
MC-GX-2 Water-borne intumescent fire-retardant and thermal insulation paint

Product description

MC-GX-2 is based on water-borne latex material, fire retardant additives, pigments and fillers. The products exhibits low volume weight and coefficient of thermal conductivity, excellent fire resistance and thermal insulation, as well as resistance to water, heat and humidity. Show high adhesion with substrate.

Recommended use

Suitable for use in steel structure of industrial and civil buildings widely. The duration of fire resistance is one hour longer than the national standard (GB1442-90).

Recommended film thickness and spreading rate

Film thickness, dry(μm)	100	~800
Film thickness, wet(μm)	200	~1600
Theoretical spreading rate, m^2/l	5	0.63

Basic characteristics

Color	Pink / other
Volume Solids, %	50 ± 2
Flash Point, $^{\circ}\text{C}$	—
Density (mix), g/ml	1.85 ± 0.05
VOC, g/l	—
Gloss	Matt

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)

Coated surfaces:

Clean, dry and undamaged compatible primer.

Other surfaces:

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

Condition during application

The temperature of the substrate should be at least 3°C above the dew point of the air, temperature and relative humidity measured in the vicinity of the substrate. 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 ratio (weight)	one-component
Thinner/Cleaner	Clean water

Recommended airless spray parameters	
Usage of thinner	0~15% (weight)
Pressure at nozzle	15~22 MPa (about 150~220 kg/cm ²).
Nozzle tip	0.58~0.69mm.

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	5	10	23
40			
Surface dry, h	6	4	2
1			
Through dry, h	40	32	24
10			

Clean the surface thoroughly by high pressure fresh water when the preceding coating is exposed to pollution environment before recoating

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

Coating thickness and the amount of consumption vary with fire-resistant time, as follows: (the following data for reference)

Film thickness, mm	3	5	7
Brushing amount, m ² /l	0.17	0.1	0.07
Fire-resistant time, h	0.5	1.0	1.5

Other systems may be formulated, depending on specific condition.

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

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.