



# ELASTAFLEX™ 1.0

ELASTOMERIC MULTI USE POLYUREA

PRELIMINARY

## DESCRIPTION

**ELASTAFLEX™ 1.0 is an economical blend of aliphatic and aromatic polymer chemistry with greater color/gloss retention and more UV resistance than aromatic polyureas\*. ELASTAFLEX™ 1.0 is formulated to be processed through a SPI Synergy proportioner such as the LPG™.**

## FEATURES

- 100% solids, no solvents, and no VOCs.
- Extended tack time to allow deep surface penetration.
- Fast-set 1:1 ratio, return to service in hours, not days.
- Compliant with FDA/USDA for incidental food contact.

## RECOMMENDED USES (Nucleated)

### \*NUCLEATED SPRAY

- Roof coating used over metal, polyurethane foam, concrete, and certain single ply membranes.
- Liner for concrete tanks, ponds, lagoons, reservoirs, dikes, tunnels, barges, etc.
- Coating for steel or other surfaces subject to corrosion.
- Encapsulation for EPS or other types of flotation materials.
- Replace or repair failed sheet membrane liners, steel tanks, silos, and pipes.
- In between slab waterproofing.
- Encapsulation for asbestos, lead paint, or other dry hazardous materials (Consult SPI).
- Earthen containment used with geotextile membranes.

\*For nucleated spray a compressor capable of producing clean air @ minimum 20 cfm per minute @ 100 psi is necessary

### STATIC MIX POUR

- To fill or repair control joints, random cracks, and shallow spalls on concrete surfaces.

JOINTFILL COVERAGE RATES: Linear Feet Per Gallon					
INCHES	1.0	1.25	1.5	2.0	2.5
1/8"	154'	123'	103'	77'	61'
3/16"	102'	82'	68'	51'	41'
1/4"	77'	62'	51'	38'	30'
3/8"	51'	41'	34'	25'	20'

## COLORS

ELASTAFLEX™ 1.0 is available in SPI standard colors (\*White, Manila, Light Grey) Sand, Medium Grey, and Black. Custom colors will be quoted upon request. Aluminized ELASTAFLEX™ 1.0 is also available under the name ELASTAFLEX™ ARC. High pigment loading available where required at an additional cost.

\*Note: In continuous full-light exposure white or very light colors will change over a period of time. Aliphatic urethane, polyurea, and various aliphatic topcoats must be used when color stability is required.

## TYPICAL PHYSICAL PROPERTIES

<b>Service Temperature</b>	-50°F - +200° (-45°C - +93°C)
<b>*CURED FILM PROPERTIES sprayed with low pressure; unheated proportioner</b>	
<b>Tensile Strength ASTM D638</b>	± 900 psi (6 MPa)
<b>Elongation ASTM D638</b>	± 400%
<b>Hardness (Shore A) ASTM D2240-81</b>	60 ± 5
<b>Hardness (Shore D) ASTM D2240-81</b>	20 ± 5
Test samples were sprayed through LPG proportioner with SPI LOCK N LOAD gun using the SPI polyurea air nucleation kit.	

<b>*CURED FILM PROPERTIES poured with low pressure; unheated proportioner</b>	
<b>Tensile Strength ASTM D638</b>	± 2,300 psi (16 MPa)
<b>Elongation ASTM D638</b>	± 500%
<b>Hardness (Shore A) ASTM D2240-81</b>	70 ± 5
<b>Hardness (Shore D) ASTM D2240-81</b>	30 ± 5
Test samples were poured through LPG proportioner with Static Mix gun at 150 psi at 70°F (21°C)	

<b>*CURED FILM PROPERTIES sprayed with high pressure; high heat proportioner</b>	
<b>Tensile Strength ASTM D638</b>	± 2,400 psi (16.5 MPa)
<b>Elongation ASTM D638</b>	± 500%
Test samples were sprayed at 2800 psi at 165°F	
*All cured film properties are approximate since processing parameters, ad-mixture types, and quantities will change physical properties of the cured elastomer. All samples for above tests were un-tinted and force cured or aged for more than three weeks, it is recommended that the user perform their own independent testing.	

