

Aliphatic Polyaspartic

DESCRIPTION	XPS-POLYSC-2G is a two-component, 100% solids, V.O.C. compliant, long working time aliphatic polyaspartic, developed for UV stable floor topcoats. It can be mixed with various colors or metallic powder to deliver opaque and glossy floor finishes. It provides outstanding appearance, superior chemical, UV, and solvent resistance. It exhibits excellent physical properties. This system complies with the Canadian Food Inspection Agency (C.F.I.A.).					
PRIMARY APPLICATIONS	 Marine protection for fiberglass, s UV-stable top coat Aircraft hangar floors Low temperature equipment Maintenance facilities Offshore platforms Industrial shop floors Car washes or wash bays Secondary Containment Cooling towers Bridges Wastewater treatment application 					
ADVANTAGES	 Long pot life (30 min) Displays slower cure times with excellent adhesion Superior chemical resistance Superior weather and abrasion resistance Non yellowing and good gloss retention Easy to mix 1:1 ratio by volume Emits virtually no odors and can be applied indoors Excellent adhesive properties, allowing application on other firm and hard coating, as well as a good bond to the substrate V.O.C. compliant in all 50 states and Canada 					
TECHNICAL DATA	Packaging	7.57 L (2 US gal.)				
	Color	Upon Request				
	Yield/Recommended Thickness Primer	XPS-POLYSC-2G 5-10 mils (320-160 ft²/gal)				
	Finish Coat	XPS-POLYSC-2G	D.F.T. 50-55 ft²/gal)			
	Shelf Life	12 months in original unopened factory sealed containers. Keep away from extreme cold, heat, or moisture. Keep out of direct sunlight and away from fire hazards.				
	Mix Ratio, by volume	A: B = 1:1 (100:100)				
	Mix Ratio, by weight (grams)	A: B = 100:107				
	Pot Life (454 g)	40-50 minutes @ 25°C				
PROPERTIES	Solids Content, by weight	Part A	Part B	Mix		
@ 23°C (73°F)	Clear	100%	100%	98.5%		
and 50% R.H.	Solids Content, by volume	Part A	Part B	Mix		
	Clear	100%	100%	98.5%		
	Specific gravity	Part A	Part B	Mix		
		1.04 - 1.06	1.13 - 1.14	1.05 - 1.10		
	Thinner Recommended	XYLENE				
	Working Time (25°C / 40% R.H.)	35 - 45 minutes				
	Abrasion Resistance, ASTM D4060, Taber Abrader CS-17 Wheel / 1000g (2.2 lbs.) / 1000 cycles	30 mg loss				







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	Adhesion, ASTM D4541 Concrete-primer							
			>500 psi (substrate ruptures)					
	Water Absorption, ASTM D570			.2%				
	Water Vapor Transmission, ASTM E96 Water Procedure B Film 0.01cm (0.004") Hardness (Shore D), ASTM D2240 Flexibility, 1/8" Mandrel, ASTM D1737 Falling Sand Abrasion Resistance (L sand/ 1 dry mil), ASTM D968							
			1 perm					
			75-78					
			Pass					
			e 45					
	Viscosity @ 25°C			Part A		Part B	A/B Mix	
				400-500		150-180	300-400	
				Substrate Tem	р	Minimum	Maximum	
	Recoat			± 10 °C		1 day	2 days	
				± 20 °C		6 hours	12 hours	
				± 30 °C		4 hours	8 hours	
	Curing Details	Substrate Temp		Foot Traffic		Light Traffic	Full Cure	
		±10 °C		3 days		7 days	10 days	
		± 20 °C		2 days		5 days	7 days	
		± 30 °C		1 day		3 days	5 days	
	Gloss, ASTM D523	3	95+					
	Fire Rating CAN/ULC S102			Estimated on similar coating				
	Flame spread			5				
	Smoke developed			94				
	Tensile Strength, ASTM D638			7000-8000 psi				
	Compressive Strength (psi MPa), ASTM D695		9000 - 10000					
	*W/Quartz *W/Chips Elongation at Break, ASTM D638		13700					
			12200					
			100 - 110%					
	Tear Strength (PLI), ASTM D2240		350					
	VOC (g/L)			0				
	surfa	ce will require mo	ore the	material in order indicated visco	r to sity	cover the same s	uct only.	







