

LONGYAN HUISINS CHEMICAL INTERNATIONAL LIMITED

TDS (Technical Data Sheet

P/N: UV protection aliphatic pure polyurea coating

Name: UV protection aliphatic pure polyurea coating PS600D

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: UV protection aliphatic pure polyurea coating

Model No: PS600D

1. Product description

PS600D is a %100 solid with a unique chemical synergistic product of aliphatic and aromatic polymers. fast curing, 2 component, UV light resistant, aliphatic pure polyurea system. Its formulation is designed for maintaining high color stability and preventing discoloration where surfaces are exposed to sun light continuously. While it can be directly used on most surfaces, it also can be used as a top layer on epoxy, polyurethane and polyurea coatings. After fully cured, it forms a coating material with high tensile strength and abrasion resistance. For protection and coating purposes, it can be applied on concrete, metal, wood, ceramic and PU foam. It can form strong films in wide variety of thicknesses. The material must be applied utilizing high pressure, heated plural component spray proportioning equipment. PS600D can be used as a stand-alone product or as a topcoat for aromatic polyureas, polyurethanes or mixtures.

2. Features

1. Excellent color stability ,100% color stability and gloss retention
- 2, Excellent wear resistance. Excellent UV light resistance
- 3, Good adhesion
4. Extend the gel time to provide a smoother, more uniform surface. Very good tensile and structural strength
5. Form a monolithic film that can be handled and walked two minutes or less after spraying
- 6, 100% solid content, Solvent-free, No VOC
- 7, Can be stacked to any thickness in one application Excellent adhesion on concrete, steel, aluminum, plastics, wood, etc
- 8, It is drying working temperature up to 93 °C, intermittent temperature up to 121 °C high drying temperature stability. Temperature and humidity insensitive.

3.Application

- Polyurethane foam roof. Roofs, garages and parking lots
- water features.
- Tanks, ponds and lagoon containment linings.
- walls, meat ceilings, dairy processing plants.
- Aquatic animals, waterwheel basins and animal habitats.
- Airports, shipyards and marina
- Truck base and chassis liner.
- Encapsulate the structural steel to protect and delay the formation of rust.
- packaging lead, low radioactivity and asbestos pollution surface

4.Performance

Chemical structure	A: Isocyanate Prepolymer B: Amine Resin
Tensile strength	15.5 mpa

Density (gr/cm3)	1,05-1,08
Elongation at break (%)	≥± 350%
Hardness (Shore A)	90 ± 5
Hardness (Shore D)	50 ± 5
Abrasion resistance (mg)	<33 (H22, 1000 cycle)
Tear resistance	85KN/m
Gel time(sec)	15s
Tack free time(sec)	30s
Hard dry	24 hrs
Volume solid content	100%
Solid content (%)	100%
VOC content (%)	0 g/l
Coating time	1 or more
Mixing ratio (volume ratio)	1 : 1
Viscosity (cps)(25°C)	A: 1150 ± 50 cps B: 730 ± 50 cps
Shelf life 15 - 32°C	9 months
Process temperature(°C)	A: 70-80 B: 70-80

5.PACKAGING

210 kg /barrel (Amine side) 220 kg/ barrel (Iso side)

6.URFACE PREPARATION & APPLICATION

1. Surface preparation strongly affects coating performance. Concrete substrates must be prepared mechanically using abrasive blast

cleaning to remove cement laitance and achieve an open textured surface. Weak concrete must be removed and surface defects such as

LONGYAN HUISINS CHEMICAL INTERNATIONAL LIMITED
Add.: Room 206, Building 21, LongTeng Xing Cheng, No. 68 LongTeng South Road, DongXiao Town, XinLuo District, LongYan City, FuJian Province, China
Tel.: 86-20-38993165 86-13922763266
Website: <https://www.huisinschem.com>

voids must be fully exposed. Repairs to the substrate, filling of blowholes/voids and surface levelling must be carried out using appropriate products. The application surface has to be primed in order to achieve an even surface and good adhesion.

2. All dust, loose and friable material must be completely removed from all surfaces before application of the product, preferably by brush and/or vacuum. For application pull off strength of the surface should be min. 1.5 N/mm² and concrete residual moisture should be max. 6 %.
3. Isocyanate prepolymer and amine resin must be applied using a 2-component high pressure and heat spray machine. The machine should be able to spray the components in 1:1 volume ratio. In order to achieve good performance, the temperature and pressure should stay same during the application.
4. Before application, amine component must be stirred using a barrel mixer.

7.SAFETY

Contains MDI. Avoid breathing vapors. Avoid contact with skin and eyes. Take precautions during application. Wear suitable protective clothing, gloves and eye/ face protection. Adequate ventilation of the working area is recommended. Refer to SDS sheet prior to use.

8.Standard machine settings

1,Standard 1:1 ratio, heated, multi-component equipment with a dynamic pressure of at least 2500 psi (17 MPa) for full injection of PS900. Includes equipment HXP3, HXP2, EXP2, H-25, Graco 20/35, 20/35 Pro, H-3500, HV-20/35, PMC GH-25, GH-40, PHX-25, and PXH-40. Guns include Graco Fusion MP, Gap Pro, Glass Craft P2, P2 Elite, P2 Elite "C", GX7-DI, and GX-8 Pro. Other applications can be selected according to the product. Preheater temperature should be 71-76 °C

2, The hose temperature should be 71-76 °C. The hose thermometer reading under the insulation near the gun should be at least 63-68 °C.

Physical performance is enhanced when using an impact gun (such as MP Fusion or GX7-DI gun) at higher pressures (3000 psi or higher)

9.Precautions

This product is for professional use only.

This product must be stored at a temperature between 15 ° - 30 ° C.

When the surface and air temperature is higher than 5 ° C and the surface temperature is at least 3 ° C above the dew point and rises, the temperature of the liquid in the barrel during application should be 21 ° C – 38 ° C.

Avoid water contamination in the container. If contamination is suspected, the container should not be resealed and therefore may create pressure from CO₂. Do not attempt to use contaminated materials.

Note: The material provided is a two component system. ct sunlight. / Nine months