

## Product Technical Manual

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Product Name: Two-component Manual Spray Polyurea Waterproof Coating

Version: V 3.0

### Product Introduction

The two-component manual spray polyurea waterproof coating is a dual-component, high-solid-content, high-strength elastic coating. It is widely used in industries such as water conservancy, transportation, construction, chemical, power, metallurgy, and marine engineering to effectively address waterproofing, seepage prevention, and corrosion resistance issues for concrete, steel structures, and other substrates, thereby extending their service life.

### Performance Features

1. High Solid Content, Low Viscosity: Easy to handle and apply.
2. Excellent Mechanical Properties and Impact Resistance: Superior strength and durability.
3. Good Chemical Resistance: Resistant to various corrosive environments.
4. Longer Gel Time, Shorter Surface Drying Time: Facilitates multi-layer coating construction.

### Product Applications

Primarily used in workshops, factories, residential buildings, and other facilities. Especially suitable for small-area or confined-space waterproofing, seepage control, and corrosion protection of concrete and steel structures.

## Key Performance Indices

Item	Index	Unit	Testing Method
Appearance	A Component: Light yellow viscous liquid		
	B Component: Adjustable color viscous liquid		
		-	GB/T 16777-2008
Solid Content	100	%	GB/T 16777-2008
Gel Time	30	Min	GB/T 16777-2008
Surface Drying Time	4	h	GB/T 16777-2008
Density	1.15	g/cm <sup>3</sup>	GB/T 16777-2008
Tensile Strength	12	MPa	GB/T 16777-2008
Elongation at Break	200	%	GB/T 16777-2008
Tear Strength	50	N/mm	GB/T 16777-2008
Impact Resistance	1.5	kg m	GB/T 16777-2008
Water Resistance	0.4MPa, 2hno leakage	-	GB/T 16777-2008

## Substrate Preparation

- Concrete: Remove loose surface layers to expose solid substrate. Ensure no moisture or standing water. Use specialized filler for pore sealing and apply primer.
- Steel Substrate: Sandblast to Sa2.5 finish, dust removal, then apply primer.
- Other Substrates: Consult Wanhua Energy Saving Technology (Yantai) Co., Ltd. technical department.

## Construction Conditions

- Temperature: Ambient 5–35°C; substrate temperature  $\geq 3^{\circ}\text{C}$  above dew point.
- Humidity:  $\leq 80\%$  RH; concrete moisture content  $< 6\%$ .
- Ventilation: Avoid strong winds to prevent dust contamination.

## Application Method

Brush coating, roller coating, or spray coating.

## Packing Details

Customizable packaging (volume ratio A:B = 1:1) upon customer request.

## Storage (Usage) Precautions

- Store in cool, ventilated, dry warehouses. Protect from rain, sunlight, fire, and heat sources. Storage temperature: 5–35 °C.
- Shelf life: 12 months from production date (unopened). Extendable if tested compliant post-expiry.
- Non-flammable during transport. Prohibit rain/sun exposure; comply with transportation regulations.
- Smoking and open flames prohibited in storage, transport, and construction areas.

## Expiration Date

12 months from production under proper storage conditions.

**For more information, please refer to the Safety Data Sheet (SDS) of our products or contact our Customer Service Center.**

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The indicators and data provided in this document are based on our current level of technical knowledge and practical experience, and are for reference only. Specific guaranteed indicators are subject to the quality assurance certificate or supply contract. The user is responsible for testing the products purchased from our company to verify their suitability for their intended processes and applications, and to achieve the desired objectives. Further application and processing of our products are beyond our control. Therefore, our liability for the products provided is limited to the portion delivered by us and used by you. We do not assume responsibility for indirect losses incurred during the production process using our products as raw materials. Our technical support and customer service center are available to provide consultation and technical services related to our products. We welcome your inquiries and communication via mail or phone.

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