
MC-HT-1 High temperature resistant paint

Product description

MC-HT-1 is a high temperature resistant paint based on silicone resin, heat resistant pigments and fillers.

Recommended use

Suitable for protection of aluminum, carbon steel and high temperature alloy steel etc. The product provides maximum long-term service temperature of 550°C and some degree of anticorrosive performance.

Recommended film thickness and spreading rate

Film thickness, dry(μm)	20~80
Film thickness, wet(μm)	33.3~133.3
Theoretical spreading rate, m ² /l	30 7.5

Basic characteristics

Color	black/silver gray/colors
Volume Solids, %	60± 2
Flash Point, °C	32± 2
Density (mix), g/ml	1.3±0.05
VOC, g/l	410 ± 10
Gloss	matt
Flexibility	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).

Other surfaces:

The paint 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 agitate component A and component B respectively, and then mixed thoroughly

Mixing ratio (weight) A:B=20:0.4

Pot life (23°C) 6 hours (Reduced at higher temperature)

Thinner/Cleaner MC-EX-1

Recommended airless spray parameters

Usage of thinner 0~15% (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	5	10	23	
40				
Surface dry, h	6	4	3	
1				
Through dry, h	48	36	24	12
Dry to recoat, minimum, h	48	36	24	
12				

If exceed the maximum coating interval, sufficiently roughened is necessary to ensure intercoat adhesion. Exposure to polluted environment, thoroughly clean the surface by high pressure fresh water prior to 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

Inorganic zinc-rich primer 60 μm

High temperature resistant topcoat μm 2×40

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

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.