
MC-CTE-1 Epoxy coal-tar paint

Product description

MC-CTE-1 is a two-component paint with epoxy resin and coal tar as binder. The cured film provides excellent anticorrosive performance with good resistance to sea water, crude oil, chemicals and cathodic disbonding.

Recommended use

Can be used on steel or concrete with a variety of intermediate coat and topcoat suitable for hull bottom, steel piles, offshore drilling platform and pipeline in moderately to severely corrosive environments.

Recommended film thickness and spreading rate

Film thickness, dry(μm)	75~300
Film thickness, wet(μm)	104.2~416.7
Theoretical spreading rate, m^2/l	9.6 2.4

Basic characteristics

Color	Brown/black
Volume Solids, %	72 \pm 2
Flash Point, $^{\circ}\text{C}$	22 \pm 2
Density (mix), g/ml	1.3 \pm 0.05
VOC, g/l	430 \pm 10
Water resistance	Excellent
Chemical resistance	Excellent

Surface preparation

New steel:

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

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

Coated with shop primer:

Clean to St3 grade using sweep sandblasting or elastic grinding wheel.

Welding, flame cutting or flame adjusting burning parts:

Remove welding spatter, polish the surface smooth and clean to St3 using elastic grinding wheel.

Coated surfaces:

Clean, dry and undamaged compatible primer.

Condition during application

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. Good ventilation is usually required in confined areas to ensure proper drying.

Application methods

Spray: airless spray or air spray

Brush, roller coating: 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=7:4, uniform mixing

Pot life (23°C)	8 hours (Reduced at higher temperature)
Thinner/Cleaner	MC-EX-1
Recommended airless spray parameters	
Usage of thinner	0~5% (weight)
Pressure at nozzle	20~30 MPa (about 200~300 kg/cm ²)
Nozzle tip	0.46~0.58 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	8	4	2
Through dry, h	48	24	16
Cured, d	12	7	5
Dry to recoat, minimum, h	36	24	12
Dry to recoat, maximum*			

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

epoxy coal-tar paint (2~4) × 150 μm

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 a 18 liter container and component B in a 10 liter 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.