



Technical data sheet

August 31, 2023
Revision #2



SCI-300-8084 SC

Aliphatic Polyaspartic

DESCRIPTION	SCI-300-8084 SC is a two-component, 100% solids, V.O.C. compliant, long working time aliphatic polyaspartic, developed for UV stable floor topcoats. 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	<ul style="list-style-type: none">■ Marine protection for fiberglass, steel, concrete or wood■ 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 applications		
ADVANTAGES	<ul style="list-style-type: none">■ 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.) and 37.8 L (10 US gal.)	
	Color	Upon Request	
	Yield/Recommended Thickness Primer	SCI-100 or SCI-300-8084 SC	5-10 mils D.F.T. (350-150 ft ² /gal)
	Finish Coat	SCI-300-8084 SC	6-10 mils D.F.T. (350-150 ft ² /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 @ 23°C (73°F) and 50% R.H.	Solids Content, by weight Clear	Part A	Part B
	100%	100%	98.5%
	Solids Content, by volume Clear	Part A	Part B
	100%	100%	98.5%
	Specific gravity	Part A	Part B
	1.12 - 1.13	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	

TDS

August 31, 2023
Revision #2

SCI COATINGS INC. • 8320 GRENACHE, ANJOU (QC) H1J 1C5, CANADA
scicoatings.com

page 1 of 4



SCI-300-8084 SC

Aliphatic Polyaspartic

	Adhesion, ASTM D4541 Concrete-primer	>500 psi (substrate ruptures)				
	Water Absorption, ASTM D570	0.2%				
	Water Vapor Transmission, ASTM E96 Water Procedure B Film 0.01cm (0.004")	1 perm				
	Hardness (Shore D), ASTM D2240	75-78				
	Flexibility, 1/8" Mandrel, ASTM D1737	Pass				
	Falling Sand Abrasion Resistance (L sand/ 1 dry mil), ASTM D968	45				
	Viscosity @ 25°C	Part A	Part B	A/B Mix		
		400-500	150-180	300-400		
	Recoat	Substrate Temp	Minimum	Maximum		
		± 10 °C	1 day	2 days		
		± 20 °C	6 hours	12 hours		
		± 30 °C	4 hours	8 hours		
	Curing Details	Foot Traffic	Light Traffic	Full Cure		
		±10 °C	3 days	7 days		
		± 20 °C	2 days	5 days		
		± 30 °C	1 day	3 days		
	Properties	Gloss, ASTM D523	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	13700			
		*W/Chips	12200			
		Elongation at Break, ASTM D638	100 - 110%			
		Tear Strength (PLI), ASTM D2240	350			
		VOC (g/L)	28			
	Please note, that the indicated mileage is calculated for flat surfaces. A porous or imperfect surface will require more material in order to cover the same surface area.					
	Please note that the indicated viscosity is for clear product only. Any addition of colorant may affect the viscosity.					

TDS

August 31, 2023
Revision #2

SCI COATINGS INC. • 8320 GRENACHE, ANJOU (QC) H1J 1C5, CANADA
scicoatings.com



SCI-300-8084 SC

Aliphatic Polyaspartic

SURFACE PREPARATION	<p>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 (SCI-100) prior to application of SCI-300-8084 SC. All cracks and substrate imperfections should be filled and repaired prior to application.</p> <p>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. SCI-100 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.</p>
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	<ul style="list-style-type: none">■ 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	<p>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.</p> <p>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.</p> <p style="color: red;">*Consult the material safety data sheet for further information.*</p>
IMPORTANT NOTICE	All statements, recommendations and technical information contained in this document are accurate to the best knowledge of SCI COATINGS INC. The data relates only to the specific material designated herein. It may not be valid if used in combination with any other materials. It is the users' responsibility to verify suitability of this information for their own particular use, and to test this product before use. SCI COATINGS INC. assumes no legal responsibility for use upon these data. SCI COATINGS INC. assumes no legal responsibility for any direct, indirect, consequential, economic, or any other damage except to replace the product or refund the purchase price as set out in the purchase agreement.



SCI-300-8084 SC

Aliphatic Polyaspartic

CHEMICAL RESISTANCE

CHEMICAL	RESULTS (25°C)
Acetic Acid 100%	C
Acetone	C
Ammonium Hydroxide 50%	RC
Benzene	C
Brine Saturated H ₂ O	R
Chlorinated H ₂ O	R
Clorox (10%) H ₂ O	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	C
Mineral Spirits	RC
Motor Oil	R
MTBE	C
Muriatic Acid 10%	R
NaCl/H ₂ O 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	C
Sodium Hydroxide 25%	R
Sodium Hydroxide 50%	R, Dis
Sodium Hypochlorite 10%	R
Sodium Bicarbonate	R
Stearic Acid	R
Sugar/H ₂ O	R
Sulfuric Acid 10%	R
Sulfuric Acid >50%	RC
Toluene	R
1,1,1-Trichloroethane	C
Trisodium Phosphate	R
Vinegar/H ₂ O 5%	R
H ₂ O	R
H ₂ O 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

TDS