
MC-AF-1 Tin-free self-polishing antifouling paint

Product description

MC-AF-1 is composed of resin, cuprous oxide, and organic biological active material. It can prevent the adhesion of halo bios. The smooth surface due to self-polishing helps to reduce the sailing resistance.

Recommended use

Suitable for long-term anti-fouling of vessels of global navigation and short-term berthing.

Recommended film thickness and spreading rate

Film thickness, dry(μm)	70~150
Film thickness, wet(μm)	112.9~241.9
Theoretical spreading rate, m^2/l	8.8 4.1

Basic characteristics

Color	Brown/red
Volume Solids, %	62 ± 2
Flash Point, $^{\circ}\text{C}$	29 ± 2
Density (mix), g/ml	1.8 ± 0.05
VOC, g/l	425 ± 10
Gloss	Flat
Flexibility	Good

Surface preparation

Clean, dry and undamaged compatible primer.

For aged self-polishing antifouling paint surface, remove grease with suitable cleaner, followed by high pressure fresh water rinsing thoroughly. For surface with contamination, remove the pollutants and loose paint completely. Anticorrosive primer and antifouling paint with good adhesion can be retained.

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: 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

Thinner/Cleaner	MC-EX-1
Recommended airless spray parameters	
Usage of thinner	0~10% (weight)
Pressure at nozzle	20~30 MPa (about 200~300 kg/cm^2) .
Nozzle tip	0.53~0.68 mm.
Spray angle	40~80 $^{\circ}$
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	0	10	23	
40				
Surface dry, h	12	6	3	
1				
Through dry, h	24	16	12	8
Cured, d	7	5	3	2
Dry to recoat				
Substrate temperature, °C	0	10	23	
40				
Dry to recoat, minimum, h	24	16	12	
8				

Typical paint system

Primer: chlorinated rubber paint, epoxy paint, epoxy coal-tar paint.

Tie coat: chlorinated rubber paint

Other systems may be formulated, depending on specific condition.

Note

This product should be thoroughly mixed before use due to heavy pigment in the paint.

According to different requirement, various thicknesses may be specified. This will alter the spreading rate, antifouling period and drying time. If multiple coats is used, the drying time and minimum recoat interval will be affected by the coat number and thickness of every coat. If the antifouling paint is used on epoxy coal-tar coating, it is not sprayed until the epoxy coal-tar coating reach dry to touch. If the topcoat is exposed to pollutive environment for long period, before coating, the surface should be washed with high pressure water and be in dry 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.

The paint can be stored for at least 12 months at temperature lower than 25°C. If stored longer than 12 months, the paint should be examined to be qualified before use.

Handling

Handle with care.

Packing size

In an 18 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.

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