# Technical Data Sheet MCU QUICKCURE®



#### **Product and Technology Description**

A 100% solids proprietary additive designed to accelerate the rate of cure of MCU-Coatings products, except MCU-Coatings' High Heat products and MCU-Insulat 230.

#### Uses

Use when faster cure and overcoat times are required, when relative humidity is lower than 40%, and when applying MCU-Coating's products in cold climates of 5 °C or less.

#### **Advantages**

With MCU-Quickcure recoat times can be reduced down to 30 minutes (see recoat times in the table below) so even a 3-coat system can be applied on the same day.

#### Accelerating with MCU-Quickcure

Once MCU-Quickcure has been added to moisture cure products there will be a limited pot-life, therefore only accelerate the materials that will be used on the same day.

To avoid premature gelling or short pot-life issues:

- Open the paint and agitate as necessary to incorporate any settling or separation. Do not over-agitate. The zinc and micaceous iron oxide (MIO) pigment take at least 4 hours to settle once thoroughly incorporated.
- Add MCU-Quickcure after the product has been mixed, and agitate only enough to incorporate the accelerator. Do not over agitate or keep the product under constant agitation.
- Immediately after mixing pour on a 'MCU-Thinner solvent float', about 2mm thick. Depending on the size of the pale, 50 100 ml is usually enough. Do not mix this float into the product. It must stay on top of the coating to prevent moisture coming into contact with the product.
- Cover the container whenever possible after adding MCU-Quickcure.
- Avoid using accelerated material after 24 hours.
- Do not use MCU-Quickcure in the first coat when applying MCU-Coatings over concrete.
- Do not use MCU-Quickcure when applying product onto damp surfaces.

#### Precautions with MCU-Ouickcure

Do not open and agitate MCU-Coatings with MCU-Quickcure while the temperature of the product is below the dew point.

To prevent condensation forming on the inside of the can, and to eliminate any risk of moisture intrusion while mixing, store the product in an area that is warmer than the dew point temperature. This is critical because any condensation on the surface of the paint will be mixed into the product when it is agitated.

If MCU-Quickcure is not used, MCU's coatings can tolerate some moisture intrusion; however, if MCU-Quickcure and moisture have been combined with the coating, it will have a very short pot life between 1 - 4 hours.

Do not allow rain or water to fall directly into an open container.

### **Application**

MCU-Quickcure accelerated coatings are designed for spray application. Brush and roll application is possible, however, the usable pot life will be drastically reduced because when the brushes and rollers are repeatedly dipped into the coating they introduce air and moisture which accelerates the cure time.

Avoid excessive mixing or high-speed turbulence because egg-beating and vortexes introduce unnecessary moisture.

Keep the container covered and use MCU-Thinner or MCU-Thinner 25 as a float when the container has been accelerated.

MCU-Coatings' products can be applied to damp, but not visibly wet, surfaces. The use of MCU-Quickcure diminishes a product's ability to adhere to damp surfaces because the MCU-Quickcure also adds moisture to the curing process. As a result you should also not add MCU-Quickcure on surfaces that will be immersed before they have fully cured because MCU-Coatings' products should not be 'over-saturated'. If in any doubt, contact MCU-Coatings for advice.



# MCU QUICKCURE®



#### **MCU-Quickcure Recoat Times & Mixing Ratios**

MIXING RATIO	Add 3% MCU-Quickcure by volume		Add 5% MCU-Quickcure by volume		Add 6% MCU-Quickcure by volume		Normally not required, but if needed add 5%		Add 5% MCU-Quickcure per volume	
COATING	MCU-Zinc** MCU-Miozinc*		MCU-Mastic* MCU-Miomastic* MCU-Ferroguard*		MCU-Aluprime RG MCU-Alutopcoat		MCU-Topcoat MCU-Miotopcoat		MCU-Clearcoat MCU-Shieldcoat	
With / without	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES
-20 °C	48 hours	10 hours	48 hours	10 hours	72 hours	12 hours	72 hours	12 hours	48 hours	10 hours
-10 °C	20 hours	4 hours	24 hours	6 hours	24 hours	8 hours	24 hours	8 hours	24 hours	6 hours
0 °C	12 hours	1.5 hours	12 hours	1.5 hours	18 hours	2 hours	18 hours	2 hours	12 hours	1.5 hours
10 °C	4 hours	45 minutes	4 hours	1 hour	10 hours	1.5 hours	10 hours	1.5 hours	10 hours	1.5 hours
25 °C	3 hours	45 minutes	3 hours	45 minutes	5 hours	1 hour	5 hours	1 hour	4 hours	1 hour
40 °C	3 hours	30 minutes	3 hours	45 minutes	3 hours	45 minutes	3 hours	45 minutes	4 hours	1 hour

