

MCU-MIOZINC – THE DEFINITION OF A UNIVERSAL PRIMER

Improving efficiency, reducing project time, optimizing asset protection

Interest in “universal primers” has increased in over the last few years because supply chains are increasingly diverse and the protective coatings market has become too fragmented for its own good and also has too many specialist products that are incompatible with other coating systems. Increasing environmental regulations and raw material price increases have also increased the costs of painting dramatically.

What does MCU-Coatings have to offer to offset these extra costs?

A unique primer, combining ultra-fine zinc and micaceous iron oxide in a high solids, single component coating that adheres tenaciously to a wide range of ‘old serviceable’ coatings’. MCU-Miozinc is also surface tolerant, has a very wide DFT tolerance and unlimited recoat window.

General properties of MCU-Miozinc

Product Quality

1. Superior anti-corrosion (passes >10000 hrs salt spray testing without blistering or undercutting)
2. Very good abrasion and impact resistance (<30mg weight loss on ASTM D4060-CS 17 Wheel, 1000 cycles/kg load & resists 150 lbs on Gardner impact test: ASTM 2794)
3. Flexible and crack resistant, even after long term exposure (passes ASTM D 522, Conical mandrel bend at 24°C 12mm and resists more than 30% elongation)

Surface & System Compatibility

1. Compatible with ferrous metal, aluminium, galvanised and corten steel.
2. Compatible with most shop primers. (Consult MCU Coatings if you have surface prep. and compatibility questions).
3. Great for over-coating existing coatings, alkyds, lead, epoxy, polyurethane, vinyl’s and water-based acrylics; without the need for abrading.

Application Quality

1. Easy application by brush, roll and spray, without mixing components or pot life limitations.
2. Wide maximum DFT tolerance of 300% (350µm) without mud cracking.
3. No maximum re-coat time limit.
4. Re-coat possible within 30 min. with QuickCure.

MCU Coatings MCU-Miozinc: The Industry’s Most Versatile Primer

Interesting Properties for New Construction

1. Can be applied to Sa 2 or NACE No.1/SSPC-SP 6 blasted substrates, 25µm profile.
2. Build for service life over 25 years.
3. Fast cure, even at lower temperatures. With QuickCure, cure times can be reduced to 30 min.
4. Universal compliance with various substrates and coatings systems.
5. Unlimited maximum re-coat window.

Interesting Properties for Maintenance

1. Good wetting properties, even into pitted surfaces.
2. Best moisture resistance in the industry.
3. Flexible after long-term exposure (passes ASTM D 522, 180° bend 6mm mandrel).
4. Tolerant to flash rust appearing with low surface preparation standards, such as (SP 2 – SP 3 or St 2 – St 3) or water-jetting (NACE No. 5/SSPC-SP 12) and still offering long-life corrosion protection.
5. No Dew point or humidity restrictions.

MCU-Miozinc a “TRUE” Universal Primer

1. All-round marine: suitable to be applied as the anti-corrosive primer all around the vessel, for area’s such as the under-water hulls, water ballast tanks, cargo holds, superstructures, internal areas, topsides, decks, areas with cathodic protection by anodes and drinking water tanks.

2. All year: MCU-Miozinc can be applied:
 - a. At 6% to 99% humidity
 - b. At -15°C to 50°C
 - c. On damp surfaces
- d. Will resist damp, rain or immersion within minutes.
3. MCU-Miozinc has no maximum re-coat window with a minimum overcoat of 30 min.
4. MCU-Miozinc can be overcoated by most generic topcoats.
5. MCU-Miozinc offers compatibility with all generic types of coatings used in subsequent maintenance situations.
6. Low VOC's

MCU-Miozinc Meets Basic Requirements:

1. MCU-Miozinc offers long term corrosion protection, even in severe C 5 M environments such as ballast tanks, and thereby substantially reduces long term asset maintenance costs.
2. MCU-Miozinc maximises the construction production efficiency because of its simplicity and speed of application.

MCU Coatings Improve Efficiency, Increase Productivity and Reduce Costs

1. One primer for the whole project.
2. Reduce the number of different products.
3. Limited number of products increases the painters' familiarity and reduces application errors.

Conclusion:

1. MCU-Miozinc reduces total paint costs and significantly improves operational efficiencies;
2. MCU-Miozinc is an important part of the world's only 2-coat system that has ever achieved +25 years to first maintenance in independent ISO testing on a ST 3 steel surface;
3. MCU-Miozinc is compatible to overcoat existing coatings and replaces the need for intermediate coatings; making it a true universal base coat.

Savings with MCU-Miozinc Universal Primer

1. Less waste - Up to 20% reduction
2. One thinner - Up to 10% reduction
3. Down time - Up to 20% reduction
4. Drying time - Up to 50% reduction
5. Raw material stock - Up to 50% reduction

Using a universal primer instead of multiple primers, total paint costs will reduce by an average of 5 – 10%.

MCU-Miozinc Track Record:

Testing shows, MCU-Coating's systems and primers exceeded or meet the anti-corrosive qualities of other products tested. This includes lead-based paints, inorganic zinc, pure epoxy, epoxy mastics, glass flake epoxy, pure epoxy primer, and epoxy MIO.

1. Proven to be the best in many different independently conducted comparative test.
2. Compatible with different types of substrates and coatings. Easy maintenance programs.
3. Efficient application in all climate conditions.
4. Avoid sagging.
5. Easy to apply uniformly at the correct dry film thickness.
6. Simplicity creates time savings on application and quality control.
7. Eliminates mixing errors.
8. Extended coating life-cycle.

The definition of a 'Universal primer' was effectively developed within the ship building industry as they were constantly being challenged by suppliers using a wide variety of temporary and permanent coating systems, which started their quest to find a primer coating that would adhere to a wide variety of substrates and existing coatings

Just one more reason to join the MCU revolution