nature of this primer/sealer allows for superior adhesion to marginally prepared surfaces when compared with most industrial coatings. It is ideal for use as a tie coat over most existing coatings and can be used in red lead encapsulation systems.

Area of Use

Substrates

Over properly prepared:
Ferrous Metal
Galvanized Metal
Corten Steel
Aluminum/Non-Ferrous Metal

Possible Uses

Water and Wastewater Treatment Facilities
Food Processing Facilities
Pulp and Paper Mills
Tank Exteriors
Hydropower Facilities
Material Handling Equipment
Marine/ Port Facilities
Chemical Processing Facilities
Offshore Platforms
Chemical Processing Facilities
Refineries
Structural Steel
Ballast Tanks (Salt Water)
Work Boats
Bridges
Pipes

Ready Reference Information

Resin Type: Urethane

Pigment Type: Proprietary Blend

Sheen: Flat

Colors: Aluminum

Volume Solids: 64.0% ± 2.0

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

Theoretical Coverage: @1 mil DFT: 1026 ft^2/gal (@ 25 μm DFT: 25.1 m^2/l)

Recommended Film Thickness
Wet: 2.3 – 3.1 mils (58 - 79 microns)
Dry: 1.5 - 2.0 mils (38 - 51 microns)

Recommended Coverage per coat:
513 ft^2/gal at 2.0 mils DFT - 684 ft^2/gal at 1.5 mils DFT
(12.5 m^2/l at 50 microns DFT - 16.8 m^2/l at 38.1 microns DFT)

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

Clean up: MC-Thinner, MC-Thinner 100, or 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 hr	--	30 min	--	20 min	--
Recoat Minimum[1]	6 hrs	***1 hr***	4 hrs	***30 min***	3 hrs	***20 min***
Full Cure	10 days	***7 days***	7 days	***5 days***	5 days	***4 days***

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

*Humidity, temperature and coating thickness will affect recoat and curing times

1. On clean surface, recoat within 21 days or consult Wasser.

Product Features

- Single Component Moisture Cure Urethane
- No Mixing Errors.
- No Pot Life
- Low viscosity for penetrating and sealing surfaces
- Low VOC
- Can be applied at 99% humidity (substrate must be visibly dry)
- Can be applied in below freezing temperatures (no ice or frost)
- Universal primer for various metal surfaces
- Easy to apply by brush, roller or spray methods
- No Dew Point Restrictions (Substrate must be visibly dry)
- Compatible with PURQuik® Accelerator for faster recoat and cure times.

Recommended Systems

Ferrous Metals (Overcoat):

1st Coat: MC-Prepbond 100	1.5-2.0 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:	6.5-11.0 mils DFT

1st Coat: MC-Prepbond 100	1.5-2.0 mils DFT
2nd Coat: MC-Prepbond 100	1.5-2.0 mils DFT
3rd Coat: MC-Ferrox A 100 Or MC-Luster 100	2.0-4.0 mils DFT
Total System DFT:	5.0-8.0 mils DFT

Ferrous Metals (Salt Water Immersion):

1st Coat: MC-Prepbond 100	1.5-2.0 mils DFT
2nd Coat: MC-Tar, Or MC-Tar 100	5.0-7.0 mils DFT
3rd Coat: MC-Tar, Or MC-Tar 100	5.0-7.0 mils DFT
Total System DFT:	11.5-16.0 mils DFT

Corten Steel:

1st Coat: MC-Prepbond 100	1.5-2.0 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:	6.5-11.0 mils DFT

Aluminum/Non-Ferrous Metals:

1st Coat: MC-Prepbond 100	1.5-2.0 mils DFT
2nd Coat: MC-Luster 100 Or MC-Ferrox A 100	2.0-4.0 mils DFT
Total System DFT:	3.5-6.0 mils DFT

Ballast Tanks (Salt Water):

1st Coat: MC-Prepbond 100	1.5-2.0 mils DFT
2nd Coat: MC-Tar, Or MC-Tar 100	5.0-7.0 mils DFT
3rd Coat: MC-Tar, Or MC-Tar 100	5.0-7.0 mils DFT
Total System DFT:	11.5-16.0 mils DFT

1st Coat: MC-Prepbond 100	1.5-2.0 mils DFT
2nd Coat: MC-BallastCoat 100	3.0-4.0 mils DFT
3rd Coat: MC-BallastCoat	3.0-4.0 mils DFT
Total System DFT:	7.5-10.0 mils DFT

Note: Severely pitted steel or aggressive surface profiles may require additional MC-Prepbond 100 coating application.

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

Performance Testing Data

Dry Heat Resistance:

Continuous:	250°F (120°C)

*Contact Wasser High-Tech Coatings for detailed testing of this product

Compatible Coatings

Primers:
MC-Zinc 100
MC-Miozinc 100
MC- Ultra Build DTM

Intermediates:
MC-Ferrox B 100
MC-Miomastic 100
MC-CR 100

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

WP 102 Rapidthane Polyaspartic

Coating Accelerator:
PURQuik® Coating Accelerator

Surface Preparation

Ferrous Metal

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

Blast Clean surfaces for immersion or severe service projects to SSPC-SP10/NACE No. 2 Near White Metal finish.

Prepare surfaces for non-immersion or atmospheric service projects using SSPC-SP12/NACE No. 5 Low Pressure Water Cleaning methods to remove surface contamination. Supplement SSPC-SP 12 LPWC with SSPC-SP2 and 3 Hand and Power Tool Cleaning or SSPC-SP6/NACE No. 3 Commercial Blast Clean methods where areas show excessive corrosion, or loose and failing paint (feather edges of sound, existing paint back to a firm edge).

Areas cleaned to bare metal should exhibit a surface profile that will support mechanical coating adhesion. Aggressive surface profile may require additional coating application to ensure proper coverage.

Corten Steel

Prepare surfaces using SSPC-SP12/NACE No. 5 Low Pressure Water Cleaning methods. Supplement SSPC-SP 12 LPWC with SSPC-SP2 and 3 Hand and Power Tool cleaning where areas show excessive corrosion. Use SSPC-SP1 solvent cleaning to remove oil and grease prior to surface preparation methods.

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 3 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.

Good Practices

MC-Prepbond 100 is designed for application to tightly adhering rust. Heavy pack rust must be removed.

The surface to be coated must be dry, clean, dull, and free from dirt, grease, oil, heavy 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-Prepbond 100 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 ⅜"
Core: Phenolic
Reduction: Typically not required. If necessary, reduce with MC-Thinner 100.

Airless Spray:

Pump Ratio:	28-40:1
Pressure:	1800-2000 psi
Hose:	¼" to ⅜"
Tip Size:	.011-.015
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.

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, 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. On applications below 33° F, 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 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)
Qualified for use in USDA and FDA inspected facilities

Ordering Information

Product Numbers: W051.81

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:	107°F (42°C)
Weight/gallon:	9.5 ± 1.0 lbs.
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.

Obtain and Read the Material Safety Data Sheet Before Using.
INTENDED FOR PROFESSIONAL USE ONLY.

W051.81

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