CX4 COROCOAT

ANTI FOULING, HIGH-TEMP, WATER-BASED ZINC COATING

USES

Anti-fouling coating for ship hulls.

Cold galvanizing for offshore structures, marine facilities and metal structures in the marine environment.

FEATURES

1. Safe, water-based 2-part system; non-toxic and non-hazardous
2. Non-flammable, long-term protection; inorganic coating system that gives superior protection as compared with latex-based paint
3. Excellent resistance to weathering and ultra-violent exposure. No weather-related failure, chalking or cracking.
4. Scratches or damage to the coating does not affect the protective function.
5. Working temperature up to **1,600°C**.
6. Environmentally-safe chemical

ANTI-CORROSION MECHANISM

1. Waterproofing property: Insoluble in water in 2 to 4 hours at 20˚C,
2. Full Curing: 2 days at 20°C, 2 weeks at 10˚C
3. During the first 3 to 6 months after coating, it acts as electro-chemical cathode protection, and converts itself to zinc-ceramic in the process, giving long-term anti-corrosive protection.
4. The final coating is non-toxic and environmentally friendly.

EQUIPMENT

It is recommended to use special airless spray equipment for zinc paints.

1. Type NP 2554 Z (ASAHI SUNAC)
2. Air pressure 2.5 - 5 bar
3. Nozzle pressure 1.5 - 2.5 bar
4. Nozzle orifice 1.8 - 2.2 mm.

   Conventional airless or air spray equipment, brush and roller may also be used.
5. It is recommended to use a fine nozzle for spraying on complicated structures, while a bigger nozzle for regular surfaces.
6. Spraying angle and distance from the spray gun to the surface may be determined by considering velocity and direction of wind.
7. Epoxy-coated agitator should be attached to ensure homogenous mixing and application.
8. The set of equipment should be cleaned thoroughly with a suitable cleaner used for organic paints, followed by rinsing several times with water to ensure it is free of organic substance.

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APPLICATION METHOD

1. Thorough blast cleaning to Sa 2 rough standard for better grip.
2. Always mix powder into the liquid. Stir until smooth and free of lumps.

   Sieve with 60 to 80 microns mesh if needed.

Pot life:	2 - 3 hours
Working Temperature:	20°C minimum
Relative Humidity:	50% minimum for 36 hours.

3. Use plastic pail for mixing. Maintain agitation of mixture until entire batch is used up.
4. Right after application, the coating should be wet and smooth.
5. Add water (thinner) when the surface temperature is higher than 40°C and relative humidity (RH) is lower than 35%.
6. When the surface cannot be covered evenly through spray application, paintwork can be carried out with a brush instead.
7. Minor cases of peeling or mud cracking may occur on certain areas due to the presence of oily substances or where coating is too thick. These areas should be repainted by removing the defective film followed by re-application.

CONTROL OF FILM THICKNESS

1. Under optimum conditions, each coat of paint yields a film thickness 0.08 - 0.15 mm.
2. Recommended film thickness: 1 to 2 coats of 70 to 90 microns dry film thickness.

   Can be painted with finishing topcoat if needed.
3. Coverage: 0.2 kg / m^2 /coat. Or 5 m^2/ kg
4. Variations in film thickness occurs in special cases like welding seams, corners, ribs, etc.

DRYING AND CURING TIMES

1. Under standard conditions, 12 hours is necessary for the first coat to become insoluble in water, while 24 hours is needed for the fourth or fifth coat. Therefore, the first or second coat will be resistant to rainfall or high humidity 12 hours after application.
2. Paint schedule should be mapped out on this basis to achieve the most satisfactory film.
3. Under standard conditions, the paint coating will become resistant to both fresh and seawater 24 hours after painting.

CLEANING AND MAINTENANCE

1. When painting is completed, equipment should be cleaned thoroughly with water. Extra care should be taken while cleaning the spray gun to prevent clogging of the nozzle.
2. Immerse the spray gun in clean water during the intervals between spraying to prevent clogging of the nozzle. Rinsing water should be replaced periodically.

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SAFETY PRECAUTIONS

1. **Fire Risk**
   When mixing is carried out, hydrogen gas is generated. In an enclosed area, ensure that there is no naked flame or sparks to avoid flash fires.
2. Always wear air masks, safety goggles, working clothes and gloves.
3. When there is contact with naked skin or the eyes, wash with a large amount of water, or seek medical advice in severe cases.
4. In confined spaces, ensure a good supply of fresh air with Relative Humidity between 35 - 75%.
5. Ventilate during the coating process and 2 hours after coating.
6. Ensure sufficient air supply in deep wells.

OPTIMAL WEATHER CONDITIONS FOR APPLICATION

1. It is recommended to carry out painting in fair weather.
2. Paint work should not be carried out on damp or rainy days.
3. Air temperature 20 - 40°C
4. Relative Humidity 35 - 75 %
5. Surface temperature 20°C to approximately 40°C

DURING STEEL WORK

1. All welds must be free of cracks or pinholes, and welding splatters should be removed.
2. Uneven surfaces should be grounded smooth to ensure uniform thickness of film on entire surface.
3. During abrasive blast cleaning, use silica sand, steel grit, aluminum or other similar sharp-edged abrasives, free from foreign matter and soft particles.\

FOR SHOP-PRIMED SURFACES

1. Previously coated primer should be removed with abrasive grits, ignoring coatings that are adhering strongly.
2. Remove dirt, dust and other accumulated impurities.
3. Welds, rusty spots, burnt areas and surfaces coated with other types of shop primers must be cleaned thoroughly with abrasive grit blasting.

TECHNICAL DATA

1.	Colours	Dark Grey
2.	Toxicity	Free from lead, mercury, tin, copper
3.	Flashing point	Nil
4.	Thinner, Cleaner	Water
5.	Shelf Life	24 months

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STORAGE

1. Store under normal temperature and humidity in sealed condition.
2. No special precautions are required against fire.
3. Pigments should be stored in a dry place.
4. If there is long-term exposure to frost during storage, the liquid solution may be separated into 2 phases. The liquid solution should be stirred before use to ensure homogeneity.

PACKING

Liquid		Zinc Powder Pigment		
1-kg carboy	**+**	**3-kg plastic tub**	**=**	**4-kg set**
5-kg carboy	**+**	**15-kg plastic pail**	**=**	**20-kg set**

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