

LONGYAN HUISINS CHEMICAL INTERNATIONAL LIMITED

TDS (Technical Data Sheet)

P/N: Special Polyurea Flooring Protective Coating No.1
Name: Special Polyurea Flooring Protective Coating PS500C

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

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Approved By: Sha LIU

Version History

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

Product Name : Special Polyurea Flooring Protective Coating

Model No: PS500C

1.Description

Floor special polyurea is 100% solid content aromatic polyurea elastomer. It has excellent flexibility and abrasion resistance, compared with traditional epoxy and car borundum floor coating be too hard and fragile, this coating is impact resistance and wearable. It also has been used on the food processing and pharmaceutical flooring field because it is 100% solid content, without solvent.

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, waterproof performance. Good shock absorbing performance
- Excellent anticorrosion and chemical resistance to acids, alkali, salts etc.

Application Scopes

Petrochemical, metallurgical machinery, food processing, pharmaceutical, electronics, textile, garment and other industries engineering workshop floor. Stadiums, parking lots, super markets, department stores, municipal Footbridge flooring project.

3. Products information

Item	A	B
Appearance	Pale yellow liquid	Adjustable color
Specific gravity (g/m ³)	1.15	1.2
Viscosity (cps) @25℃	700	680
Solid content (%)	100	100
Mix ratio (by volume)	1	1
Gel time (second) @25℃	4-6	
Surface dry time (second)	15-40	
Theoretical Coverage (dft)	1.08kg/m ² Film thickness 1mm	

4.Physical properties

Item	Test standard	Result
Hardness (Shore A)	ASTM D-2240	90
Elongation rate (%)	ASTM D-412	480
Tensile strength (Mpa)	ASTM D-412	22
Tear strength (N/km)	ASTM D-624	85
Impermeability(0.3Mpa/30min)	HG/T 3831-2006	impermeable
Wearable (750g/500r) /mg	HG/T 3831-2006	4.2
Adhesive strength (Mpa) concrete base	HG/T 3831-2006	3.2

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Adhesive strength (Mpa) steel base	HG/T 3831-2006	11.3
Density (g/cm ³)	GB/T 6750-2007	1.03
Cathodic disbondment [1.5v,(65±5)°C, 48h]	HG/T 3831-2006	≤15mm

5. Chemical resistance

Acid resistance 10%H ₂ SO ₄ or 10%HCl,30d	No rust, no bubbles, no peel off
Alkali resistance 10% NaOH, 30d	No rust, no bubbles, no peel off
Salt resistance 30g/L,30d	No rust, no bubbles, no peel off
Salt spray resistance, 2000h	No rust, no bubbles, no peel off
Oil resistance 0# diesel, crude,30d	No rust, no bubbles, no peel off

(For reference: the above data is acquired based on GB / T9274-1988 test standard. Pay attention to the influence of ventilation, splash and spillage. Independent immersion testing is recommended if requires other specific data)

6. Product application environment

Environment temperature	0°C-45°C
Product spray heating temperature	65°C-70°C
hose heating temperature	55°C-65°C
Relative humidity	≤90%
Dew point	≥3°C

7. Product application guide

Recommend spray machine	GRACO H-XP3 Polyurea spray equipment
Spray gun	Fusion-air purge or mechanical purge
Static pressure	2300-2500psi
Dynamic pressure	2000-2200psi
Recommend film thickness	1000-3000μm
Recoating interval	≤6h

8. Application note

- Agitate part B uniform prior to application, thoroughly mix the deposited pigments, or the product quality will be affected.
- spray polyurea within the proper time if the substrate surface is primed. For the application method and interval time of polyurea speical primer please refer to companies' other brochure.
- Always apply spray polyurea on a small area before large application to check the mix ratio, color and spray effect are correct. For detailed information of application please refer to the latest instruction sheet of the application instructions of spray polyurea series.

9. Product curing time

Substrate temperature	Dry	Walking intensity	complete solidify
+10°C	30s	45min	7d
+20°C	23s	15min	6d
+30°C	17s	5min	5d

Note: the curing time varies with the environment condition especially the temperature and relative humidity.

10. Shelf Life

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From the manufacturer date and on the original package sealed condition: One year

storage temperature: +5-35°C

Packing: Part A 220kg/drum, part B 210kg/drum

Make sure the product package sealed well

store in cool and ventilated place, avoid direct sunshine exposure.

11.Product health and safety information

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Material Safety Data Sheet containing physical, ecological, toxicological and other safety related data.

12.Integrity declaration

Gguarantee all technical data stated in this sheet are based on laboratory tests. Actual testing methods may vary due to different circumstances. Therefore please test and verify its applicability. Does not take any other responsibilities except the product quality and reserve the right of any modifications on the listed data without prior notice.