

PRODUCT DATA SHEET

Metal Roof Waterproof Coating

INTRODUCTION

Metal Roof Waterproof Coating is made from silicone-modified pure acrylic emulsion, fumed silica, titanium dioxide filler, and microporous insulation technology. This coating not only provides waterproofing, anti-corrosion, and anti-rust functions but also quickly dissipates heat from the substrate, reducing indoor temperatures. It can be exposed to sunlight for extended periods, with excellent weather resistance and UV resistance.

APPLICATION

This product can be used for waterproofing metal roofs of various buildings, such as industrial plants, warehouses, airports, stations, and other large public facilities with metal roofs, color steel tiles, containers, copper doors and windows, workshops, construction fences, carriages, as well as metal roofs of high-rise buildings and villas, concrete surfaces, and irregular surfaces. It effectively solves problems like water leakage and rust on metal roofs, provides insulation and heat resistance, and enhances the lifespan and safety of buildings. It has strong adhesion to metal surfaces but can also be used on general concrete surfaces.

Note:

- 1.Application methods: Applying with a sprayer, roller, brush, or scraper.
- 2.This product can also be diluted with water for use.
- 3.This product can be used with fiber mesh.

ADVANTAGES

- Strong adhesion to metal surfaces: Excellent adhesion to metal and various panels, suitable for a wide range of substrate surfaces.
- Excellent insulation effect: High reflectivity, effectively reducing roof temperature.
- Powerful waterproof performance: Forms a dense surface membrane with strong waterproof properties.
- UV resistance: This product can withstand prolonged sun exposure in outdoor environments.

- High weather resistance: Resistant to high temperatures and acid rain, extending the roof's lifespan by over 10 years.
- Eco-friendly: This product is water-based, using water as a solvent with low VOC content, protecting the environment and human health.
- Safety: Safe construction, with no risk of fire.

PACKAGING & COVERAGE

Specification:	18kg/pail or 50kg/pail
Appearance:	Single component, viscous emulsion, color can be customized.
Coverage:	It is recommended to apply two coats, with each pail covering 13~15m ² .
Warranty period:	Normal Quality: 6~8 years. Excellent Quality: more than 10 years.
Shelf Life:	1 Year

CONSTRUCTION STEPS

1. Substrate Cleaning

Before construction, thoroughly clean the metal surfaces. If there are rust spots on the metal roofs, remove the rust and apply anti-rust paint.

2. Waterproofing Reinforcement in Key Areas

If there are leaks, perform waterproofing treatment first (apply high polymer waterproof coating with reinforcement fabric, using a fabric and two coats).

3. Coating Application

Before use, stir the coating thoroughly. Application methods can include spraying, brushing, or rolling. Apply 2~3 even coats, allowing a gap of 1~3 hours between coats. Proceed to the next coat when the previous one is dry to the touch and does not stick to hands or feet. When spraying, work from the inside to the outside, starting with vertical surfaces before moving to horizontal surfaces. Ensure that the coating is applied evenly without sagging or dripping.

Note:

1. Do not apply during rainy conditions. The product must

PRODUCT DATA SHEET

not come into contact with water before it is completely dry, and rain should be avoided within 24 hours after application.

2. It is recommended to apply the product at temperatures between 5°C and 35°C. Within this temperature range, the material can form a proper film, ensuring optimal adhesion, flexibility, and waterproofing performance.

HANDLING & HEALTH

1. Please wear rubber or plastic gloves to avoid contact with skin.
2. Product is for professional use only.

3. If the product comes into contact with skin during application, it can be removed by rinsing the affected area with clean water.

STORAGE & SAFETY

1. This product is eco-friendly and non flammable
2. This product must be stored dry, protected from sun and rain.
3. This product should not be stored at temperatures below 5°C. As a water-based waterproof coating, it may freeze at low temperatures, which can compromise product quality.

TECHNICAL DATA

No.	Test Item	Standard Requirements	Test Results	Individual Results	
1	Tensile Strength, MPa	≥1.0	1.10	Pass	
2	Elongation at Break, %	≥200	280	Pass	
3	Low-Temperature Flexibility (around φ10mm rod)	No Cracking at -10°C	No Cracking	Pass	
4	Water Resistance (0.3 MPa 0.5a)	Impermeable	Impermeable	Pass	
5	Solid Content, %	≥65	70	Pass	
6	Drying Time	Surface Drying	≤4	1.5	Pass
		Thorough Drying	≤8	3.5	Pass
7	Water Penetration Resistance , MPa	≥ - 0.6	- 0.4	Pass	
8	Tensile Strength Retention Rate after Aging Treatment, %	Heat Treatment	≥80	98.2	Pass
		UV Treatment	≥30	86.9	Pass
		Alkaline Treatment	≥60	85.9	Pass
		Acid Treatment	≥40	87.3	Pass
9	Elongation at Break after Aging Treatment, %	Heat Treatment	≥200	211	Pass
		UV Treatment	≥200	405	Pass
		Alkaline Treatment	≥200	335	Pass
		Acid Treatment	≥200	490	Pass
10	Heat Shrinkage Rate, %	≤1.0	0.26	Pass	

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