



ChemSkin-

Two-Component 100% Solids Polyurea

TECHNICAL DATA SHEET

PRODUCT DESCRIPTION

ChemSkin is an extremely tough, 100% solids, super-polymer formulations which stands up to high heat and provides excellent chemical resistance. ChemSkin provides excellent bonding performance, low surface friction, toughness and abrasion resistance. This unique super-polymer is designed to be applied as a fast-set spray with gel time of approximately 5-10 seconds. ChemSkin is available with flame retardants upon request. ChemSkin is a naturally caramel colored translucent coating which can be color tinted to produce translucent or opaque colors. This aromatic super-polymer is not UV stable and must be top coated with an aliphatic UV stable coating.

CHEMSKIN PHYSICAL PROPERTIES

Hardness	ASTM D785	70-75 D
Tensile Strength	ASTM D412	4200 psi
Elongation	ASTM D412	350%
Water Absorption (24 hr.)	ASTM D570	0.25%
Moisture Vapor Transmission	ASTM E96	0.24 perms
Taber Abrasion CS17	ASTM D4060	<50 mg/1k cycle
Tear Strength	ASTM D624	675 lbs./lin. in.
Gel Time	Time	5-10 sec.
Mix Ratio	PBV	1A – 1B

ADHESION RESULTS

Typical Substrates per ASTM D-4541 Elcometer		
Concrete*	>300 psi	Cohesive failure; excellent bonding
Steel*	>1000 psi	Excellent bonding
Composite Lamination*	>1000 psi	Saturated; excellent bonding

*All substrates primed with SuperSkinSystems' Primer 28

HEALTH AND SAFETY

Read the Safety Data Sheet (SDS) and container labels for detailed health and safety information. This product is intended for industrial use by properly trained professional applicators only.

APPLICATION

ChemSkin is a 100% solids mixture with no VOC's. Application temperature ranges from 40°F - 100°F. Functional operation temperature ranges from -40° to 250°F. ChemSkin can be applied using a standard 2-component, high pressure spray machine. Substrate surfaces must be clean, dry and free of contaminants and dust. Substrates must be free of loose rust, paint, moisture, dirt oils, etc. If application surface exhibits extensive corrosion, spalling and/or weak deteriorating substrate, normal forms of media or shot blasting is recommended to create a secure surface preparation. For conditions which may only require liquid washing and cleaning with detergents, acids, bio-enzymes, etc. or conditions involving processes of scrubbing, rinsing and drying, the finish surface must not retain any residual cleaner unless specified by SuperskinSystems, Inc. Concrete must be fully cured and should be prepared with shot blasting, diamond grinding or machine sanding depending on the severity of the concrete surface condition. Similar proper preparation must be performed for metal surfaces. Primers are recommended for proper preparation. Always power clean using mild detergent prior to sanding, etc. Spray coverage at 16 mils is 100 sq. ft./ mixed gallon.

WARRANTY

THE INFORMATION HEREIN IS BELIEVED TO BE RELIABLE, BUT UNKNOWN RISKS MAY BE PRESENT. SUPERSKINSYSTEMS, INC., WARRANTS ONLY THAT THE MATERIALS SHALL BE OF MERCHANTABLE QUALITY. THIS WARRANTY IS IN LIEU OF ALL OTHER WRITTEN OR UNWRITTEN, EXPRESSED OR IMPLIED WARRANTIES. SUPERSKINSYSTEMS, INC., EXPRESSLY DISCLAIMS ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, OR FREEDOM FROM PATENT INFRINGEMENT. ACCORDINGLY, BUYER ASSUMES ALL RISKS WHATSOEVER AS TO THE USE OF THESE MATERIALS. BUYER'S EXCLUSIVE REMEDY AS TO ANY BREACH OF WARRANTY OR NEGLIGENCE CLAIM SHALL BE LIMITED TO THE PURCHASE PRICE OF THE MATERIALS. FAILURE TO STRICTLY ADHERE TO RECOMMENDED PROCEDURES SHALL RELIEVE SUPERSKINSYSTEMS INC. OF ALL LIABILITY WITH RESPECT TO THE MATERIALS OR THE USE THEREOF.



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Two-Component 100% Solids Polyurea

CHEMICAL RESISTANCE CHART

72 Hour Immersion Test ASTM D3912

Chemical Name	Results @ 25°C
Acetic Acid	R
Acetone	NR
Ammonium Hydroxide (14%)	R
Brake Fluid	R
Brine-Saturated Water (310g/l)	R
Clorox (10%) Water	R
Diesel Fuel	R
Gasoline	R
Gasoline 5% MTBE	R
Gasoline 5% Methanol	R
Hydrochloric Acid (25%)	R
Hydrochloric Acid (10%)	R
Hydraulic Fluid	R
Isopropyl Alcohol	R
Lactic Acid	R
MEK	R
Methanol	R
Methylene Chloride	C
Mineral Spirits	R
Motor Oil	R
MTBE	C
Muriatic Acid (10%)	R
NaCl Water (10%)	R
Nitric Acid (20%)	RC
Phosphoric Acid (10%)	R
Phosphoric Acid (50%)	R
Potassium Hydroxide (10%)	R
Potassium Hydroxide (20%)	R. Dis
Skydrol	R
Sodium Hydroxide (25%)	R. Dis
Sodium Hypochlorite (10%)	R
Sodium Bicarbonate	R
Stearic Acid	R
Sugar Water	R
Sulfuric Acid (10%)	R
Sulfuric Acid (30%)	R
Toluene	RC
Trisodium Phosphate	R
Vinegar Water (5%)	R
Water	R
Water (14 days @ 82°C)	R
Xylene	RC

72 Hour Spot Test Chemical Resistance Data

ChemSkin	
Chemical	Rating
HCL 37.5%	6
NaOH 50%	8
H ₂ SO ₄ 50%	8
HI 57%	8
H ₃ PO ₄ 50%	8
Brake Fluid	10
Anti-Freeze	10
Motor Oil	10

Rating Guidelines

0-1	75-100% Film Dissolved
1-2	50-75% Film Dissolved
2-3	25-50% Film Dissolved
3-4	1-25% Film Dissolved
4-5	Film damage severe, cracking, pinholes
5-6	Film moderate to heavy damage, swollen, dulled
6-7	Film moderately damaged, haze, residue
7-8	Film with slight or no damage, slight haze, residue
8-9	Film in very good condition
10	Film unchanged, excellent condition

CHART KEY

R – Recommended (little or no visible damage)
 RC – Recommended Condition (swelling or discoloration)
 C- Conditional (crackling – wash down within 1 hour)
 NR – Not Recommended
 Dis. – Discoloration