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	Old Congrete				
SURFACE PREPARATION	Old Concrete Concrete surface must be cleaned and mechanically prepared using shotblasting, sand blasting, and/ or diamond grinding. All oils, sealers, curing agents, waxes and fats must be removed prior to product application. Do not apply onto wet substrates. Chloride, moisture, and pH levels should be checked prior to application. Strongly recommended to use primer (XPS-POLYSC-2G) prior to application of XPS-POLYSC-2G. All cracks and substrate imperfections should be filled and repaired prior to application.				
	New Concrete New concrete should be allowed to cure for a minimum of 30 days. Compression resistance of concrete must be at least 25 MPa (3625 lbs./inch²) after 28 days and traction resistance must be at least 1,5 MPa (218 lbs./inch²). Shotblasting, sand blasting, and/or diamond grinding is required to remove the surface laitance that appears during the concrete finishing and curing process. XPS-POLYSC-2G primer is recommended to be used to seal porous concrete surfaces prior to application. All cracks and substrate imperfections should be filled and repaired prior to application.				
MIXING	Materials should be pre-conditioned to a minimum of 15°C (50°F) prior to use. Thoroughly mix each component separately using paddle mixers and a drill for a minimum of 2 minutes to place the solids content evenly in suspension. Pour component B into component A using the proper mixing ratio of 1A:1B by volume. Mix both components for at least 3 minutes using a drill at low revolution (300 to 450 rpm) to reduce trapping of air. While mixing, scrape bottom and walls of container at least once to ensure a homogeneous mix. Only prepare quantity that may be applied during pot life of mixture.				
APPLICATION	Apply mixed product on the prepared surface tightly (thin film) using a rubber rake and pass a roller to obtain a uniform coating. Avoid creating puddles.				
CLEANING	Clean all application equipment with a specified cleaner. Once the material hardens it can only be removed mechanically. If the product splatters, wash thoroughly with hot soapy water.				
OVERLAPS	Subsequent overlaps must be applied when primer is still wet or tacky. If primer has dried, reprime. Porous substrates may require multiple priming.				
SUGGESTIONS	Sprinkle the primed area lightly with aggregate to provide better footing.				
RESTRICTIONS	 Minimum/Maximum temperature of substrate: 15°C / 30°C (59°F / 86°F). Maximum relative humidity during application and curing: 85%. Humidity content of substrate must be < 4% when coating is applied. Do not apply on porous surfaces where a transfer of humidity may occur during application. Protect from humidity, condensation and contact with water during the 24-hour initial curing period. 				
HEALTH AND SAFETY	In case of skin contact, wash with water and soap. In case of eye contact, immediately rinse with water for at least 15 minutes. Consult a physician. For respiratory irritation, move affected person to fresh air. Remove contaminated clothes and clean before reuse.				
	Components A and B contain toxic ingredients. Prolonged contact of this product with the skin is susceptible to provoke an irritation. Avoid eye contact. Contact with product may cause serious burns. Avoid breathing vapors release from this product. This product is a strong sensitizer. Wear safety glasses and chemical resistant gloves. A breathing apparatus filtering organic vapors approved by the NIOSH/MSHA is recommended. Work in well ventilated area.				
	Consult the material safety data sheet for further information.				
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CHEMICAL RESISTANCE				
CHEMICAL	RESULTS (25°C)			
Acetic Acid 100%	C C			
Acetone	C			
Ammonium Hydroxide 50%	RC			
Benzene	C			
Brine Saturated H ₂ 0	R			
Chlorinated H ₂ 0	R			
Clorox (10%) H ₂ 0	R			
Diesel Fuel	RC			
Gasoline	RC			
Gasoline/5% MTBE	RC			
Gasoline/5% Methanol	RC			
Hydrochloric Acid 20%	R			
Hydrochloric Acid 10%	NR			
Hydraulic Fluid (oil)	RC			
Isopropyl Alcohol	R			
Lactic Acid	RC			
MEK	RC			
Methanol	R			
Methylene Chloride	С			
Mineral Spirits	RC			
Motor Oil	R			
MTBE	С			
Muriatic Acid 10%	R			
NaCl/H20 10%	R			
Nitric Acid 20%	NR			
Phosphoric Acid 10%	R			
Phosphoric Acid 50%	NR			
Potassium Hydroxide 10%	R			
Potassium Hydroxide 20%	R, Dis			
Propylene Carbonate	RC			
Skydrol	С			
Sodium Hydroxide 25%	R			
Sodium Hydroxide 50%	R, Dis			
Sodium Hypochlorite 10%	R			
Sodium Bicarbonate	R			
Stearic Acid	R			
Sugar/H ₂ 0	R			
Sulfuric Acid 10%	R			
Sulfuric Acid >50%	RC			
Toluene	R			
1,1,1-Trichloroethane	С			
Trisodium Phosphate	R			
Vinegar/H ₂ 0 5%	R			
H ₂ 0	R			
H ₂ 0 14 days at 82°C	R			
Xylene	RC			

R = Recommended/ little or no visible damage

RC= Recommended Conditional/ some effect, swelling or discoloration

C= Conditional/ cracking-wash within one hour of spillage to avoid affects

NR= Not Recommended

Dis= Discoloration



