

Liqubain™ 2S

TWO-COMPONENT SPRAYING-APPLIED POLYUREA COATING

Technical Data Sheet



✓ **DESCRIPTION**

Spraying-applied polyurea coating is a flexible polyurea material mainly composed of semi-prepolymer, polyether and chain extender, which moulding through the spot spraying by using professional equipment. The material is solvent-free, non-polluting, easy to construct, dense, seamless. It also has continuous coating, high strength, abrasion resistance as well as excellent physical and chemical properties and stability.

✓ **PRODUCT FEATURES**

- ◆ **Fast curing.** It can be continuously sprayed moulding in any curve, facade and top, not producing sagging as well as keeping dense and seamless.
- ◆ **Construction convenience,** high efficiency, one construction can meet the designed required thickness (hundreds of microns to several centimeters).
- ◆ **100% solid content,** free of VOC and don't contain heavy metals,

environmentally friendly.

- ◆ **Excellent physical and chemical properties,** good adhesion with various of substrates.
- ◆ **Non-slip, impermeable, wear-resistant, corrosion-resistant,** can withstand the erosion of the majority of materials.
- ◆ **The service temperature range is -45 °C ~ 150 °C.**
- ◆ **Mechanical construction,** professional, convenient and controllable.

✓ **APPLICATIONS**

- ◆ **Waterproof for railways, bridges, tunnels, water conservancy dams and other large building projects.**
- ◆ **Waterproof & insulation integration for the old and new roof, ground, underground of military buildings, civil buildings, factories, municipal buildings.**
- ◆ **Waterproof for sports theater, water playground, artificial river/lake, landscape pool and other building structures.**
- ◆ **Waterproof & anti-collision for cars, ships, buoys, indicator lights and other marine equipment.**
- ◆ **Emergency rescue project.**

Liqubain™ 2S

TWO-COMPONENT SPRAYING-APPLIED POLYUREA COATING

Technical Data Sheet

✓ **CONSTRUCTION CONDITION**

◆ **Requirement for the substrate:**

The concrete substrate should be cleaned, repaired and polished to a certain roughness condition. After the enough time of maintenance, the concrete strength must be C25 or above, and moisture content should be less than 6%. When the substrate is ready, the next process should be carried out as soon as possible.

◆ **Environmental temperature and humidity requirements:**

The construction environment temperature is between 5~35°C, and the substrate's temperature is at least 5°C higher than the air temperature. The humidity range should be between 30~80%.

◆ **Ventilation condition:**

Keep ventilation during construction, but don't construct the primer when there is strong wind.

✓ **CONSTRUCTION NOTES**

- ◆ **The component A and B should be stirred evenly before mixing them. It is recommended to stir and spray the material at the same time if it can.**
- ◆ **The mixing ratio of component A and B by volume is A:B=1:1, and don't allowed mixed with any thinner material.**
- ◆ **The construction must be constructed by professional constructors with professional spraying equipment. When spraying the material, the material temperature should be controlled between 50~80°C.**
- ◆ **Normally, the next process should be carried out on 12 hours after previous polyurea. It should apply one layer of polyurethane if the next process is carried out on more than 24 hours after previous polyurea. It also needs apply one layer of**

Performance Parameter

No.	ITEM	INDEX	TEST STANDARD
1	Gel time / s	≤45	GB/T 23446-2009
2	Tack free drying time / s	≤120	
3	Hardness (shore A)	≥90	
4	Tensile strength / MPa	≥16	
5	Elongation at break / %	≥450	
6	Tear strength / N/mm	≥50	
7	Adhesive strength / MPa	≥2.5(Or substrate destroyed)	
8	Wear resistance /[(750g/500r)/mg]	≤30	
9	Impact resistance / (kg·m)	≥1.0	

Liqubain™ 2S

TWO-COMPONENT SPRAYING-APPLIED POLYUREA COATING

Technical Data Sheet

- ◆ polyurethane if there is rain or other bad weather after the previous construction of polyurea.
- ◆ Normally, it should be maintained for more than 7 days after finish the construction, to ensure the best performance.

✓ **PROTECTION AND SECURITY**

- ◆ Protective glasses, work clothes and shoes and hats are required for construction operations. During the construction, it is avoided contact with the skin, and once in contact with the skin, it is recommended to wash with warm water and detergent, if necessary, wash with a plastic brush or a steel ball. If inadvertently splashed into the eyes, need to wipe immediately and rinse with plenty of water, and go to the hospital for help.
- ◆ Normally, the fully dry coating is non-toxic and very safe.

✓ **RECOMMEND USAGE**

The recommended usage is 2.4kg/m² for 1mm thickness polyurea film.

✓ **Packing**

420kg/set=Liqubain-2SA: 200kg/drum;
Liqubain-2SB: 220kg/drum

✓ **STORAGE AND TRANSPORTATION**

- ◆ The coating should be sealed and stored in a dry, cool and well-ventilated condition, avoiding sun and rain and keeping away from fire.
- ◆ In the original packaging state and the prescribed storage conditions, the product has a shelf life of 12 months from the date of production.
- ◆ After open the drum, please use it as soon as possible and seal it again when not in use.
- ◆ The materials is not content solve and can be shipped as normal cargo. It shall be stacked stationary and avoid sun and rain and violent collision when transporting.