

Product Technical Specification

Revision Date:

TDS Number:

Product name: Two-Component Moisture and Vapor Barrier Coating for Cold Storage
version: V 1.0

Product profile

The cold storage moisture and vapor barrier coating (two-component) is an environmentally friendly two-component cyan-ester polyurethane material, which is a solvent-free, high-solid-content polyurethane polymer. It cures into a film through the reaction of components A and B, forming a strongly adhesive moisture and vapor barrier layer. After curing, the environmentally friendly two-component cyan-ester polyurethane forms a uniform film, demonstrating excellent compatibility with polyurethane foam, high bonding strength, superior moisture and vapor barrier performance, and outstanding chemical resistance. Prior to application, testing must be conducted to ensure the reliability and suitability of the cold storage moisture and vapor barrier coating (two-component cyan-ester polyurethane) for the specific engineering project.

Performance Characteristics

1. Uniform film formation;
2. High solid content, solvent-free;
3. Good compatibility with polyurethane foam;
4. Excellent chemical resistance;
5. Strong adhesion.

Product Application

It is mainly used for floors, walls, and roofs in cold storage, tunnels, buildings, and other locations.

Physical and Chemical Properties

Item		Technical Specifications
Appearance in container		Uniform after stirring, free of lumps
Film appearance		Uniform film formation, free of bubbles, blisters, etc
Solid Content (%)		≥96
Drying Time	Surface Dry	≤ 12
	Hard Dry	≤ 24
Bond Strength (MPa)		≥1.0
Water Resistance (360h)		No blistering, no peeling, no cracking
Alkali Resistance (20%NaOH, 72h)		No blistering, no peeling, no cracking

The values provided herein are typical test results, and actual data may vary slightly depending on environmental conditions. For our company's products, the listed data shall not be legally binding in any way.

Usage Precautions

Two-Component Environmentally Friendly Polyurethane Moisture-Curing Material for Cold Storage Moisture Barrier Coating. Store in a sealed, dry, and cool place with adequate ventilation. Avoid application during rainy conditions. Use immediately after opening – reseal containers promptly to prevent material curing and waste. "Use-it, Pour-it, Seal-it" principle must be followed to avoid premature hardening. The buyer must conduct pre-construction testing under actual job-site conditions to verify material suitability. Formal construction implies acceptance of product performance. Failure to test voids all liability claims. All responsibilities arising from non-compliance with these instructions shall be borne by the buyer.

Construction Conditions

Humidity Range: Moisture content of concrete substrate shall be less than 10% .

Ventilation Requirements: Adequate ventilation must be maintained at the construction site

Application Method

Apply using a dual-component spray machine

Construction Parameters

Automatic 1:1 Volume Ratio Metering by Mechanical System

Packaging Specifications

Environmentally Friendly Two-Component Polyurethane Moisture Barrier Coating for Cold Storage

Component A: 250 kg/drum, Red steel pail

Component B: 203 kg/drum, Green steel pail

Storage & Transport Conditions / Shelf Life

Storage and Transportation Conditions & Shelf Life: The environmentally friendly two-component polyurethane moisture barrier coating for cold storage must be stored in a tightly sealed condition in a dry, cool, and well-ventilated environment at 15-35 °C,

protected from high temperatures and ignition sources. During transportation, materials should be stacked securely in dry, enclosed vehicles with moisture-proof and freeze-proof measures.

Safety Precautions

Read construction instructions and container warnings thoroughly before use.

Ensure proper ventilation at worksites. Open flames are prohibited.

Wear appropriate PPE (gloves, goggles, coveralls, etc.) during application.

If material contacts skin/eyes, rinse immediately with water for 15+ minutes. Seek medical help if needed.

Cured film is non-toxic under normal conditions.

Refer to the product's MSDS for complete safety, toxicity and first aid information.

Fire and Explosion Hazards

This product is not classified as a flammable liquid, explosive, oxidizer, corrosive, toxic substance or radioactive hazard during storage and transportation, and does not qualify as dangerous goods.

For fire extinguishing, carbon dioxide, foam or dry chemical powder fire extinguishers may be used. If no other extinguishing agents are available, large amounts of water mist can be sprayed. Once the fire is extinguished, spilled material should be cleaned up (refer to Spill Handling Procedure).

Firefighting procedure: Standard protection measures apply.

Spill and Leakage Handling

For minor leaks or spills, the material can be rinsed away with water. In case of major spills, contain and recover the material, then clean the contaminated area with water or detergent. Disposal of waste materials must comply with local government environmental regulations.

For more information, please refer to the safety technical manual for our products or contact our customer service center.

The indicators and data given in this data are based on our existing technical knowledge level and practical experience and are for reference only. The specific guarantee index shall be subject to the provisions of the quality guarantee certificate or the supply contract. Users have the responsibility for testing the products purchased to verify whether they are suitable for the proposed process and use and to achieve the intended purpose. Further application and processing of our products are beyond our control, so our liability for the products provided is limited to the parts delivered by us and used by you. We will not bear the indirect losses caused by the production process of using our company's products as raw materials. Our company technical support and customer service center is willing to provide you with product consulting and application technology services, welcome to contact.

Address: Wanhua Energy Saving Technology (Yantai) Co., LTD., No.56, Taiyuan Road, Economic and Technological Development Zone, Yantai city, Shandong Province.

Telephone: 400-059-1116 Fax: (86)-0535-6809777 Postal Code : 264006
