

ReHarmony E-COATING - Metal ThermalShield Ultra **環融極致型防護降溫金屬漆**

Introduction

ReHarmony E-COATING - Metal ThermalShield Ultra is an eco-friendly coating that uses water as its dispersion medium. It is non-toxic, odorless, and non-polluting, ensuring no harm to human health while aligning with green environmental principles. The product is non-flammable and non-explosive, making it safe to transport and store. By combining physical shielding and chemical corrosion inhibition, it provides excellent anti-rust protection for metal substrates. With strong environmental performance, reliable anti-rust capabilities, good decorative properties, and superior physical and chemical resistance, it is an ideal solution for long-lasting surface protection.

Application	Warehouse logistics equipment, power equipment, structural steel for construction, industrial equipment protection, rail transport equipment.
Finish	Gloss
Feature	✓ Dual Anti-Rust Mechanism ✓ Eco-friendly and Safe ✓ Great Cooling Performance ✓ Strong Physical and Chemical Resistance
Color	White
Composition	Water-based acrylic resin paint, pigments, additives, water
Application Method	Brush / roller / spray
Coverage	8-10 m ² / kg / coat
Dilution	10-15% water addition
Dry Film Thickness	30-80 μm
Drying Time (25°C, 50% RH)	Room temperature curing for 24-48 hours
Recoat Time (25°C, 50% RH)	12-18 hours
Tool Clean	Clean all brushes, rollers, and tools immediately after use with water.
Solid Content	40-60%
Packaging Composition	20 kg
Shelf Life	12-18 months
Recommended Coating System	ReHarmony Base and Primer Series, ReHarmony Functional Topcoat Series.
Surface Preparation	Oil and Grease Removal: ▲ For oil, grease, and dirt on metal surfaces, wipe with organic solvents (e.g., mineral spirits, trichloroethylene) or clean using an alkaline degreaser. ▲ Ultrasonic cleaning equipment may also be used to ensure complete oil removal.

Rust Removal:

- ▲ For surfaces with slight rust, manual or power tool rust removal can be used, such as wire brushes or sandpaper to grind off the rust.
- ▲ For surfaces with severe rust, sandblasting is recommended to thoroughly remove rust layers, oxide scale, and other impurities from the metal surface, achieving a certain level of roughness to enhance paint adhesion.
- ▲ After sandblasting, the surface should meet the Sa2.5 grade or higher standard, meaning it should be free of visible oil, grease, dirt, oxide scale, rust, and paint coatings. Any remaining traces should only be slight discoloration in the form of spots or streaks.

Surface Cleaning:

- ▲ Remove dust and debris using clean compressed air, a vacuum, or a solvent-wiped cloth to ensure a contaminant-free surface before painting.

Surface Roughness Treatment:

- ▲ Achieve optimal roughness (typically 30–75 µm) via blasting or shot peening, verified with a roughness tester.

Drying Treatment:

- ▲ Moisture requirement: Surface moisture content must be below 8% to prevent adhesion issues (e.g., blistering, peeling).
- ▲ Drying methods: Air-drying, hot air blowing, or infrared lamps. Drying time varies with ambient temperature, humidity, and treatment method.
- ▲ Chemical-treated surfaces: Rinse with water and dry thoroughly to prevent moisture-induced defects.

Avoiding Secondary Contamination:

- ▲ Protect prepared surfaces from oil/dust exposure. If temporary storage is needed, cover with plastic film.

Usage Recommendation

- ▲ Before use, carefully read the product instructions.
- ▲ After opening the can, stir the paint thoroughly to ensure even consistency before application.
- ▲ If dilution is needed, add only the recommended amount of water—excessive thinning may affect performance.
- ▲ When applying, avoid overloading brushes or rollers to prevent drips and runs.
- ▲ Do not pour diluted paint back into the original container to avoid contaminating unused paint.

- ▲ After use, seal the container tightly and store any remaining paint in a cool, dry place.
- ▲ During wall curing and in humid climates (e.g., damp season, monsoon season, etc.), keep windows closed and use dehumidifiers to maintain dry wall conditions.

Construction Notice

Do not proceed with construction if the substrate temperature or ambient temperature is below 5°C, or if the relative humidity exceeds 85%.

Safety and Environmental Guidelines

- ▲ Keep paint cans tightly sealed and stored out of reach of children.
- ▲ Wear a suitable dust mask when sanding walls to avoid inhaling dust.
- ▲ Ensure proper ventilation during application and drying to maintain adequate airflow.
- ▲ Avoid breathing in paint fumes or spray mist.
- ▲ When spraying in poorly ventilated areas, use approved oxygen supply equipment that meets safety standards.
- ▲ Store the product away from food and beverages to prevent contamination.
- ▲ Wear protective goggles and gloves to shield eyes and skin when handling paint.
- ▲ If paint gets into eyes, rinse immediately with plenty of water and seek medical attention.
- ▲ If paint contacts skin, wash promptly with soap and water or an appropriate cleanser.
- ▲ Handle paint cans carefully—keep them upright to prevent spills.
- ▲ This product is lead- and mercury-free, complying with environmental standards.
- ▲ Do not store in extreme heat or cold; keep in a cool, dry place.
- ▲ If a paint can leaks or tips over, contain the spill with sand or soil and clean up properly.
- ▲ Never pour paint into drains or sewers to prevent environmental contamination.
- ▲ Dispose of paint waste according to local environmental regulations.

Note: ReHarmony Limited endeavors to ensure the accuracy and reliability of the information provided. This information pertains to the product's performance under specific testing conditions. As actual application environments may involve variables beyond our control, ReHarmony Limited shall not be held liable (whether in tort, contract, or otherwise) for any loss or damage arising from inaccuracies, omissions, or any decisions, actions, or inactions taken based on or in reliance upon this document. We reserve the right to modify product specifications at any time without prior notice. Please contact us if there are any inquiries.

ReHarmony Limited

Website: <https://reharmonyhk.com/>

Email: contact@reharmonyhk.com