

**POLYPRUFE - HIGH STRENGTH, CHEMICAL RESISTANT, SPRAY APPLIED POLYUREA**

**Description**

Polyprufe is a high tensile, high elongation, high build, fast-set, elastomer, specifically formulated to provide a tenacious bond to certain thermoset plastic surfaces. Unlike most spray-applied polyureas Polyprufe has the unique advantage of adhering to many polymeric substrates, both new and aged, typically without the use of primers or extensive surface preparation. It provides a cost effective, flexible, tough, resilient monolithic membrane with water and chemical resistance. Polyprufe is an excellent choice of elastomer to topcoat geotextile fabrics for primary or secondary containment.

**Field of Application**

In house testing has shown excellent adhesion to certain clean, dry surfaces including:

- Primers past the recoat window
- Epoxy
- SBR rubber
- Aged polyureas
- Latex rubber
- Automotive finishes
- Crumb rubber surfaces
- Roofing
- Melamine
- Glass
- Firestone SBS roofing membrane
- Sarnafil vinyl roofing membrane
- Line-X bed liner

**Limitations**

- This product is for professional use only.
- This product must be stored at temperatures between 60° F to 90° F (15 °C to 30 °C).
- Minimum material/container temperature for spray application is 70°F (21°C).
- Avoid moisture contamination in containers. Containers should not be resealed if contamination is suspected, CO2 created pressure can develop. Do not attempt to use contaminated material.
- Liquid temperature in drums during application 70°F (21°C) – 100°F (38°C).
- Apply Polyprufe when surface and air temperatures are above 40°F (5°C) and rising, and 7°F (-13°C) above dew point.
- Liquid components exposed to undried air will result in reduced physical properties of the cured coating.

Note: The material supplied is two components (Component "A" Component "B") used to formulate this product. The quality and characteristics of the finished polymer is determined by the mixture and application of the two components.

**Technical Data**

WET PROPERTIES @ 77°F (25°C)	
Solids by Volume	100%
Solids by Weight	100%
Volatile Organic Compounds	0 lbs/gal (0g/l)
Theoretical Coverage DFT	100 sq. ft. @ 16 mils/gal
Weight per gallon (approx.)	8.6 lbs. (3.87 kg)
Number of Coats	1-2
Mix Ratio	1 "A": 1 "B"
Viscosity (cps) @ 77° F (25 °C)	A: 500 approx. B: 650 approx.
Shelf Life Unopened Containers @ 60-90°F (15-32°C)	Six months

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

DRY PROPERTIES @ 70 mils (1.7 mm)**		
Tensile Strength ASTM D 412	>3900 psi (27.11 mpa)	
Elongation @77°F (25°C)	>300%	
Hardness (Shore D)	55	
Modulus @ 100% Elongation ASTM D412	>1600 psi (11.13 mpa)	
Modulus @ 300% Elongation ASTM D412	>3500 psi (24.32 mpa)	
Service Temperature	-50°F - +200°F (-45°C - +93.3°C)	
Tear Resistance ASTM D624	483 PLI (84.57 KN/m) ± 50	
Abrasion Resistance 1kg. 1000 rev.	CS-17 wheel	0.2 mg. lost
	H-18 wheel	90 mg. lost
	H-22 wheel	136 mg. lost

\*\*All cured film properties are approximate since processing parameters, ad-mixture types, and quantities will change physical properties of cured elastomer. All samples for above tests were force cured or aged for more than three weeks. It is recommended that the user perform their own independent testing.

CURING SCHEDULE	
Gel	± 3 sec.
Tack Free	± 6 sec.
Post Cure***	24 hours
Recoat	0-12 hours

\*It is recommended that oxidized surfaces be power washed with 2500 – 3500 psi water pressure to achieve maximum adhesion of Polyprufe. If there is a possibility of surface contamination, scrub with a solution of ¼ tsp Dawn detergent plus 1 tbsp of Vinegar, per 1 gallon of warm water, followed by a thorough water rinse.

\*\*\*Complete polymerization to achieve final strength and adhesion can take up to several days depending on a variety of conditions.