

LONGYAN HUISINS CHEMICAL INTERNATIONAL LIMITED

TDS (Technical Data Sheet)

P/N: Special Spray Polyurea Coating No.1
Name: Special Spray Polyurea Coating PS600B

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
A	Approved	Initial Release	Sha LIU	2016-01-18

Product Name : Special Spray Polyurea Coating

Model No: PS600B

1.Description

PS600B Special Spray Polyurea coating is a 100% solids, two-component, fast curing, high-performance on-site spray molding materials. The product is mainly composed of an isocyanate semi-prepolymer, Poly-amine resin, and a pigment, which has the advantages of high strength, good performance and quick construction .Based on the high reactivity and fast curing property, it can be sprayed forming at any bent, inclined and vertical surface without sagging. With super adhesive strength and impact resistance characteristics, the coating is flexible, impact resistant and seamless that able to completely insulate air and water and oxygen penetration. It integrated anticorrosion, waterproof, wear resistance, aging resistant performances, no pulverization and crack peel up or fall down after long- term outdoor work with alternating ambient conditions of cold, heat, rain and snow. It is the optimum choice where a tough, flexible, impact resistant, abrasion resistant waterproofing system which exhibits extraordinary performance characteristics.

2.Features

- *Solvent free, 100% solids, safe, environmentally friendly and odor free.
- *Rapid cure, can be sprayed forming on any bent, slope and vertical surfaces without sagging.
- *Dense coating, seamless, with good flexibility.
- *High adhesive strength, fast bonding well on steel, concrete, wood, glass fibers and other substrates.
- *Excellent impact resistance, abrasion resistance
- *Excellent anticorrosion and chemical resistance to acids, alkali, salts etc.
- *Excellent waterproof performance
- *Good shock absorbing performance
- *Excellent resistance to temperature variation
- *Fast cure, application site back to service quickly
- *Excellent durability to reduce maintenance cost for lifelong
- *Extend the service life of sprayed structure

Application scopes: Anticorrosion and waterproof protection of construction, chemicals, transportation, metallurgy, electric power, aerospace, marine, shipbuilding and other fields.

3. Products information

Item	Part A	Part B
Appearance	Pale yellow liquid	Gray
Specific gravity (g/m ³)	1.11	1.05
Viscosity (cps) @25°C	500	750
Solid content (%)	100	100
Mix ratio (by volume)	1	1
Theoretical coverage (dft)	1.08kg/m ² film thickness:1mm	
Solids content	100%	
Hardness (Shore)	85-96(A)	
Density	1.05g/cm ³	
Elongation	≥420%	
Tensile strength	22MPa	
Tear strength	≥55N/mm	
Water impermeability	0.4MPa,60min	
Wear resistance (750g, 500r)	30mg	
Abrasion (Taber, wheel H-18, 1000 g, 1000 rev.), mg	125;	
Impact resistance	1.5kg.m	
Electric strength	15kv/mm	
Temperature variation	-35---+120°C	
Heating temperature	60-70°C	
Recommended thickness	>1500μm	
Operating temperature range	0-35°C	
Gel time(sec)	7-10	
Tack free time(sec)	12-17	
Water resistance (30d)	no rust no bubbles no peel	
Acid resistance (10%H ₂ SO ₄ or 10%HCl, 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	

4.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 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

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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, 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 polyaspartic polyurea topcoat: Spraying with special polyurea spraying equipment and polyurea spray gun, spraying evenly without defects and leaking spray.

5. **Package:** Two-component, A component 220KG / 200L barrel, B component 210KG / 200L barrel.

6. **Color:** Spray polyurea material standard color is gray, can also provide other colors according to user requirements

7. **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.

8. **Storage/Shelf Life:** Ideal storage condition is 5-35 °C in cool and dry place, avoid direct sunlight. / Nine months