BASIC CONCEPTS INC
Justrite Safety Group

SC-3900-F

HIGH STRENGTH, CHEMICAL RESISTANCE

STRUCTRUAL COATINGS DIVISION

Revised 01-30-20

DESCRIPTION

SC-3900-F is a fast-set, high-performance, spray-applied, plural-component, elastomer. This system is based on amine-terminated polyether resins, amine chain extenders, and pre-polymers. It provides a cost effective flexible, tough, resilient monolithic membrane with water and chemical resistance.

SC-3900-F is an excellent choice of elastomer to topcoat geotextile fabrics for primary or secondary containment.

FEATURES

- 100% solids. No solvents. No VOCs.
- Fast-set: Handle in one minute or less.
- High dry temperature stability to 250° F (121°C) with intermittent temperatures to 300°F (148°C).
- High abrasion resistance.
- High elongation for crack bridging.
- Excellent encapsulation characteristics.
- Compliant with FDA/USDA for incidental food contact.
- Environmental Protection approved for fuel containment.

RECOMMENDED USES

- Coating for steel or other substrate exposed to corrosion.
- Liner for concrete tanks, concrete floors, ponds, lagoons, reservoirs, dikes, irrigation ditches, tunnels, barges, etc.
- Encapsulation for EPS or other types of flotation materials.
- Encapsulation for asbestos, lead paint or other dry hazardous materials.
- Replace or repair failed existing sheet membrane liners.
- Earthen containment used with or without geotextile
- Steel tanks, silos, and pipes
- Concrete parking decks
- Rock shield for pipelines
- Wastewater containment

COLORS

SC-3900-F is available in standard colors (Sand, Medium Grey and Black). Custom colors available upon request.

It should be noted that SC-3900-F is an aromatic urea; therefore, as with all aromatics color change and superficial oxidation will occur. SC-3900-F is available in a high-pigment, UV inhibited formulation for stand-alone applications, such as roofs and containment liners.

Aliphatic urethane, urea, and other suitable aliphatic topcoats can be used where long-term color stability and increased longevity in full sun exposure are of critical importance.

WET PROPERTIES @ 77ºF (25ºC)	
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.)	8.55 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: 550 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 @ 34 mils (0.8 mm)*		
Tensile Strength ASTM D 412	>3700 psi (25.7 mpa)	
Elongation @77°F (25°C)	>300%	
Hardness (Shore D) ASTM D 2240-03	±55	
Hardness (Shore A) ASTM D 2240-03	±98	
100% Modulus ASTM D 412	>1600 psi (11.13 mpa)	
300% Modulus ASTM D412	>3500 psi (24.32 mpa)	
Service Temperature	-60°F - +250°F (-50°C - +121°C)	
Tear Resistance ASTM D 624	483 PLI (84.57 KN/m) ± 50	
Abrasion Resistance 1 kg. 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 the 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.*

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

The samples for tests were sprayed with Gusmer 20/35 HP @ 2500 psi dynamic (172 bar). Primaries/Hose Heat 170°F (77ºC) MP Fusion Gun with 29/29 mixing chamber and .040 ceramtip.

CURING SCHEDULE	
Gel	± 5 sec.
Tack Free	± 7 sec.
Post Cure**	24 hours
Recoat	0-12 hours