

DESCRIPTION:

ResinForce® E85 Polyaspartic is a two-component, solvent-based aliphatic polyaspartic coating engineered to protect concrete surfaces while delivering an appealing finish. It offers outstanding mechanical strength, superior UV stability, and exceptional resistance to chemicals and solvents.

USES:

Residential Garages and Basements
Commercial Restaurants, Food Prep, Bars, Distilleries, Wineries, Breweries
Classrooms, Laboratories, Mechanical Rooms • Areas of light manufacturing, storage, or production
Retail Showrooms, Sales Floors, Waiting Rooms • Fiberglass, steel, concrete or wood • Aircraft hangar floors
Maintenance facilities • Industrial shop floors or Car Wash Bays • Chemical Containment

ADVANTAGES:

Extended working time (30-40 mins) and long pot life (60-90 mins)
Displays fast cure times with excellent adhesion • Superior chemical resistance
Superior weather and abrasion resistance • Good gloss retention • Easy to mix 1:1 ratio by volume
Excellent adhesive properties, allowing application on other firm and hard coating, as well as a good bond to the substrate

TECHNICAL PROPERTIES:

ResinForce® E85 Polyaspartic Properties: Based on 73-77°F @ 40% RH*

Working time.....	30 - 40 Mins	Pot Life.....	60 - 90 Mins
Tack Free.....	5 - 7 Hours	Re-Coat Time.....	4 - 6 Hours
Light Traffic.....	24 - 48 Hours	Full Cure.....	7 Days*

*Note: Higher temperatures and humidity will shorten pot life and cure times. Colder temperatures and/or lower humidity will extend pot life and cure times.

SURFACE PREPARATION:

The concrete surface must be deemed mechanically and structurally sound, thoroughly clean of debris, oils, fats, waxes, sealers, curing agents, and other contamination. New concrete must be fully cured for a minimum of 28 days. Compressive strength of concrete should be at least 3,500 psi (24 Mpa) @ 28 days and at least 215 psi (1.5 Mpa) in tension at time of product application. 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). Do not apply to wet concrete. Chloride, moisture, and pH levels should be checked prior to application. Mechanically prep the concrete surface by shot blasting or diamond grinding with 30 grit or coarser diamonds to achieve a dust free CSP-3 profile, which is required to remove the surface laitance that appears during the concrete finishing and curing process and obtain maximum mechanical bond. Substrate and material temperature should be 59°F - 86°F with a maximum relative humidity of 85%. If applied outside these limits the coating may have excessive air entrapment, bubbles, blisters, blushing, hazing, curing issues, or adhesion issues. All cracks and substrate imperfections should be filled and repaired with **ResinForce® EasyMend®** prior to application.

MIXING:

Materials should be at least 50°F prior to use. Pre-mix Part A and Part B separately with a slow speed mixer for 1-2 minutes prior to combining components together to ensure uniform distribution of raw materials. Pour 1 Part of Part B into 1 Part of Part A by volume, then mix with a helix or jiffy mixer for 3 minutes at 300-450 rpm LOW SPEED, scooping sides, bottom, and all around for a good uniform mix. Avoid high speed mixing which will cause entrapment of air during mixing. Make sure to scrape the walls and bottom of container with straight edged trowel or mixing stick at least once to ensure homogeneous mix. Do not mix more material than can be applied within working time limits. For best results, pour contents into a separate clean container and mix again for 30 seconds to avoid any unmixed material clinging to walls of the container. Avoid creating a vortex in the material which could introduce air and/or moisture content to the mixture. Immediately pour contents out of the pail onto the floor to begin spreading. Discard the pail promptly, do not leave it tilted upside down on the floor.

COVERAGE RATE:

Primer Direct to Concrete: 150 – 265 sq ft per gallon (6-11 mils)*

Top Coat over Full Broadcast Flake Floors: 130 – 200 sq ft per gallon (8-12 mils)*

Grout Coat over Full Broadcast Quartz: 100 – 150 sq ft per gallon (11-16 mils)*

*Coverage rates may vary depending upon surface porosity, texture, application method and prior coating application. Excessive build up should be avoided.

APPLICATION:

Apply mixed material by pouring onto the surface and spread with a flat squeegee or small notch squeegee. Then back roll with an 18" lint free shedless 3/8" nap roller. Avoid creating puddles. Use a brush or small roller for corners and areas hard to maneuver larger squeegees/rollers. If the material becomes thick while applying and sticking to the application tools, stop applying and discard the mixed material. At this point it has reached the end of the usable pot life.

