

MC-ECO TR 100

specialty

WASSER
ADVANCED COATINGS TECHNOLOGY

Product Description

Wasser combined moisture-cure urethane technology and coal tar free proprietary blend pigments to produce a superior corrosion resistant coating. MC-ECO TR 100 has proven performance in severe immersion exposure, and is recommended for application on various substrates where coal tar is normally used for immersion, atmospheric, and buried environments. It has the ability to provide outstanding barrier protection in one-coat or multi-coat systems.

Product Features

- Single component Moisture Cure Urethane / Does not contain coal tar
- No mixing errors / no pot life / no coal tar odor
- Easy to apply by brush, roller, mitt or spray methods
- Performance compatible to coal tar epoxy coatings
- VOC compliant at <100 g/L
- Maintains build on edges, threads, and weld seams
- Immersion and non-immersion service / Excellent chemical resistance
- 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 (substrate must be visibly dry)
- No outer re-coat window on clean surfaces
- Compatible with PURQuik® Accelerator for faster re-coat and cure times
- Remains flexible over time

Area of Use

Substrates

Over properly prepared:

- Ferrous Metal
- Galvanized Metal
- Aluminum/Non-Ferrous Metal
- Metalized
- Concrete
- Concrete Block
- Previously Existing Coatings

Possible Uses

- Water and Wastewater Treatment Facilities
- Pulp and Paper Mills
- Tanks
- Hydro-power Facilities and Penstocks
- Marine/Port Facilities
- Offshore Platforms
- Chemical Processing Facilities
- Refineries
- Structural Steel
- Work Boats
- Piling
- Barges

Ready Reference Information

Resin Type:	Single Component Moisture Cure Aromatic Urethane	Theoretical Coverage: At 1 mil DFT: 1122 ft ² /gal (25 µm DFT: 27.54m ² /l)
Pigment Type:	Proprietary Blend & Micaceous Iron Oxide	Recommended Film Thickness: Wet: 7.1-10.0 mils (180-254 µm) Dry: 5.0-7.0 mils (127-179 µm)
Sheen:	Flat	Recommended Coverage Per Coat: 160 ft ² /gal at 7.0 mils DFT - 224 ft ² /gal at 5.0 mils DFT (3.93 m ² /l at 179 µm DFT - 5.50 m ² /l at 127 µm DFT)
Colors:	Black and Red Oxide	Thinning: MC-Thinner, MC-Thinner 100, MC-Thinner XMT Clean Up: MC-Thinner, MC-Thinner 100, MC-Thinner XMT
Volume Solids:	70.0% ± 2.0	
VOC: (Volatile Organic Content)	<0.8 lb/gal (100g/l)	

*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	4 hours	--	2 hours	--	1 hour	--
Re-coat Minimum¹	12 hours	2 hours	6 hours	1 hour	3 hours	30 minutes
Full Cure	10 days	7 days	7 days	5 days	5 days	4 days

¹Humidity, temperature and coating thickness will affect re-coat and curing times. ²No outer re-coat window on clean surfaces. Refer to Wasser's PURQuik® Accelerator Product Data for additional information.

Recommended Systems

Ferrous Metals (Atmospheric/Severe Exposure):

1st Coat: MC-Zinc 100 or MC-Miozinc 100	3.0-5.0 mils DFT
2nd Coat: MC-ECO TR 100	5.0-7.0 mils DFT
3rd Coat: MC-ECO TR 100	5.0-7.0 mils DFT
Total System DFT:	13.0-19.0 mils DFT
1st Coat: MC-Prepbond 100	1.5-2.0 mils DFT
2nd Coat: MC-ECO TR 100	5.0-7.0 mils DFT
3rd Coat: MC-ECO TR 100	5.0-7.0 mils DFT
Total System DFT:	11.5-16.0 mils DFT

Ferrous Metals (Salt or Fresh Water Immersion):

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

Aluminum/Non-Ferrous Metals/ Galvanized Metal:

1st Coat: MC-Ferrox B 100 or MC-Universal 100 or MC-Prepbond 100	3.0-5.0 mils DFT
2nd Coat: MC-ECO TR 100	3.0-5.0 mils DFT
	1.5-2.0 mils DFT
	5.0-7.0 mils DFT
Total System DFT: Dependant on the primer used	

Concrete¹ (Interior):

Severe Duty

1st Coat: MC-Universal100	3.0-5.0 mils DFT
2nd Coat: MC-ECO TR 100	5.0-7.0 mils DFT
3rd Coat: MC-ECO TR 100	5.0-7.0 mils DFT
Total System DFT:	14.0-19.5 mils DFT

2 Coat Option

1st Coat: MC-ECO TR 100	5.0-7.0 mils DFT
2nd Coat: MC-ECO TR 100	5.0-7.0 mils DFT
Total System DFT:	10.0-14.0 mils DFT

¹Prime 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.

Do not use Purquik Accelerator when priming concrete

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

Compatible Coatings

Primers:

MC-Zinc 100
MC-Miozinc 100
MC-Ferrolad 100
MC-Prepbond 100
MC-Universal100
MC-CR 100 (concrete)

Intermediates:

MC-Ferrox B 100
MC-Miomastic 100
MC-CR 100
MC-Ballastcoat 100

Topcoats:

MC-Tar 100
MC-Ballastcoat
MC-Antigraffiti 100

Coating Accelerator

PURQuik® Accelerator

Surface Preparation

Ferrous Metal

Use SSPC-SP1 solvent cleaning to remove contaminants prior to employing surface preparation methods. Prepare surfaces for immersion service projects to SSPC-SP10/NACE No. 2 near White Blast Cleaning. Prepare surfaces for non-immersion or atmospheric service projects to SSPC-SP6/NACE No. 3 Commercial Blast Clean finish. For minimum surface preparation use conscientious power tool cleaning methods in accordance with SSPC-SP3 to remove corrosion and loose or failing paint (feather edges of sound, existing paint back to a firm edge). For immersion or severe service, apply over a Wasser recommended primer. Refer to Primer Product Data for surface preparation information. Not recommended direct to metal in immersion. Blast cleaning methods should produce a surface profile of 1.0-2.0 mils (25-51 µm).

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.

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. Allow a minimum 7-14 days cure time for new concrete prior to preparation and application.

Surface Preparation (con't)

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 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 for maximum system performance. Sand glossy surfaces to provide profile.

Good Practices

MC-ECO TR 100 is designed for application to a variety of substrates and tightly adhering, previously existing coatings. Apply a test sample to a small area to determine coating adhesion and/or compatibility. Spot prime any areas cleaned to bare metal with a Wasser recommended primer for maximum system performance. When using MC-ECO TR 100 in immersion or severe environments, apply over a recommended Wasser primer. 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. Consult the referenced standards, SSPC-PA1 and your Wasser Representative for additional information or recommendations.

Application Information

MC-ECO TR 100 can be applied by brush, roll, airless spray, mitt and conventional spray methods. 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 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 ¾"
Tip Size: .015 - .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. 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. 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 ≤ 0.8 lbs/gal (100 gr/ltr) (National Standard for Industrial Maintenance Coating, Ozone Transportation Commission and SCAQMD Rule 1113 IM Coating effective 1/1/04)

Performance Testing Data

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

Ordering Information

Product Numbers: W351.79 Black
W351.32 Red Oxide

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:	59°F (15°C)
Weight:	13.5 ± 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!

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.