## WET PROPERTIES

<b>Solids by Volume</b>	100%
<b>Solids by Weight</b>	100%
<b>Volatile Organic Compounds</b>	0 lbs/gal (0 g/l)
<b>Theoretical Coverage DFT</b>	100 sq. ft. @ 16 mils/gal
<b>Weight per gallon (approx.)</b>	8.55 lbs. (3.87 kg)
<b>Number of coats</b>	1 - 2
<b>Mix Ratio (by volume)</b>	1 "A" : 1 "B"
<b>Viscosity</b>	A: 450 ± 50 cPs B: 775 ± 50 cPs
<b>Shelf Life Unopened Containers @ 60 - 90°F (15 - 32°C)</b>	Six Months

Minimum material/container temperature for application is 70°F (21°C).

## CURING SCHEDULE

<b>Gel</b>	± 25 - 50 sec.
<b>Tack Free</b>	± 1.5 - 2.5 min.
<b>Post Cure**</b>	24 hour
<b>Recoat</b>	0 - 24 hours

\*\*Complete polymerization to achieve final strength can take up to several days or weeks, depending on a variety of conditions or product type.

## PACKAGING

This product sold in standard 10, 30, 110 gallon drum, and 500 gallon tote sets.

## MIXING & THINNING

The polyol "B" component must be thoroughly power mixed each day, prior to use. Use a SPI folding blade mixer or equivalent equipment approved by SPI. Install mixer through 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. Contact a SPI technician regarding proper mixing equipment.

Thinning is not required. Using any thinner may adversely affect product performance.

## GENERAL APPLICATION INSTRUCTIONS

Apply ELASTAFLEX™ 1.0 only to clean, dry, sound surfaces free of loose particles or other foreign matter. A primer may be required, subject to type and/or condition of the substrate. Consult technical service personnel for specific primer recommendations and substrate preparation procedures.

ELASTAFLEX™ 1.0 can be sprayed over a broad range of ambient and substrate temperatures. Contact technical service personnel for specific recommendations, pricing, and availability of spray and auxiliary equipment.

To reduce the possibility of blisters and blow holes when

applying ELASTAFLEX™ 1.0 to cementitious or other porous surfaces:

1. Do not apply on damp or wet substrates.
2. Start spray application after peak heat of the day when surface is cooling.
3. Do not apply on areas in direct sunlight.
4. The temperature of the ELASTAFLEX™ 1.0 material and hose temperature should be approximately the same temperature as the substrate being sprayed. Adhere to instructions on container label.

It is recommended that ELASTAFLEX™ 1.0 be sprayed in multi-directional (north-south/east-west) passes to ensure uniform thickness.

To achieve optimum spray patten, air nucleation at the gun needs to be a minimum of 15 cfm at 90 psi.

Follow the instructions attached to "A" and "B" containers.

**Adhesion tests are always recommended prior to application.**

## SURFACE PREPARATION

It is recommended that oxidized polymeric surfaces be power washed with 2500 - 3500 psi water pressure to achieve maximum adhesion of ELASTAFLEX™ 1.0. If there is a possibility of surface contamination, scrub with a solution of 1/4 tsp. Dawn detergent plus 1 tbsp. of vinegar per 1 gallon of warm water, followed by a thorough water rinse.

SPI Prep Wipe™ applied prior to application of ELASTAFLEX™ 1.0 generally increases adhesion to certain finishes. For applications to concrete refer to SPI Concrete Prep Guide.

## RECOMMENDED EQUIPMENT SETTINGS

- Lock 'n Load™ gun with 12" mixer.
- Standard 1:1 ratio, LPG™ equipment developing a minimum of 50 - 500 psi (0.3 - 3.4 mpa)
- Substrate temperature should be a minimum of 50°F (10°C).

