

DESCRIPTION:

RF-100 Fast Cure 6H Part B is the fast cure hardener curing agent for the two-component 100% solids epoxy coating system. It exhibits very good chemical and physical properties, and is resistant to cold and crystallization. Can be used on concrete floors, countertops, and other decorative surfaces. When used on concrete floors it is recommended to be applied over an MVB primer.

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

ADVANTAGES:

Dense surface, resistant to bacteria and moisture, and is easy to clean.
May apply several layers onto itself with excellent adhesion.
Contains no solvent with a very low VOC content (VOC = 88g/liters), allowing for interior application without harmful odors.
Excellent adhesive properties allow application onto many different types of substrates

TECHNICAL PROPERTIES:

RF-100 Fast Cure 6H Properties: Based on 73-77°F @ 50% RH*

Working time.....	10 - 15 Mins	Pot Life.....	10 - 15 Mins
Tack Free.....	1 - 3 Hours	Re-Coat Time.....	3 - 6 Hours
Light Traffic.....	1 - 2 Days	Full Cure.....	5 - 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 59°F prior to use. Pre-mix Part A and Part B separately with a slow speed mixer, or vigorously shake containers for 1-2 minutes prior to combining components together to ensure uniform distribution of raw materials. When using a 3-Gallon Kit, the Part A container can be used as the mixing container. Pour entire contents from the Part B container into the Part A container using proper mix ratio 2A : 1B by volume, then mix with a helix or jiffy mixer for 3 minutes at 300-450 rpm at various angles, directions, scooping sides, bottom, and all around for a good uniform mix. Avoid unnecessary 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. Make sure to empty ALL contents of PART B into PART A to avoid system weakening or incomplete curing. 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.

APPLICATION:

ResinForce® RF-100 should be applied when material and slab temperatures are between 55-85°F and humidity below 85%. Apply mixed material by pouring onto the surface and spread with a 1/8" notch flexible squeegee. Then back roll with an 18" lint free shedless 3/8" nap roller. 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.

Additional coats of this same product may be applied when surface is tack-free. Do not exceed specified hours for re-coat time. By exceeding this re-coat time limit, the entire surface must be thoroughly sanded to achieve desired profile for a proper mechanical bond. Clean up all dust and debris created by sanding prior to applying next coat.

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 & 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. 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. In case of contact, flush areas with abundance of water for 20 minutes and seek medical assistance. Wash skin with soap and water. Use only in well-ventilated areas.

- Minimum/Maximum temperature of substrate: 59 °F / 86 °F.
- Maximum relative humidity (RH) during application and curing: 85 %.
- Moisture Content (MC) 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.
- Surface may discolor in areas exposed to regular ultraviolet light.

PART A INGREDIENT DISCLOSURE:

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CAS 25085-99-8 Oxirane, 2,2'-[[1-methylethylidene]bis(4,1-phenyleneoxymethylene)]bis-, homopolymer
CAS 17557-23-2 Oxirane, 2,2'-[[2,2-dimethyl-1,3-propanediyl]bis(oxyethylene)]bis
CAS 28064-14-4 Phenol, polymer with formaldehyde, glycidyl ether
CAS 100-51-6 Benzenemethanol
CAS 68609-97-2 Oxirane, 2-[[C12-14-alkyloxy)methyl] derivs

PART B INGREDIENT DISCLOSURE:

INGREDIENT DISCLOSURE:

CAS Proprietary Epoxy adduct
CAS 2855-13-2 Isophorone diamine
CAS 84852-15-3 4-Nonylphenol, branched
CAS 100-51-6 Benzyl alcohol

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 MORE INGREDIENT INFORMATION VISIT WWW.RESINFORCE.COM

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:					
		PART A Resin	PART B Hardener		
		2.0 US Gal.	1.0 US Gal.		
Color		PART A Upon Request	PART B Clear to Amber	Mix Upon Request	
Recommended Thickness		Primer 6-8 mils Finish Coat 8-12 mils			
Mileage per gallon (8 mils thick)		200 ft ²			
Mileage for Slurry Application (50% Silica Sand) (12 mils thick)		125 ft ²			
Mileage for Trowel Epoxy Application (85% Silica Sand) (24 mils thick)		60 ft ²			
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 - 2:1			
Mix Ratio, by weight	Clear	A:B=100: 41-48			
	Colors	A:B=100: 39-45			
Pot Life (454g)		40-50 minutes @ 77°F			
Solids Content, by weight		100%			
Solids Content, by volume		100%			
Density (kg/L)		PART A	PART B	Mix	
	Clear	1.05 - 1.10	0.9 - 1.0	—	
	Colors	1.10 - 1.15	0.9 - 1.0	—	
Thinner Recommended		XYLENE			
Before Applying RF-100 over Primer		+ 50°F	24 Hours	3 Days	
		+ 68°F	12 Hours	2 Days	
		+ 86°F	6 Hours	1 Day	
Before Applying Second Coat of RF-100	<u>Substrate Temperature</u>		<u>Minimum</u>	<u>Maximum</u>	
		+ 50°F	30 Hours	3 Days	
		+ 68°F	24 Hours	2 Days	
		+ 86°F	16 Hours	1 Day	
Curing Details	<u>Substrate Temperature</u>	<u>Foot Traffic</u>	<u>Light Traffic</u>	<u>Full Cure</u>	
	+ 50°F	30 Hours	5 Days	10 Days	
	+ 68°F	24 Hours	3 Days	7 Days	
	+ 86°F	16 Hours	2 Days	5 Days	
	<i>Times are approximate and will be affected by changing ambient conditions, especially changes in temperature and relative humidity.</i>				
Bond Resistance (psi), ASTM D4541		>300 (substrate ruptures)			
Permeability (%), ASTM D570		0.3 % VRM			
Hardness (Shore D), ASTM D2240		85-90			
Abrasive Resistance, ASTM D4060 (CS17 / 1000 cycles / 1000g)		0.10 g			
Viscosity @ 77°F		PART A	PART B	Mix	
	Clear	1200 - 1400	200-400	650 - 750	
	Colors	1400- 1600	200-400	1000 - 1400	
Tensile Resistance (psi), ASTM D638		6500			
Compressive Strength (psi MPa), ASTM D695		12000-13000			
Elongation %, ASTM D638		6.7%			
<i>*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</i>					