

ELASTAFLEX™ CR

CHEMICAL RESISTANT POLYUREA
PRELIMINARY

DESCRIPTION

ELASTAFLEX™ CR is specifically created as a secondary containment liner for hydrocarbons including crude oil, diesel fuel, gasoline, and alcohols. This very economical polyurea exhibits very high tensile strength and elongation. ELASTAFLEX™ CR is a unique blend of aliphatic and aromatic polymer chemistry with greater color/gloss retention and is more UV resistant than aromatic polyureas. Unlike most spray-applied polyureas, ELASTAFLEX™ CR is available with SPI's cutting-edge ULTRA BOND™ technology. SPI's advanced ULTRA BOND™ chemistry is coined "the duct tape molecule". ULTRA BOND™ has the unique advantage of adhering to most properly prepared organic and inorganic (new and aged) surfaces without requiring a primer. Like duct tape, ELASTAFLEX™ CR with ULTRA BOND™ gains adhesion over time.

FEATURES

- Chemical Resistant.
- Superior color stability and gloss retention compared to aromatic polyurea elastomers*.
- Eco-friendly, 100% solids, no solvents, and zero VOCs.
- Extended gel time for better flow-out providing a smooth, more uniform finish.
- High build up to any thickness in one application.
- Compliant with FDA/USDA for incidental food contact.
- ElastaFLEX™ CR liner is very supple with minimal shrinkage (less than 1% at 7 days).

RECOMMENDED USES

- On geotextile fabric to form a monolithic liner.
- Primary and secondary containment.
- Steel and concrete tanks.
- Barge and ship holds.
- Waste water treatment facilities.
- Chemical transportation.

COLORS

Note: $\mathsf{ELASTAFLEX}^{\mathbb{M}}$ CR is an <u>aromatic</u> polyurea; therefore, as with all aromatics, superficial oxidation will occur. <u>Aliphatic</u> urethane and other suitable topcoats can be used where long-term color stability and increased longevity in full sun exposure are of critical importance.

PACKAGING

This product sold in standard 110 gallon drum and 550 gallon tote sets. Available in other container sizes, contact sales representative for further information. Non-standard containers may require a longer lead time.

DRY PROPERTIES*

55 mils (1.5 mm)*				
Tensile Strength ASTM D638	± 4000 psi (28 MPa)			
Elongation ASTM D638	± 400%			
Hardness (Shore A) ASTM D2240-81	94 ± 5			
Hardness (Shore D) ASTM D2240-81	43 ± 5			
Exposure Temperature**	-60° - +200°F (-50° - +93°C)			

CURING SCHEDULE

Gel	± 6 sec	
Tack Free	± 20 - 30 sec.	
Post Cure**	24 hour	
Recoat	30 min 8 hours	

^{*} All cured film properties are approximate since processing parameters, ad-mixture types, and quantities change physical properties of the cured elastomer. Elevated temperatures will accelerate the curing process and shorten the re-coat window.

The samples for tests were sprayed with Graco HXP3 @ 2,500 psi (17 mpa) dynamic pressure at the gun. Primary heater and hose heat 170°F (77°C) Graco MP Fusion Gun with 29/29 mixing chamber and .040 ceramtip.

Note: Currently, this product is manufactured exclusively in our Lakewood, Washington facility. Therefore, please allow additional transit time and additional transportation charges to certain geographic areas.

^{**} Test performed in a dry, static environment.

^{***} Complete polymerization to achieve final strength can take up to several days or weeks, depending on a variety of conditions or product type. All samples for above tests were force cured 48 hours or aged for more than three weeks. It is recommended that the user perform their own independent testing.

