

CPS SL-50

Protective Coating System

Description

CPS SL-50 is a two-component, spray-applied protective coating that has been specially designed with a slower reaction time to enhance spray-ability. This 100% solids, VOC-free, pure polyurea demonstrates increased substrate-wetting and self-leveling characteristics, and its delayed back-end cure improves the users' ability to wire trim and/or otherwise work with the product. Once fully cured, this elastomeric-coating creates a soft but resilient monolithic membrane with excellent flexibility and durability.

Typical Physical Properties

Properties	A-Side	B-Side
Brookfield Visc. @78° F, 20 RPM	400 cps	500 cps
Weight/Gallon	9.4 Lbs.	8.5 Lbs.
Color	Clear Yellow	Black
Processing Data		
Mix Ratio (Parts by Vol.)	1:1	
String-Gel Time	20 seconds	
Dry-To-Touch Time	45 seconds	
Final Cure Time	72 hours	
Cured Properties		
Test Method	Result	
Color	N/A	
Durometer	ASTM D2240	
Tensile Strength	ASTM D412	
Elongation	ASTM D5034	
Die-C Tear Strength	ASTM D624	
Vertical Rebound	ASTM D2632	
Taber Abrasion Loss	ASTM D4060	
Impact Resistance	ASTM D2794	

Chemical Resistance 7-Day Spot-Testing

	Durometer Change	Appearance Change	Adhesion Change
Gasoline	B	B	A
Diesel Fuel	A	A	A
Motor Oil, Regular	A	A	A
Brake Fluid	A	A	A
Antifreeze 50:50	A	A	A
Lacquer Thinner	B	B	B

Chemical Resistance Ratings			
A	B	C	D
No Loss	Minimal Loss	Moderate Loss	Severe Loss

Application Requirements

Spray Equipment

High-pressure spray equipment must be designed to produce a minimum of 2,500-psi with an output of 1.5 gallons per minute. The heating component of the equipment must be able to maintain a temperature at the gun of 150° F. The hose on the equipment must be heated and rated a minimum of 3,000-psi burst pressure; the spray gun must be equally rated. CPS SL-50 is also capable of application via dispensing 750mL x 750mL cartridges. Compressed air source should be capable of 80-psi @ 9-12 CFM's minimum. Cartridges should be heated to 90° F - 100° F for best results.

Substrate Parameters

The substrate must be dry; proper substrate prep is critical to application success. A minimum ambient temperature of 5° F above the dew point is mandatory. The ambient relative humidity should not be above 85%. Pin-holing may occur if the above parameters are not strictly followed; it is up to the applicator to check initial climatic conditions. It is recommended that a small area be sprayed and checked for proper application. Theoretical coverage of the material is 1,604 square feet at 100-mil dry film thickness.

Storage

Liquid materials should be stored at temperatures between 55° F and 95° F in sealed containers. The A-side component should always be blanketed with nitrogen gas. B-side component should be agitated via air-mixer prior to application to ensure uniform suspension of material. Liquid product shelf life is six-months. Consult product SDS for proper safety and handling procedures of components.



Chemical Resistance Summary

	Rating
HCl, 10%	A+
HCl, 27% @ 120° F	NR
H2SO4, 20%	A
H2SO4, 60%	NR
H3PO4, 10%	A+
NaOCl, 5%	C
NaOCl, 12%	C
NaOH, 50%	A+
Castor Oil	A+
NH4OH, 10%	B
Diesel Fuel	B
Gasoline	NR
H2O @ 70° C	A+
H2O Room Temp.	A+
Motor Oil	A+
Ethylene Glycol	A+
Mineral Spirits	A
Paint Thinner	NR
Sea Salt, 25%	A+
Isopropyl Alcohol	NR
Xylene	NR
De-Natured Alcohol	NR
Kerosene	C

A+	Suitable for continuous immersion
A	Suitable for continuous immersion or exposure for up to 3 months
B	Suitable for temporary immersion or exposure
C	Suitable for temporary exposure or incidental contact
NR	Not Recommended
NT	Not Tested

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