

LONGYAN HUISINS CHEMICAL INTERNATIONAL LIMITED

TDS (Technical Data Sheet)

P/N: Two-component solvent-free polyurea primer

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	2017-01-18

Product Name: Two-component solvent-free polyurea primer

Model No: DS304

DS304 two-component solvent-free polyurea primer is mainly composed of high-performance polyurethane resin prepolymers and polymer materials as film-forming substances. It is produced through scientific production processes. The coating is solvent-free, odorless, environmentally friendly, and does not affect the surrounding environment during application. Strong permeability to the substrate, excellent sealing performance, and can significantly improve the adhesion of the base layer.

Product features and advantages

- *Significantly improve the adhesion force between substrate and the following coating
- *Excellent sealing and penetration performance
- *Excellent corrosion resistance and chemical medium resistance, such as acid, alkali, salt, etc
- *Excellent water and moisture resistance performance
- *Excellent temperature variation resistance performance
- *Good compatibility with the subsequent coating
- *Effectively avoiding the generation of bubbles, thereby extending the service life
- *Odorless and VOC free.

Application scope

Anti-corrosion waterproof coating on substrates such as concrete, marble, ceramic tiles, wood, and metal.

Product physical properties

Item	Results
Appearance	Flat and without bubbles
Solid content (%)	≥98
Pot life (h)	0.5
Surface dry time (h)	≤3
Mixing ratio	A:B=1:2 (by weight)
Solid dry time (h)	≤12
Theoretical coverage (DFT)	0.2kg/m ² film thickness 100μm

Typical physical properties

Item	Test standard	Results
Adhesive strength (dry concrete surface)	ASTM D-3359	3.5(or substrate broken)
Impact resistance (kg.cm)	GB/T 1732	60
Abrasion resistance (750g/500r) mg	GB/T 1732	12
Temperature variation (-40+150℃) 24h	GB/9278-1988	Normal
Density g/cm ³	GB/T 6750-2007	1.02

Chemical resistance

Acid resistance 30%H ₂ SO ₄ or 10%HCl,30d	no rust, no bubbles, no peel off
Alkali resistance 50%NaOH, 30d	no rust, no bubbles, no peel off
Salt resistance 50g/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 requires other specific data)	

Application guide

Recommend dft: 30-60μm

Recoating interval time: 3-24h

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

Application environment

Environment temperature: -5 ~+ 35℃

Relative humidity: RH%:35-85%

Dew point: ≥3℃

Surface preparation

Metal surface: It is recommended to sandblast and remove rust to achieve Sa2.5 level according to ISO8501-1 or GB8923 standards.

Concrete surface: achieve a strong, dense, flat, clean, and dry state. There should be no phenomena such as sanding, shelling, cracks, honeycomb and pockmarks. Usually, putty is needed for repair.

Wood surface: clean, dry, without burrs, fragments, and loose debris.

The surface pre-treatment of other substrate can be consulted with HUISINS technical personnel.

Application note

The concrete substrate needs to be fully cured while the surface should be clean, dry, dense, free of grease and stains, and in case of obvious damage to interfaces and cracks, they need to be repaired in advance. Ensure that the surface is sanded or vacuumed to remove dust before applying **DS304**.

This product can be used at low temperatures of -10℃. If used at low temperatures, it is recommended that the paint pail be placed in an air-conditioned room and kept at high temperatures for more than 24 hours.

Before use, make sure that the raw materials are accurately proportioned and evenly mixed, and the paint must be used up within 30 minutes after mixing. 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 to add special thinner if the viscosity changed with the application environment and humidity.

Curing time

Substrate temperature	Surface dry time	Foot traffic	Solid cure time
+10℃	10h	24h	21d
+20℃	8h	12h	14d
+30℃	3h	6h	7d

Shelf Life

storage temperature: 5℃-35℃

shelf life : 12 months (from the date of production and in sealed condition):

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

package: 5kg/bucket, 10kg/bucket; 10kg/bucket, 20kg/bucket;

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.

Integrity declaration

Huisins guarantees 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.

Huisins does not take any other responsibilities except the product quality and reserve the right of any modifications on the listed data without prior notice.

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