Polyurea Sealant

INTRODUCTION

Polyurea Sealant is a high-performance polymer joint sealant characterized by excellent waterproofing, high elasticity, chemical resistance, UV resistance, high solid content, and non-shrinkage properties. Its sealing performance surpasses that of conventional sealants. Additionally, the product offers high tensile strength and elongation at break, enabling it to bridge various structural and pavement cracks. It effectively addresses leakage and recurrent leakage issues caused by expansion joints, contraction joints, and connection joints.
It exhibits excellent adhesion to concrete, ceramic tile, and metal surfaces, and can cure even underwater. This product is environmentally friendly.

APPLICATION

1.Civil Engineering: Polyurea sealant is used in water conservancy projects such as dam reinforcement and seepage prevention, enhancing safety.
2.Subway Tunnels: In tunnel construction, polyurea grouting fills gaps between tunnel linings and surrounding rocks, preventing water leakage and ensuring safety.
3.Bridge Repair: Polyurea sealant, with its fast curing and high strength, is ideal for repairing bridge cracks and restoring load-bearing capacity.
4.Industrial and Civil Buildings: Polyurea sealant is used for waterproofing in basements, roofs, and walls, protecting the building structure.

ADVANTAGES

●Exceptional Durability: esistant to water immersion, acid and alkali, and high temperatures.
●Underwater Curing Capability: Can fully cure in water, tightly bonding with concrete even in humid or submerged conditions.
●Strength and Elasticity Balance: Possesses certain strength and elasticity, reinforcing structures while accommodating deformation.
●Dense Structure and Waterproof Performance: Dense internal structure, outstanding waterproof performance.
●Non-Shrinkage After Curing
●Excellent Adhesion to Multiple Substrates: Excellent adhesion to concrete, ceramic tile, and metal surfaces.
●UV Resistance.

PACKAGING & COVERAGE

Specification:	500g / bag
Appearance:	Single component, gray viscous liquid.
Shelf Life:	1 Year

CONSTRUCTION STEPS

1.Joint Preparation

Clean the joint thoroughly to ensure it is free of debris, oil, and moisture. This step is crucial for the adhesion and effectiveness of the polyurea joint sealant.

2.Application Process

Inject the polyurea sealant into the joint, ensuring uniform and dense filling. When pouring the polyurea joint sealant, start from the lowest point and work outward to ensure complete filling of the joint.

3.Curing & Maintenance

After injection, the polyurea material requires a curing period. During this time, avoid disturbing the joint or applying external forces. The curing time typically depends on ambient temperature and humidity—wait until the material has fully cured before proceeding.

Note:

1.Do not apply during rainy conditions. The product must not come into contact with water before it is completely dry, and rain should be avoided within 24 hours after application.
2.It is recommended to apply the product at temperatures between 5° C and 35° C.
3.This product cannot be diluted with water or any solvent.
4.If the bag is opened, it is recommended to use it up within 3~5 days, otherwise, the sealant may react with air and solidify.

HANDLING & HEALTH

1.Please wear rubber or plastic gloves to avoid contact with skin.
2.Product is for professional use only.
3.If the product comes into contact with skin during application, it is recommended to remove it with a dry paper towel or cloth, followed by washing the skin with clean water.

STORAGE & SAFETY

1.This product is eco-friendly & non flammable
2.This product must be stored dry, protected from sun and rain.
3.This product can be stored in low-temperature environments during winter.

TECHNICAL DATA

No.	Item	Data
1	Solid content, %	98
2	Surface dry time, h	3
3	Full Drying time, h	7
4	Tensile strength, MPa	1.2
5	Elongation at break, %	252
6	Low-temperature bendability	-40°C, no cracks
7	Waterproofness	0.3MPa, 120min, waterproof
8	Heating shrinkage rate, %	-1.6
9	Bonding strength, MPa	1.2
10	Density, kg/m³	1.47

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