
MC-WEP-1 Waterborne epoxy antirust paint

Product description

MC-WEP-1 is a two-component waterborne epoxy antirust paint. The product cures a tough, hard and anticorrosive film with good resistance to abrasion and ease of application.

Recommended use

Suitable for use in the steel structure with mild to moderately corrosive environment. Not recommended for use in which coating with insulation is required, also not recommended for use underwater.

Recommended film thickness and spreading rate

Film thickness, dry(μm)	30~75
Film thickness, wet(μm)	50~125
Theoretical spreading rate, m^2/l	20 8

Basic characteristics

Color	Grey, iron red
Volume Solids, %	60 \pm 2
Flash Point, $^{\circ}\text{C}$	-
Density (mix), g/ml	1.3 \pm 0.05
VOC, g/l	70 \pm 10
Abrasion resistance	Good
Solvent resistance	Good

Surface preparation

Bare steel:

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

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

For local maintenance, the surface should be polished to St3

All the cutting, welding and grinding process should be completed before the surface preparation.

The paint can be used on other substrates. Please contact our company for more information.

Condition during application

This product only can be used above 10 $^{\circ}\text{C}$ to make sure that application and curing can proceed. The temperature of the substrate should be at least 3 $^{\circ}\text{C}$ above the dew point of the air, temperature and relative humidity measured in the vicinity of the substrate. The relative humidity is preferably less than 60% during drying. The surface can be froze when the temperature is below 0 $^{\circ}\text{C}$. This can affect the film adhesion. Good ventilation is usually required in confined areas to ensure proper drying.

Application methods

Spray: use 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=5:1
Pot life (23°C)	2 hours (Changed by temperature)
Thinner/Cleaner	Clean water
Recommended airless spray parameters	
Usage of thinner	0~10% (weight)
Pressure at nozzle	15 MPa (about 150 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	10	23	40
Surface dry, h	3	2	1
Through dry, h	36	24	16
Cured, d	10	7	4
Dry to recoat, minimum, h	36	24	16

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

Inorganic zinc silicate shop primer		20 μm
Waterborne epoxy anti-rust paint	μm	2×50
Waterborne acrylic paint		50 μm

Other systems may be formulated, depending on specific condition.

Note

The application must be particularly careful to avoid excessive thick film per coat.

Avoid application at low temperature at night, especially avoid application outdoors when water condensation or rain season appear.

If painted components is immediately exposed to humid environment below 15°C, the following rules are extremely important:

Avoid excessive film thickness, the dry time of the final coat must be at least 6 hours (20°C,40-60% RH).

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 an 18 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.

For detailed information on the health and safety and precautions for use of this product, please consult our company.
