

CLEARSKIN

Two-Component Aliphatic Polyurea



PRODUCT DESCRIPTION

ClearSkin is an extremely tough, optically clear, weather resistant, 2-component polyurea. It exhibits excellent durability, resistance to abrasion, chemicals and sunlight. It is used primarily in exterior high-wear environments where severe top-coating protection is required. This system may also be color tinted. It retains a high dielectric insulator capacity. ClearSkin may be used over diverse types of substrates such as metals, woods, foams, engineering polymers, composites, brick and concrete. A primer may be required depending on type of substrate or conditions thereof to achieve proper bonding performance. The toughness of ClearSkin places it in demanding industries such as power plants, boat building, marine environments, industrial outdoor heavy equipment, commercial flooring, decorative concrete, steel infrastructures, etc.

ClearSkin PHYSICAL PROPERTIES

Flex Modulus	ASTM D624	250 kpsi
Tensile Strength	ASTM D412	4200 psi
Elongation	ASTM D412	150%
Hardness	ASTM D758	75D
Tear Strength	ASTM D624	200 lbs./linear in.
Taber Abrasion CS17	ASTM D4060	50 mg/1k cycles
Pot Life	Time	1 hour

MIX RATIO

Read product labels and application instructions prior to use. For colored ClearSkin, pre-mix Resin (B-Side) prior to use to ensure any settled pigment is properly dispersed. Mix ClearSkin ISO (A-Side) and Resin (B-Side) at a ratio of 1A-1B by volume. Mixing can be done by hand in small quantity. For a 5 gallon mix or more, mixing should be done with a variable speed drill utilizing a Jiffy Mixer to suspend any settled pigment and attain a uniform color.

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.

Adhesion Results of Typical Substrates per ASTM D4541

Concrete – Primed	>300 psi	00 psi Concrete cohesive failure; excellent bonding	
Steel – Primed	>1000 psi	Excellent bonding	
Wood – Primed	>250 psi	Wood failure; excellent bonding	

TECHNICAL APPLICATION

Substrates must be fully cured and cleaned prior to any coating operation. The cleaning operation must not leave any residual detergents, acids or alkali cleaners. Concrete flooring should be prepared with shot blasting (SPCC min. 2), diamond grinding and/or machine sanding depending on severity of concrete surface condition. When using ClearSkin for coating steel, the substrate should be shot blasted to an sspc 4-6 mils profile. After shot blasting, the substrate should be clean and dry. There should be no visible rust prior to coating. Clearskin may be applied using rollers or squeegees. Coverage at 16 mils is 100 sq. ft. / mixed gal.

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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		CAL RESISTANCE CHA		
	•	nmersion Test ASTM D		
<u>Chemical Name</u>	Results @ 25°C		72 H	
Acetic Acid	R			
Acetone	R	Chemical	Ra	
Ammonium Hydroxide (14%)	R	NHO₃ 50%		
Brake Fluid	R	HCL 37.5%		
Brine-Saturated Water (310g/l)	R	NaOH 50%		
Clorox (10%) Water	R	H₂SO ₄ 50%		
Diesel Fuel	R	HI 57%		
Gasoline	R	H₃PO₄ 50%		
Gasoline 5% MTBE	R	Brake Fluid	1	
Gasoline 5% Methanol	R	Anti-Freeze	1	
Hydrochloric Acid (25%)	R	Motor Oil	1	
Hydrochloric Acid (10%)	R			
Hydraulic Fluid	R	Rating Gui	delines	
Isopropyl Alcohol	R	0-1	75-10	
Lactic Acid	R	1-2	50-75	
MEK	R	2-3	25-50	
Methanol	R	3-4	1-25%	
Methylene Chloride	С	4-5	Film	
Mineral Spirits	R	5-6	Film r	
Motor Oil	R	6-7	Film r	
MTBE	С	7-8	Film v	
Muriatic Acid (10%)	R	8-9	Film i	
NaCl Water (10%)	R	10	Film (
Nitric Acid (20%)	RC		J	
Phosphoric Acid (10%)	R			
Phosphoric Acid (50%)	R			
Potassium Hydroxide (10%)	R	*NOTES:		
Potassium Hydroxide (20%)	R. Dis	All samples usin	g 57% l	
Skydrol	R	•	nature of the acid in the	
Sodium Hydroxide (25%)	R. Dis		Samples were placed at	
Sodium Hypochlorite (10%)	R	of 1 ml of solvent		
Sodium Bicarbonate	R	or 1 mil or solvene	011 10 1	
Stearic Acid	R			
Sugar Water	R	CHART KEY		
Sulfuric Acid (10%)	RC	R – Recommende	d (little	
Sulfuric Acid (10%)	NR NR		RC – Recommended (little	
Toluene	R		C- Conditional (crackling	
Trisodium Phosphate	R	•	NR – Not Recommended	
Vinegar Water (5%)	R	Dis. – Discoloration		
Water (5%)	R	טוזים ביים ייים אומיים ביים	ווע	
Water (14 days @ 82°C)	R			

Xylene

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	72 Hour Spot Test Chemical Resistance Data		
	ClearSkin		
	Chemical	Rating	
	NHO₃ 50%	8	
	HCL 37.5%	9	
	NaOH 50%	8	
	H₂SO₄ 50%	8	
	HI 57%	8	
	H₃PO₄ 50%	8	
	Brake Fluid	10	
	Anti-Freeze	10	
	Motor Oil	10	
	Brake Fluid Anti-Freeze	10 10	

Rating Gu	idelines
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

- --All samples using 57% HI had purple iodine discoloration due to the nature of the acid in the air
- --Samples were placed at room temperature for 72 hours after application of 1 ml of solvent on 16 mil film of product

CHART KEY

R - Recommended (little or no visible damage)

RC – Recommended Condition (swelling or discoloration)

C- Conditional (crackling - wash down within 1 hour)



RC



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