## LIMITATIONS

- This product is for professional use only. User must be proficient in the application of ELASTAFLEX™ 1.0 and the use of the high pressure heated plural component equipment used to apply it.
- This product must be stored at temperatures between 60–90°F (15–32°C).
- Apply product 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.
- Liquid temperature in containers during application of product should be 75°F (24°C) minimum, 85°F (29°C) optimum, and 95°F (35°C) maximum.
- Product and hose temperature during application should be 85°F (29°C).
- Avoid moisture contamination in containers. Containers should not be released if contamination is suspected. CO<sub>2</sub> created pressure can develop. Do not attempt to use contaminated material.
- 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.

- Undried air exposed to liquid components will reduce physical properties of the cured coating.

For the most up to date technical data sheet and/or safety data sheet (SDS) visit our website at [specialty-products.com](http://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 1-703-527-7196.**

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

**CONTAMINATION:** Avoid moisture contamination in containers. Containers should not be resealed if contamination is suspected, carbon dioxide created pressure can develop. Do not attempt to use contaminated material.

**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 are recommended. Cover as much of the exposed skin area as possible with appropriate clothing.

**RESPIRATORY PROTECTION:** Harmful if inhaled and may cause allergy or asthma symptoms. Ensure adequate ventilation. If the respirator is the sole means of protection, use a full-face supplied respirator. Use respirators and components tested and approved under appropriate government standards such as OSHA 29CFR 1910.134, NIOSH (US), or CEN (EU). 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.



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### WARRANTY & DISCLAIMER

Specialty Products, Inc. has no role in the manufacture of the finished polymer other than to supply its two components. It is vital that the person applying this product understands the product, and is fully trained and certified in the use of plural-component equipment. Specialty Products, Inc., an Alaska corporation, warrants only that the two components of this product shall conform to the technical specifications published in the product literature. The quality and fitness of the product are dependent upon the proper mixture and application of the components by the applicator. There are no warranties that extend beyond the description on the face of this instrument. Failure to apply the product within the parameters stated on this document shall void the warranty. SPECIALTY PRODUCTS, INC. MAKES NO WARRANTY OF MERCHANTABILITY OF THE PRODUCT OR OF FITNESS OF THE PRODUCT FOR ANY PARTICULAR PURPOSE. Specialty Products, Inc. makes no warranty as to the quality of any product modified, supplemented, tinted, or altered in any way after it leaves the manufacturing plant. Specialty Products, Inc. does not warrant that this product is suitable for use as a liner for potable water containers. Use of this product in a potable water container could be hazardous to health if it is improperly processed or applied. The liability of Specialty Products, Inc. for any nonconformity of the product to its technical specifications shall be limited to replacement of the product. The sole exclusive remedy of buyer, which is to have Specialty Products, Inc. replace any nonconforming product at no cost to buyer, is conditioned upon buyer notifying Specialty Products, Inc. or its distributor in writing of such defect within thirty days of the discovery of such defect. Specialty Products, Inc. shall not be liable for any direct, incidental, or consequential damages resulting from any breach of warranty. The data presented herein is intended for professional applicators or those persons who purchase or utilize this product in the normal course of their business. The potential user must perform any pertinent tests in order to determine the product's performance and suitability in the intended application, since final determination of fitness of the product for any particular use is the responsibility of the buyer. The aforementioned data on this product is to be used as a guide and is subject to change without notice. The information herein is believed to be reliable, but unknown risks may be present. Specialty Products, Inc. makes no warranties, expressed or implied, including patent warranties or warranties of merchantability or fitness of use, with respect to products or information set forth herein. Nothing contained herein shall constitute permission or recommendation to practice any invention covered by a patent without a license from the owner of the patent. Accordingly, the buyer assumes all risks whatsoever as to the use of these materials and buyer's exclusive remedy as to any breach of warranty, negligence, or other claim shall be limited to the purchase price of the materials. Failure to adhere to any recommended procedures shall relieve Specialty Products, Inc. of all liability with respect to the materials and the use thereof

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**Serving the Plural-Component Industry**

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



SPI Website

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SPI Media



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