
Single Part Polyurethane Waterproof Coating

Single Part Polyurethane Waterproof Coating (waterbased PU coating) is a kind of solvent free, one component, and high performance polymer polyurethane based flexible waterproof coating, also called liquid waterproof membrane, which is made by using isocyanate and polyether as the main raw material, mixed with plasticizer, solid agent and other additives and produced through the reaction of high temperature dehydration and polymerization by using advanced production technology. It is widely used in waterproofing constructions of indoor and outdoor waterproofing projects such as rooftop waterproofing, kitchen waterproofing, bathrooms waterproofing, balconies waterproofing, water pools waterproofing, and external walls waterproofing. It can also be used for underground projects such as basements waterproofing, anti seepage of underground garages, waterproofing of air-raid shelters, moisture proof of underground tunnels, and subway culverts.

Product Feature

1. Easy to use. Single component polyurethane coating is ready for use on site which makes the construction simple and fast.
2. Beautiful appearance because the color is adjustable on customers demand.
3. Excellent performance in anti-aging, acid and alkali resistance, fatigue resistance, high and low temperature resistance, anti-corrosion, mildew resistance, good water resistance, high tensile strength and elongation, there is no seam after the film is formed.
4. Good elasticity, strong adhesion to the base layer.

Application Scope

1. Widely used in basement, roofing, kitchens, swimming pools, fountains, landscape pools, subways, tunnels and other projects for civil engineering and industrial construction.
2. Especially good for waterproofing of irregular areas of the projects and vertical or horizontal areas of pipelines, as well as sealing and reinforcing treatment of the openings and joints.

Working Advice

1. Once opened, it must be used up, and in case of the unused material, they must be completely sealed in time.
2. The construction temperature should be above 5°C, and keep working areas ventilated and avoid fire and rain.
3. Steps and stacking debris are not allowed before the waterproofing layer is dry and completely formed to avoid damage to the waterproof layer.

Application Process

1. The substrate treatment: substrate must be firm, smooth, clean, dry and free of sharp projections, all the holes need to be repaired by cement mortar, other defects also should be repaired.

2. The details treatment: inside corner and outside corner should be rounded into a circular arc shape, inside corner which D is $\geq 50\text{mm}$, outside corner which D is $\geq 10\text{mm}$, brushing a layer of paint, and then non-woven reinforcement layer must be added on it and soaked by the coating completely.

3. Apply the coating on the bottom of uneven surface: first pour the liquid into the container, stir with mixer, the stirring time should not be less than 2 minutes, stirring evenly and applying the coating with rubber scraper.

4. Waiting time for application: the coating surface dry time is about 12 hours according to the construction site conditions, interval time based on the coating film is not sticky when touched by hand.

5. Sprinkle sand: As for vertical or large slope waterproof layer, in order to increase the bonding strength between the waterproof layer and cement mortar, in front of the final coating curing, sprinkle clean coarse sand (2-3mm in diameter) in the surface.

Transportation & storage

1. The product should be sealed and stored in a dry, ventilated and cool warehouse.

2. Close to the source of fire is strictly prohibited, and the storage period is one year, is the time passed one year products must be re-checked before using.

3. Protect against sun and rain during transportation, prevent collision, keep packing intact, and prohibit access to fire source.

Performance Test Report

Technical Data Sheet			
S/N	Test Item	Model I	Model II
1	Solid content	$\geq 85\%$	
2	Tensile strength	$\geq 2\text{Mpa}$	$\geq 6\text{Mpa}$
3	Elongation at break	$\geq 500\%$	$\geq 450\%$
4	Low temperature bending	-35°C , No crack	
5	Impermeable	0.3Mpa 120min, Impermeable	
6	Surface dry time	$\leq 12\text{hrs}$	
7	Dry time	$\leq 24\text{hrs}$	
8	Bonding strength	$\geq 1\text{ Mpa}$	

Product link : <https://www.sinomaco.com/?p=1484>