<sup>\*</sup> Increase 50% of the curing times when DFT is above 125 microns

The curing times listed are approximate times required before recoating and are based on 60 % to 70 % relative humidity and a dry film thickness of 125µm. Actual curing times vary depending on ambient temperature, substrate temperature, relative humidity and film thickness. Thicker films may require longer cure times

#### **Safety Precautions**

This product is for industrial use only. Recommend that respiratory, eye and clothing protection is used for handling MCU-Quickcure.

#### **WARNINGS:**

- To protect skin and eyes from contact. Wear chemical splash goggles, rubber boots and gloves.
- Product may cause severe skin burns. Remove product from skin and clothing by washing thoroughly with water.
- ♦ Product may cause serious eye damage. Wash eyes thoroughly for 15 minutes if required.
- Read the product label and MCU-Quickcure Safety Data Sheet before use.

## Potential Fire Hazard

## WARNING:

This product poses no unusual hazard in the container or in the coating; however, if the undiluted MCU-Quickcure is spilled, special steps must be taken. DO NOT WIPE UP WITH DRY RAGS. Finely divided small quantities of this material will create heat in rags much like oily rags. Rags containing this chemical that are piled or stuffed into closed containers can ignite. Caution must be taken. Material laying on the ground or in partial containers cause no hazard; however, if clean-up is done with rags, the rags must be thoroughly soaked with water.

Clean all spills with plenty of water and soak any rags with water prior to disposal. Call your MCU-Coatings representative for any questions.



<sup>\*\*</sup> Increase 100% of the curing times when built up to a DFT of 175 microns

# MCU QUICKCURE®



#### Storage & Shipping

Density:  $0.87 \text{ g/cm}^3$ Flash point:  $>60 ^{\circ}\text{C}$ 

Shelf life / Storage: 2 years from date of manufacture if stored between 5 °C and 30 °C & in a cool, dry place

UN proper shipping name: UN 2735, LIQUID AMINE, Class 8, Packaging Group III

#### Warranty

MCU-Coatings warrants its products to be free from defects in materials. MCU-Coatings sole obligation, and Buyer's exclusive remedy, in connection with the products shall be limited, at MCU-Coatings' option to either replace the products not conforming with this warranty, or to credit the Buyer's account with the invoiced amount of the non-conforming products. Any claim under this warranty must be made by Buyer to MCU-Coatings in writing within five (5) days of Buyer's discovery of the claimed defect, but in no event later than the expiration of the applicable shelf- life, or six months from the delivery date, whichever is earlier. Buyer's failure to notify MCU-Coatings of such non-conformance as required herein shall bar Buyer from recovery under this warranty.

MCU-Coatings makes no other warranties concerning the products. No other warranties, whether expressed,

implied, or statutory, such as warranties of merchantability or fitness for a particular purpose, shall apply. In no event shall MCU-Coatings be liable for consequential or incidental damages.

Any recommendations or suggestions relating to the use of the products made by MCU-Coatings, whether in its technical literature, or in response to specific inquiry, or otherwise, is based on data believed to be reliable; however, the products and information are intended for use by Buyers having the requisite skill and know-how in the industry, and therefore the Buyer must satisfy itself as to the suitability of the products for their own particular use, and it shall be deemed that Buyer has done so at its sole discretion and risk. Variations in environment, changes in procedures of use or extrapolation of data may cause unsatisfactory results.

# **Limit of Liability**

MCU-Coatings' liability on any claim of any kind, including claims based upon MCU-Coatings' 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 gave rise to the claim. In no event shall MCU-Coatings be liable for consequential or incidental damages. Published Technical Data Sheets are subject to change without notice. Contact your MCU-Coatings' representative for the most up to date Technical Data Sheets.

