MC-EP-7 Epoxy zinc primer

Product description

MC-EP-7 is a zinc primer based on epoxy resin, polyamide hardener, zinc powder and anti -corrosive pigments. With excellent adhesion on metal surface. Can be used as primer for a variety of anti-corrosive occasions, also can be used for pretreatment of steel plates.

Recommended use

Suitable for sip, offshore steel structure in moderately corrosive environment. Can be used as primer for most of the anticorrosive systems.

Recommended film thickness and spreading rate

Film thickness，dry(μm)	2 5～100
Film thickness，wet(μm)	38.5～153.8
Theoretical spreading rate，m^2/l	26～ 6.5

Basic characteristics

Color	grey
Volume Solids，%	65± 2
Flash Point，℃	23 ± 2
Density (mix), g/ml	1.95±0.05
VOC，g/l	390 ± 10
Solvent resistance	Good
Corrosion resistance	Very good

Surface preparation

Bare steel:

Roughness: using abrasives suitable to achieve medium grade (ISO 8503-2).

Cleanliness: blast cleaning to min. Sa 2 ½ (ISO 8501-1)

Condition during application

The temperature of the substrate should be at least 3℃ above the dew point of the air, temperature and relative humidity measured in the vicinity of the substrate. In confined spaces provide adequate ventilation during application and drying.

Application methods

Spray: airless spray or air spray

Brush: recommended for precoating or small area coating only, multiple coats may be required to achieve the specified film thickness.

Application data

Mixing	agitate component A and component B respectively, and then mixed thoroughly
Mixing ratio（weight）	A:B=10:1
Pot life（23℃）	8 hours (Reduced at higher temperature)
Thinner/Cleaner	MC-EX-1

Recommended airless spray parameters

Usage of thinner	0～10%（weight）
Pressure at nozzle	15～22 MPa（about 150～220 kg/cm^2）.
Nozzle tip	0.38～0.53 mm.
Spray angle	40～80°
Filter	Check to ensure that filters are clean.

Drying time

Drying times are generally related to air circulation, temperature, film thickness and number of coats, and will be affected correspondingly. The figures given in the table are typical with:

Good ventilation (Outdoor exposure or free circulation of air)

Typical film thickness

One coat on top of inert substrate

Substrate temperature, °C	5	10	23	40
Surface dry, min	120	60	30	20
Through dry, h	30	18	12	8
Cured, d	10	8	5	3
Dry to recoat, minimum, h	30	18	12	8

The given data must be considered as guidelines only. The actual drying time/ recoat interval may be shorter or longer, depending on film thickness, ventilation, humidity, underlying paint system, requirement for early handling and mechanical strength etc. .

Typical paint system

Subsequent coat: MIO epoxy coating, Acrylic polyurethane topcoat, Chlorinated rubber paint, but not suitable with alkyd paint and polyester paint.

Epoxy zinc primer		60 μm
MIO epoxy coating		200 μm
Acrylic polyurethane topcoat	μm	2×40

Other systems may be formulated, depending on specific condition.

Note

Depending on purpose and area of use, the film thickness may be adjusted in a specified range. This will alter spreading rate and usage of thinner. In order to obtain good corrosion resistance, film thickness will be no less than 30μm.

This primer can not be used on insulation coating or underwater.

Storage

Storage conditions are to keep the containers in a cool, dry, well ventilated space and away from source of heat and ignition.

Containers must be kept tightly closed.

Handling

Handle with care.

Packing size

Component A in an 18 litre container and component B in a 4 litre container, or negotiation.

Health and safety

Before and during use of this product, please observe the precautionary notices displayed on the container. Be careful to avoid inhalation and skin contact of paint. Spillage of paint on the skin should immediately be removed with a suitable cleanser, soap and water. Avoid using organic solvent. Eyes should be well flushed with water and then seek medical attention immediately. The product should be used under well-ventilated condition. If using in stagnant condition and narrow place, forced ventilation must be provided, and applicators should take corresponding measures to strengthen personnel protection.