



# PasteCool® Coolguard Pro Inorganic Radiative Cooling Primer

## Product Overview

This product is an inorganic silicate primer specifically designed for use with an inorganic radiative cooling coating that boasts an extremely high infrared reflectivity. It is capable of reflecting the longer wavelength near-infrared rays that penetrate the topcoat, enabling a thinner composite coating system to reflect the entire spectrum of sunlight, including ultraviolet, visible, and infrared light. When used in conjunction with the radiative cooling topcoat, the resulting coating exhibits an exceptionally high solar reflectance and simultaneously radiates heat into outer space with high emissivity. Applied together with the radiative cooling topcoat on building roofs, walls, or outdoor equipment surfaces, it can maintain surface temperatures 3~10 °C below ambient even during hot summer months, thereby reducing air conditioning energy consumption, alleviating energy shortages, cutting carbon emissions, and promoting sustainable development.

## Product Features

1. High Near-Infrared Reflectance and Radiative Cooling Capability
2. Excellent Penetration and Adhesion: Strong adhesion to various substrates such as concrete and metal.
3. Superior Alkali Resistance and Weather Resistance
4. High Coverage and Excellent Water Resistance
5. Eco-friendly: Water-based, free of biocides.

## **Scope of Application**

When used in combination with PasteCool® inorganic silicate radiative cooling topcoat and water-based fluorosilicone waterproofing agent, it is widely applicable in energy-saving applications such as building energy efficiency, communication data centers, grain storage, petrochemical storage tanks, power equipment, cold chain logistics, and new energy sectors where cooling and energy efficiency are required.

## **Application Guidelines**

1. Surface Preparation: Remove dust, oil, and loose particles from the surface. Rinse with water and allow to dry naturally. Repair cracks and holes with cement mortar and sand smooth.
2. Application Methods: Rolling, brushing, or airless spraying. Stir the paint thoroughly before application and apply immediately after mixing.
3. Coating System and Number of Coats:

Coating Step	Coating Name	Number of Coats	Paint Consumption (m <sup>2</sup> /KG per coat)
Primer	PasteCool® Coolguard Inorganic Radiative Cooling Primer	2	6-8
Topcoat	PasteCool® Coolcoat Inorganic Radiative Cooling Topcoat	1	5-7
Topcoat Varnish	FSK900 Water-based Fluorosilicone Waterproofing Agent	1	16~20

4. Cleaning: Clean all tools with water promptly during pauses or after application.
5. Application Conditions: Avoid application in humid or cold weather (temperature below 5 °C or above 35 °C, relative humidity above 85%), as it may affect the coating performance. Ensure proper drying time between coats. Applying the next coat too soon may cause slow drying, wrinkling, bubbling, and poor water resistance and adhesion.

## **Precautions**

Wear protective gloves, masks, and goggles during application. Avoid skin and eye contact. In case of contact, rinse immediately with plenty of water and seek medical attention if necessary.

## **Packaging and Storage**

Available in 10 L and 18 L containers. Store in a cool, dry, and well-ventilated place at 5~35 °C, away from direct sunlight and freezing temperatures. Seal tightly to prevent moisture loss. Shelf life: 12 months from the production date.