TEST INFORMATION

Abrasion Resistance 1 kg.	CS-17	14.6 mg lost
1000 rev.	H-18	88 mg lost
Mandrel Bend Test ASTM D522-93b	Passed	Mandrel Size 1/4 - 60°F (-51°C)

WET PROPERTIES

Solids by Volume	100%	
Solids by Weight	100%	
Volatile Organic Compounds	ds 0 lbs./gal (0 g/l)	
Theoretical Coverage DFT	100 sq. ft. @ 16 mils/gal	
Weight per gallon (approx.)	9.21 lbs. (4.17 kg)	
Number of coats	1-2	
Mix Ratio (by volume)	1 "A" : 1 "B"	
Viscosity	A: 1000 ± 200 mPa.s B: 1000 ± 100 mPa.s	
Shelf Life Unopened Containers @ 60 - 90°F (15 - 32°C)	6 Months	

Minimum/maximum material/container temperature to supply proportioner "A" side is 85° - 95°F (29° - 35°C) "B" 70° - 80°F (21° - 27°C).

GENERAL APPLICATION INSTRUCTIONS

Apply ELASTAFLEX™ CR only to clean, dry, sound, surfaces free of loose particles or other foreign matter. ELASTAFLEX™ CRR can be sprayed over a broad range of ambient and substrate temperatures. It is recommended that ELASTAFLEX™ CR be sprayed in multi-directional (north/south - east/west) passes to ensure uniform thickness.

Contact SPI technical service personnel for specific surface preparation for your application.

COMMON SUBSTRATES:

STEEL: 4-5 mil anchor profile is best for maximum adhesion and varies per application and conditions; adhere to proper SSPC standards.

WOOD: Apply polyurea onto a clean, dry, and sanded surface; free from burrs, splinters and loose debris. (It is recommended to prime wood and other porous surfaces before application of heated, fast-set polyureas to reduce pin holing).

CONCRETE: Prepare concrete in accordance with SSPC/ NACE Standards and SPI Concrete Prep Guide.

PREVIOUSLY APPLIED COATINGS: SPI recommends UB™ (ULTRA BOND™) products over existing coatings that are past the recoat window and/or application over other coatings. Contact SPI for additional information.

On all above listed substrates and others, please contact SPI Sales or Technical Support for more information specific to your application, including industry standards such as SSPC and NACE. Adhesion tests are always recommended prior to application.

MIXING & THINNING

Thoroughly agitate the "B" components of this product prior to application. Use a SPI folding blade mixer, or equivalent equipment approved by SPI. Install mixer though the extra 2" bung hole provided on all "B" drums. Care must be taken not to cross contaminate the individual components with the mixing equipment. Thinning is not required. Using any thinner may adversely affect product performance.

PROCESSING EQUIPMENT & SETTINGS

MACHINES:				
GRACO (Gusmer, Glass- craft)	• A-25* • A-XP1 • E-10 HP • E-20* • E-30* • E-XP1 • E-XP2 • H-20/35 Pro • H-25* • H3500 • H-40*	 H-50* HV-20/35 H-XP2 H-XP3 Reactor2 E-XP2 Reactor2 H-XP3 Reactor2 H-XP3 Reactor2 E-30* Reactor2 H-30* Reactor2 H-40* Reactor2 H-50* 		
PMC	• GH-25* • GH-40* • PA-25* • PAX-25 • PH-2* • PH-25*	PH-40*PHX-2PHX-25PHX-40PMCA-20		
SPRAY FOAM EQUIP & MFG	• 5/12K* • 6/6K*	• 6/12K		
*2,000 psi machines				
GUNS:				
GRACO (Gusmer, Glass- craft)	Fusion APFusion MPGAP ProGX7-DIGX-8 Pro	• GX7-400 • P2 • P2 Elite • P2 Elite "C" • D7		

- **PMC** AP-2 **SPRAY FOAM** Boss **EQUIP & MFG**
- Standard 1:1 ratio, heated, plural-component equipment developing a minimum of 1700 psi (11.72 MPa) dynamic pressure at the gun with heating capabilities to 170°F (77°C) will adequately spray ELASTAFLEX™ CR.
- Machines capable of producing a higher dynamic psi may be required depending on the service environment the ELASTAFLEX™ CR will be exposed to. Consult SPI technical service personnel for additional information.
- · Proportioning machine primary heater temperature for application is 70°F (21°C).
- Hose temperature 160-170°F (71-77°C). A hose thermometer inserted under the insulation near the gun should read a minimum of 145-155°F (63-68°C).
- Physical properties will be enhanced when sprayed

at higher pressure (3000 psi or more); utilizing an impingement mix gun such as MP Fusion or GX7-DI gun.