Subsequent overlaps must be applied when primer is still wet or tacky. If primer has dried, reprime. Porous substrates may require multiple priming.

Clean-up tools and equipment with Xylene. Wash hands and skin carefully with warm soapy water. Once product has hardened, it may only be removed through mechanical means.

PRECAUTIONS AND LIMITATIONS

- Prior to application, measure and confirm Substrate Moisture Content, Ambient and Surface temperatures and Dew Point. Moisture within substrate must be $\leq 4\%$ by mass as measured by Tramex® type concrete moisture meter on mechanically prepared surface.
- AVOID CONDENSATION. The substrate must be at least 6 F above Dew Point to reduce risk of condensation. Condensation may lead to failure in adhesion.
- Avoid situations where substrate temperature is considerably lower than ambient temperature. Ambient Relative Humidity must be below 85% during application and curing process.
- Do not add thinners or solvents to mix. Do not add water. Dispose of waste materials in accordance with government regulations. The use of safety glasses and protective gloves is required.

WARNING!

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 is recommended. Work in well ventilated area.

PART A INGREDIENT DISCLOSURE:

INGREDIENT DISCLOSURE:

CAS 136210-32-7	1,1'-Methylenebis[(3-methylcyclohexyl-4)-2-amino-butanedioic acid], tetraethyl ester
CAS 136210-30-5	Tetraethyl N,N'-(methylenedicyclohexane-4,1-diyl)bis-di-aspartate; (Aspartic Acid Ester)
CAS 108-32-7	Propylene carbonate
CAS 64742-95-6	Light aromatic petroleum naphtha,
CAS 95-63-6	1,2,4 Trimethylbenzene
CAS 1330-20-7	Xylene
CAS 98-82-8	Cumene.

PART B INGREDIENT DISCLOSURE:

INGREDIENT DISCLOSURE:

CAS 64742-95-6	Light aromatic petroleum naphtha,
CAS 822-06-0	Hexamethylene diisocyanate.

WARRANTY

All statements, recommendations and technical information contained in this document are accurate to the best knowledge of **ResinForce® Products, LLC**. 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 the suitability of this information for their own particular use, and to test this product before use. **ResinForce® Products, LLC** assumes no legal responsibility for use upon this data. **ResinForce® Products, LLC** 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.

FOR PROFESSIONAL USE ONLY!

This data sheet provides typical properties for **ResinForce® Products, LLC**. Before using this product, the user is advised and cautioned to make their own determination and assessment of the safety and suitability of the product for the specific use in question and is further advised against relying on the information contained herein as it may relate to any specific use or application. Please consult our SDS for further safety information.

TECHNICAL DATA @ 77°F:

Packaging	Packaged in factory proportioned packaging for easy handling and mixing. Resin (A): 4 KG Hardener (B): 4.3 KG			
Storage	All components should be stored in dry, temperature-controlled areas between 12-28°C. Do not expose to freezing or excessive high heat.			
% Solids by weight	82%			
VOC Content	>200 g/L			
Gel Time (100 g)	60-90 Minutes			
Specific Gravity	Part A	Part B	Mix	
	1.05 - 1.10	1.05 - 1.10	—	
Mixing Ratio by volume	100:100			
Mixing Ratio by weight	100:98			
Mileage (On Flakes)	8 - 12 Mils/130-200 ft ² /US gal			
Mileage (On Solid Color)	8 Mils/200 ft ² /US gal			
Color	Clear, Beige and Grey			
Working Time (23°C/12% RH)	30 - 40 minutes			
Mixing Ratio by weight	100:98			
Tack Free Time (8 mils) (23°C/12% RH)	5 - 7 Hours			
Mixed Viscosity	150 - 200 cps			
Suggested # Of Coats	1 - 2 Color			
Recoat Time (min/max)	4 - 6 hours / 24 hours			
	Foot Traffic	12 - 24 hours		
	Light Traffic	2 days		
	Full Cure	7 days		
Shelf Life	12 months unopened			
Compressive strength ASTM D695	9000 - 10000 psi			
Bond Resistance, ASTM D4541	500 psi			
Tensile Strength, ASTM D638	6000 - 7000 psi			
Hardness (Shore D), ASTM D2240	75 - 80			
Water Vapor Transmission ASTM E96	1 Perm			
Elongation, D638	100%			
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	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
Abrasion Resistance ASTM D4060 (CS17/1000 CYCLES/1000 g)	30 mg			
Water Absorption (%) ASTM D570	0.2			