

# **TECHNICAL DATASHEET**

## BMA ZINC SILICATE PRIMER

#### **PROPERTIES**

Zinc silicates, or inorganic zinc primers, are often used in a variety of applications due to their offer strong corrosion protection. Zinc silicates consist in 2 component products, where one component (Zinc dust) is solid and the binder is inorganic humidity curing silicate.

### **RECOMMENDED USES**

BMA Zinc Silicate Primer could be used for:

- ✓ Highly aggressive environments
- ✓ Superior galvanic corrosion protection to steelwork
- ✓ Intended for use in moderate to severe coastal areas
- ✓ Intended for structures with very long service lives, such as buildings, public spaces and infrastructure

#### PERFORMANCE BENEFITS

- ✓ The mild steel substrate is protected against galvanic corrosion by the zinc metal
- ✓ The porosity of the coating provides voids that help to maintain that protection to the mild steel

### **APPLICATIONS GUIDE**

## **Surface Preparation**

Before applying BMA Zinc Silicate Primer, all necessary pretreatment must be done. Surface should be clean, dry and free of all contaminants (oils, agents, dust, dirt, etc...) in order to avoid the risk of surface failing.

For optimum performance, the following is recommended: Avoid undercuts, fissures, under welded seams, and other imperfections. If they are discovered, they should be fixed using grinding and/or welding. All steel work (including welding, flame cutting, grinding) must be finished before the surface preparation starts.



## **TECHNICAL DATASHEET**

Don't open the packaging until shortly before usage. For each batch, the complete contents of the two packings must be used to achieve a proper mixing. The packaging cannot be used again for leftovers. Keep the product dry until the application is finished.

Shake or stir the LIQUID component before mixing. Slowly add the zinc dust to the liquid while with constant mechanical stirring. Continue stirring until the mixture is free of lumps. To prevent zinc from settling and to maintain homogeneity in the mixture, stir the mixture continuously until the batch is finished. Before mixed paint reaches the nozzle, make sure it has been filtered via a screen measuring 250–160 m (60–80 mesh).

## **Thinning**

The amount of thinning necessary will depend upon prevailing conditions: Temperature, humidity, wind/ventilation, method of spraying, spray equipment, etc. The normal thinning range is: 0-10%. The coating must be wet and smooth just after application. Besides correct spray technique, the amount of thinner added must be selected securing this optimum film formation. Too little thinning will typically lead to dry-spray and too much thinning to sagging and settling of zinc particles in the can or in the spray hoses.

## Application

BMA Zinc Silicate Primer should be applied in a ventilated area where the humidity does not exceed 85%, nor in sunny days on hot substrates. The required temperature for optimum performance is between 5°C and 40°C.

BMA Zinc Silicate Primer must be applied on a clean and dry surface using a brush, roller or airless spraying system.

Keep the spray gun between 30 and 50 cm away from the surface. Perform even, parallel passes with about 50% overlap while holding the spray gun at a straight angle to the surface. To ensure optimal film formation, careful adjustments must be made to the amount of thinner used in addition to the proper spray technique.

Recommended minimum surface temperature is 0°C/32°F. The maximum recommended surface temperature is approx. 40°C/104°F. Higher steel temperatures are acceptable provided dry-spray is avoided by extra thinning and proper spray application (reducing pressure and distance of gun to the substrate). In extreme cases a reduction of the dry film thickness may also be necessary. In warm climates it is recommended to carry out application during night-time.



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### SHELF LIFE

BMA Zinc Silicate Primer should be stored in closed and undamaged containers in a well-ventilated area where the humidity does not exceed 85% and at a maximum temperature of 40°C.

Under these conditions, the shelf life of BMA Zinc Silicate will be 2 years. After this period, the product quality is subjected to re-inspection.

#### **HEALTH & SAFETY**

Before using this product please consult our Safety Data Sheet (SDS) for complete information on Hazards Identification, First-Aid and Fire-Fighting Measures, Accidental Release Measures, Handling and Storage, Exposure Control and Personal Protection, Stability and Reactivity, Toxicological Information, and Transport Information.

## **QUALITY ASSURANCE**

BMA Commercial & Industrial s.a.l is a holder of the ISO 9001:2015 and ISO 45001:2018 certificates, which guarantees that all operations are conducted in compliance with International Standards.

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