

LONGYAN HUISINS CHEMICAL INTERNATIONAL LIMITED

TDS (Technical Data Sheet)

P/N: Single component polyurea waterproof anticorrosion
protective coating

Customer: N/A
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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 : Single component polyurea waterproof anticorrosion protective coating

Model No: ST800B

1. Description

ST800B is a single-component aromatic polyurea waterproof and anti-corrosion coating material. It exhibits excellent adhesion to a variety of substrates. Thanks to its unique chemical structure, the product offers not only outstanding resistance to chemical corrosive media, but also possesses superior physical properties including high elasticity, strength, abrasion resistance, impact resistance, and scratch resistance.

2. Features

- High solids, low VOC emissions
- Easy to apply, brush, roller, air spray or airless spray all suitable.
- High physical properties of wearable, impact resistance and scratch resistance
- Excellent waterproof performance
- Excellent chemical resistance, can withstand certain concentration of acid, alkali, salt, oil, organic solvents etc.
- Excellent adhesion force, fast bonding well on the surface of steel, concrete, wood, fiberglass and other substrates.
- Wide temperature requirements, can be used in environment of -50 °C ~ 120°C.
- One component material, easy operation without ratio mixed, reducing labor costs

Application Scope

Anticorrosion waterproof protection of petroleum, chemical, transportation, construction, electricity, container and other industries. Maintenance of bridges, waterproof anticorrosion of tunnels, waterproofing protection of industrial floor, sewage water treatment pool, building roofing, water conservancy dam, hydropower station buildings.

3. Products information

Item	Results
Appearance	Color is adjustable
Specific gravity	1.2
Viscosity (cps)@20℃	420
Solid content (%)	75(vary with different colors)
Tack-Free Time (hrs)	1.5-2
Pot life (hrs)	1
theoretical coverage	0.15kg/m ² (thickness 100um)

4. Physical properties

Item	Test standard	Result
Hardness (Shore A)	ASTM D-2240	82
Elongation at Break (%)	ASTM D-412	400
Tensile strength (Mpa)	ASTM D-412	24
Tear strength (KN/m)	ASTM D-624	65
Abrasion resistance (750G/500r) /mg	HG/T 3831-2006	10
Adhesive strength (Mpa) concrete base	HG/T 3831-2006	3.2
Adhesive strength (Mpa) steel base	HG/T 3831-2006	10
Impact Resistance (kg.m)	GB/T23446-2009	1.0
Density (g/cm ³)	GB/T 6750-2007	1.2

5. Chemical resistance

Acid resistance 10% H ₂ SO ₄ or 10%HCl, 30d	No rust, no bubbles, no peel off
Alkali resistance 30% 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 oil, 30d	No rust, no bubbles, no peel off

(For reference: pay attention to the influence of ventilation, splash and spillage. Independent immersion testing is recommended if requiring detail data.)

6. Application environment

Environment temperature	-5℃-35℃
Relative humidity	35-85%
Dew point	When applying on the surface of metal materials, the temperature must be at least 3℃ above the dew point.

7. Application tips

Recommended dft: 100-200 (as design requirement)

Re-coating interval: 4-24h, if the interval time exceed 24h or has dust deposited, sand-blasting first and clean well prior to application.

Coating method: airless spray, air spray, brush, roller.

Application note

It can be applied in the low temperature below 5℃. Put the coating drums into the air-conditioning room for over 24 hours when apply in the low temperature environment.

HUISINS recommends to agitate the coating uniform prior to application, pour accurate quantity of material to another vessel and seal well immediately. Don't pour the rest liquid to the original bucket.

The viscosity of product is set up in the factory, thinner shall not be random added by the applicators.

Call the manufacturer for instructions of special thinner if the viscosity changed as the application environment and humidity.

8.Curing time

Substrate temperature	Surface dry time	Foot traffic	Solid dry
+10℃	6h	24h	7d
+20℃	3h	12h	6d
+30℃	2h	8h	5d

9.Shelf Life

storage temperature: 5℃~32℃

shelf life: 10 months (sealed)

store in cool and ventilated place, avoid direct sunshine, keep away from heat

package: 5kg/bucket, 20kg/bucket, 25kg/bucket

10.Health and Safety

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.

11. Disclaimer

All technical data provided in this datasheet are derived from controlled laboratory testing. Actual performance may vary depending on application-specific conditions. Users are advised to conduct their own tests to verify suitability for intended use. HUISINS guarantees product quality as specified but shall not be held liable for application-specific performance. We reserve the right to modify product information without prior notice.