Product Data Sheet

Electricity-free Cooling Coating Architecture 01 (Art-01)

Product Description	This product is formulated with water-based resin, cooling base slurry with special surface treatment, water-based color paste, film-forming aids, leveling agents, defoamers and other additives, as well as water. At room temperature, it can form a coating film with strong adhesion, high hardness, excellent chemical resistance and good weather resistance.
Product Features	1. Environment-friendly, low-toxicity, odorless, with low VOC content, and free of organic solvents such as benzene, toluene, xylene and ethylene glycol ethers. 2. It can be directly diluted with water, ensuring safety and completely eliminating the potential safety hazards caused by organic solvents. 3. Cures at room temperature, with a low film-forming temperature. 4. Convenient for construction, and tools and contaminants can be cleaned with water. 5. Effectively reflects sunlight and infrared radiation, enabling the coating to achieve an electricity-free cooling effect.
Product Usage	It is used in combination with Electricity-free Cooling interfacial agent, Electricity-free Cooling primer, Electricity-free Cooling topcoat and Electricity-free Cooling protective layer as a Electricity-free Cooling coating for various external surfaces exposed to sunlight, such as building exteriors, roofs, and floors.

Properties		**Reference Standards/Method**	**Result**
Condition in Container		ASTM D344	After stirring, it presents a homogeneous state without any hard lumps.
Appearance of Coating Film		ISO 13803:2014	The surface is smooth, with no evident shrinkage cavities, color floating, blooming, wrinkling, pinholes, cracks, etc.
Drying Time	Surface Drying (h)	ASTM D1604	0.5
	Hard Drying (h)	ASTM D1604	1
Abrasion Resistance (750 g/500r, g)		ISO 5470-1	0.048
Tensile Bond Strength (MPa)	Standard Conditions	ASTM C297	2.7
	Water Immersion	ASTM C297	2.1
Impact Resistance	Under Light Load (500 g Steel Ball)	ASTM D2794	No cracks or peeling
Skid resistance (dry friction coefficient)		ASTM C1028	0.63
Chemical resistance	Alkali resistance (20%NaOH, 72 h)	ASTM D543-06	No foaming, no peeling, no discoloration
	Acid resistance (10%H2SO4,48 h)		No foaming, no peeling, no discoloration
	Oil resistance (120# Solvent oil, 72 h)		No foaming, no peeling, no discoloration
Resistance to artificial climate aging, 1000 h		ASTM G154	No blistering, no peeling, no cracking, chalking level 0, color change level 0.

Construction Description	
Mix ratio (weight ratio)	Paint:Water =1:0.1 (Adjust according to the viscosity)
Recoating interval time (h)	≥ 1, ≤ 24
Application coats are recommended	Totally 6 coats
Construction environment conditions	Temperature 15~35℃, relative humidity 35~80%, spray air pressure 0.8-1.2 MPa
Construction tools	Spray, brush, or roll
Construction process	1. Substrate treatment: before the construction of electricity-free cooling primer,

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	use appropriate oil removal cleaner to remove soluble salts, grease and other pollutants on the surface, the surface temperature of the substrate must be at least 3℃ above the dew point; 2. According to the construction situation and the current coating state, add an appropriate amount of water to adjust to the appropriate viscosity for construction.
Precautions	1. The construction should avoid direct contact with the skin, eyes and other sensitive parts. In case of contact with skin and eyes, immediately rinse with a lot of water and go to the hospital; 2. Construction tools can be cleaned with clean water or alcohol; 3. If the product is overturned or leaking, cover it with sand or soil, then sweep it up. Do not pour the product into sewers or drainage pipes to avoid environmental pollution; 4. The used packaging shall be submitted to a company with solid waste treatment qualification for treatment according to the relevant local laws and regulations.
Other instructions	
Packing specifications	29kg/set
Storage and transportation	1. This product is not a dangerous product; 2. This product is packed in plastic buckets, well sealed, stored in a dry, ventilated, cool place,the original packaging can be stored in a ventilated warehouse at 15–30℃for 24 months; 3. If the storage period is too long, the product must be fully stirred before use, without affecting the performance.

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