

LONGYAN HUISINS CHEMICAL INTERNATIONAL LIMITED

TDS (Technical Data Sheet)

P/N: single component polyurea industrial wearable anticorrosion floor coating

Customer: N/A
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Customer Desc: N/A

Drafted By: Kit ZENG
Approved By: Sha LIU

Version History

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

Product Name : single component polyurea industrial wearable anticorrosion floor coating

Model No: ST800C

1. Description

ST800C is a high-performance single-component aromatic polyurea anti-corrosion and wear-resistant coating, designed to offer exceptional compatibility with concrete substrates as well as existing epoxy and polyurethane coatings. Its unique chemical structure provides outstanding chemical and corrosion resistance, high strength, and high elasticity, resulting in a durable coating film that is resistant to abrasion, impact, and scratches. This helps prevent concrete damage caused by impact and cracking forces, making it an ideal solution for demanding environments such as chemical plants, printing and dyeing facilities, and pharmaceutical factories. It is available in a variety of colors to meet decorative requirements for different application projects.

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 environments of -50 °C ~ 120°C.
- * One component material, easy operation without ratio mixed, reducing labor costs

Application Scope

Flooring of oil chemical plant, cotton processing factory, pharmaceutical factory, brewery plant, food processing plants, dairy plants, iron and steel manufacturing enterprises, power plant, machinery processing factory, workshop and warehouse floor of pesticide production industry

3. Products information

Item	Results
Appearance	Color adjustable
Specific gravity	1.15
Viscosity (cps)@20°C	420
Solid content (%)	≥65
Dry time (h)	1-3
Pot life (h)	2h
Theoretical Coverage	0.15kg/m2 (thickness:100um)

4. Physical properties

Item	Test standard	Result
Pencil Hardness	GB/T6739-2006	2H
Bending strength (cylindrical shaft) mm	GB/T 6742-2007	1
Puncture resistance (Kv/mm)	HG/T 3330-1980	250
Impact resistance (kg.m)	GB/T1732-1993	50
Elongation at Break (%)	ASTM D-412	410
Wear resistance (750g/500r)/mg	HG/T 3831-2006	15
Adhesive strength (Mpa), metal base	HG/T 3831-2006	11
Adhesive strength (Mpa), concrete base	HG/T 3831-2006	3.2
Density (g/cm ³)	GB/T 6750-2007	1.1

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: 100-200um(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.

Recommended coating methods: airless spray, air spray, brush, roller

Application note

It can be applied in the low temperature below 10℃. Put the coating bucket 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 the 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 time
+10℃	6h	24h	7d
+20℃	3h	12h	6d
+30℃	2h	8h	5d

9.Shelf Life

storage temperature: 5℃~35℃

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.