# LONGYAN HUISINS CHEMICAL INTERNATIONAL LIMITED

# **TDS (Technical Data Sheet)**

**P/N:** Spray Polyurea Waterproof and Fireproof Coating

Name: Spray Polyurea Waterproof and Fireproof Coating PS500B

Customer: N/A
Customer P/N: N/A
Customer Desc: N/A

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# Version History

Rev.	Status	Revision Description	Author/Approved	Date
Α	Approved	Initial Release	Sha LIU	2016-01-18



**Product Name :** Spray Polyurea Waterproof and Fireproof Coating

Model No: PS500B

### 1. Description

PS500B is a kind of material with high crosslinking density and certain elasticity, excellent wear resistance. This polyurea material is a high performance material with 100% solid content, double group, fast curing and field spraying molding. It is designed for situations where the coating should have excellent fire retardant and flame-resistant properties. The product is mainly composed of an isocyanate semi-prepolymer, Poly-amine resin, and flame retardant, pigment, with high strength, good performance, quick construction of a single molding without seams and other advantages.

### 2.Features

- 1. Fire retardant and flame resistant;
- 2. Without any thinner, environmental protection;
- 3. Elongation, high flexibility, can adapt to the basic cracks and slight deformation;
- 4. Good aging resistance
- 5. Fast curing, can be sprayed on any surface, slope, vertical surface;
- 6. Convenient construction, spraying a film.

### 3.Performance

Volume solid content	100%	
Flame resistant level	Bfl-s2	
Hardness (Shore A)	90-96	
Density	1.02g/cm3	
Elongation	≥330%	
Tensile strength	18MPa	
Impact strength	≥50N/mm	
Water impermeability	0.4MPa,60min	
Wear resistance (750g, 500r)	30mg	
Impact resistance	1.5kg.m	
Electric strength	15kv/mm	
Temperature variation	-35+120°C	
Heating temperature	55-65°C	
Gel time(sec)	7-15	
Tack free time(sec)	30-50	
Water resistance (30d)	no rust no bubbles no peel	
Acid resistance (10%H2SO4 or 10%HCI, 30d)	no rust no bubbles no peel	
Alkali resistance 10%NaOH, 30d	no rust no bubbles no peel	
Salt resistance 60g/L, 30d	no rust no bubbles no peel	
Salt spray resistance (2000h)	no rust no bubbles no peel	
Oil resistance 0# diesel crude oil 30d	no rust no bubbles no peel	
Flash point	200°C	

## 4.Applications

- > Roof
- Industrial facilities
- Manufacturing facilities
- Waste water treatment
- Secondary containment,
- Transportation infrastructure.

## 5.Construction method

- 1) Spray equipment: Spray polyurea materials must be constructed using a dedicated (1:1) two-component spray equipment. Such as Graco's H-XP3 and so on.
- 2) Construction environment requirements: In order to achieve the best coating effect, the site requires ventilation, the ambient temperature should

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not be lower than 10 °C, the substrate temperature is higher than the dew point of 5 °C, and the air humidity is less than 80%.

- 3) Surface treatment of the substrate:
- a. Leveling the cement surface: leveling the substrate with cement mortar.
- b. Grinding of the substrate: the substrate requires fine pitting (to be flat), the surface of the substrate is polished, the scar and the floating slurry are removed, and the position of the negative angle of the yin angle is treated with emphasis, and the yin angle is straight and yang. The corner suggests eight-point angle processing.
- c. Cleaning: The dirt on the surface of the substrate cleaned with oil-free, water-free compressed air will clean up the debris that affects the construction of polyurea.
- 4) Brush primer: brush the EP1304 or HP6303K concrete special primer or Epoxy MasticNTC Aluminium primer for steel, evenly brushed, no leakage coating, no defects.
- 5) Scrape putty: Apply putty to seal the trachoma and micropores on the concrete surface.
- 6) Spray polyurea: Spray with special polyurea spraying equipment and polyurea spray gun. Use cross method to repair leak spray and reduce stress.
- 7) Spraying aliphatic polyurea topcoat: Spraying with special polyurea spraying equipment and polyurea spray gun, spraying evenly without defects and leaking spray.

### 6.Package

Two-component, A component 220KG / 200L barrel, B component 210KG / 200L barrel.

#### 7. Color

Spray polyurea material standard color is gray, can also provide other colors according to user requirements

### 8. Safety

Spraying polyurea materials should be equipped with basic labor protection measures during it was be used.

It is recommended that operators be equipped with protective clothing, goggles, plastic gloves, masks and other protective equipment.

### 9.Storage/Shelf Life

Ideal storage condition is 5-35  $\,^{\circ}\mathbb{C}\,$  in cool and dry place, avoid direct sunlight. / Nine months