 Do not use mixing chambers with output greater than 1.5 gallons per minute. Consult SPI technical service personnel for additional information.

If you own a machine that is not listed above please contact your SPI representative for information and instructions.

LIMITATIONS

- ELASTAFLEX™ CR is for professional use only.
- ELASTAFLEX[™] CR must be stored at temperatures between 60—90°F (15—30°C).
- Liquid temperature in containers/drums during application 70—100°F (21—38°C).
- Apply ELASTAFLEX[™] CR when surface and air temperatures are above 40°F (5°C) and the surface temperature is at least 5°F (3°C) above dew point and rising.
- Avoid moisture contamination in containers. Containers should not be released if contamination is suspected.
 CO² created pressure can develop. Do not attempt to use contaminated material.
- Undried air exposed to liquid components will reduce physical properties of the cured coating.

Note: The material supplied is a two component system (component "A"/component "B", which is used to formulate this product. The quality and characteristics of the finished polymer is determined by the mixture and application of the two components.

For the most up to date technical data sheet and/or safety data sheet visit our website at www.specialty-products.com.

GENERAL SAFETY, TOXICITY, & HEALTH

Safety Data Sheets are available for this coating material. Any individual who may come in contact with these products should read and understand the S.D.S. **CHEMTREC**

EMERGENCY NUMBER 1-800-424-9300 INT'L 1-703-527-3887.

WARNING: Contact with skin or inhalation of vapors may cause an allergic reaction. Avoid eye contact with the liquid or spray mist. Hypersensitive persons should wear protective clothes, gloves and use protective cream on face, hands and other exposed areas.

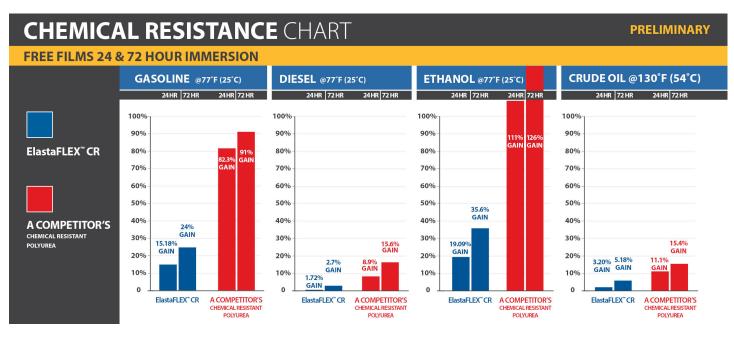
CLEAN UP: Use DPM, NMP, and Polyclean.

EYE PROTECTION: Safety eye wear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield.

SKIN PROTECTION: Personal protective equipment for the body should be selected based on the task being performed, the risks involved, and should be approved by an industrial hygiene specialist before handling this product. Chemical resistant gloves complying with applicable health and safety standards shall be worn when handling this product. Cover as much of the exposed skin area as possible with appropriate clothing. Refer to safety data sheet (SDS).

RESPIRATORY PROTECTION: Harmful if inhaled and may cause allergy or asthma symptoms. Use a respirator approved for isocyanates and organic vapors. If you are not sure, or not able to monitor levels, or if you are spraying in an enclosed/indoor area, use MSHA/NIOSH approved supplied air respirator. Consider the application and environmental concentrations when deciding if additional protective measures are necessary.

INGESTION: Do not take internally. It is believed that ingestion of polymeric isocyanates would not be fatal to humans, but may cause inflammation of mouth and stomach tissue.







WARRANTY & DISCLAIMER

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Product & Equipment Technical Assistance 24 hours - 7 days a week 800 627 0773



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SPI Media









