

LONGYAN HUISINS CHEMICAL INTERNATIONAL LIMITED

TDS (Technical Data Sheet)

P/N: Pipeline Special Anti-corrosion Polyurea Coating

Name: Pipeline Special Anti-corrosion Polyurea Coating PS700A

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
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Product Name: Pipeline Special Anti-Corrosion Polyurea Coating

Model No: PS700A

1. Description

PS700A is a kind of material with high crosslinking density and certain elasticity, more than 30% elongation at break, dense coating and low water absorption. PS700A is the state of the art 100% solids, ultra fast cure, flexible, spray-applied, high build, and two components aromatic pure polyurea elastomer. The system consists of an isocyanate semi-prepolymer, Poly-amine resin, and a pigment. PS700A is relatively moisture and temperature insensitive, allowing application in the most problematic ambient conditions. It is the optimum choice where a tough, flexible, impact resistant, abrasion resistant, heavy-duty, anti-corrosion coating system which exhibits extraordinary performance characteristics. High performance of resistance to acid,alkali,salt,sulfide. No bubbles and peeling when long term immersion in liquid. Weather resistant,no powdering and cracking when enduring the impact of cold and hot weather.

2. Features

1. Without any thinner, environmental protection,high performance of resistance to acid,alkali,salt,sulfide
2. Elongation, high flexibility, can adapt to the basic cracks and slight deformation;
3. Good aging resistance, Excellent mechanical and chemical properties
4. Fast curing, can be sprayed on any surface, slope, vertical surface;
5. Convenient construction, spraying a film.
6. Working by machine

3. Performance

Volume solid content	100%
Hardness (shore A)	65-75
Density	1.02g/cm ³
Elongation	≥300%
Tensile strength	24MPa
Impact strength	≥60N/mm
Water impermeability	0.4MPa,60min
Wear resistance (750g, 500r)	10mg
Impact resistance	1.5kg.m
Electric strength	15kv/mm
Temperature variation	-35-----+120°C
Heating temperature	60-70°C
Gel time(sec)	7-15
Tack free time(sec)	30-50
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
Flash point	200°C

4.Applications

Petrochemical tank ,natural gas,municipal,urban drainages, tower,tank-washer,pipeline ,sewage pool.

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

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, 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 °C in cool and dry place, avoid direct sunlight. / Nine months