SPECTRASHIELD
LINER SYSTEMS

SpectraGarde™ Potable Water Coating System

PRODUCT DESCRIPTION:

SpectraGarde is a 100% solids, multi-layered hybrid polymer coating system that contains no volatile organic compounds (VOC) or solvents. It has been formulated as a hard, durable, chemical resistant coating that also provides good flexibility and impact resistance. *SpectraGarde* is certified to NSF/ANSI Standard 61 by the NSF for lining potable water tanks, pipes, valves, and fittings in ambient temperature applications. The multi-layer system is typically applied at a minimum thickness of 500 mils. *SpectraGarde* remains flexible so that it expands and contracts with the substrate.

PRIMARY APPLICATIONS:

SpectraGarde adheres well to several substrates including concrete, steel, and other surfaces. Some typical uses include:

- POTABLE WATER TANK LINING
- POTABLE WATER PIPE LINING
- LINING FOR POTABLE WATER VALVES
- COATING POLYURETHANE FOAM

QUALIFICATIONS

- MEETS AWWA C222
- CERTIFIED TO NSF/ANSI STANDARD 61 BY NSF FOR LINING POTABLE WATER TANKS, PIPES & VALVES
- USDA BIOPREFERRED: CERTIFIED BIOBASED PRODUCT

COLOR:

- BEIGE

TYPICAL PHYSICAL PROPERTIES:

Tensile Strength (PSI)	ASTM D412	2776
Elongation (%)	ASTM D412	41
Hardness (Shore D)	ASTM D2240	71
Flexibility (3/4" Mandrel)	ASTM D522	Pass
Flash Point (ºF)	Pensky-Martin	>200
Taber Abrasion (mg loss) CS17 Wheel, 1 kg per 1000 cycles	ASTM D4060	45
Moisture Vapor Transmission (40 mils – grams/100 in^2)	ASTM F-1249-90	0.012
Water Absorption (%)	ASTM D570	0.49
Cathodic Disbondment (mm)	ASTM G95	0
Dielectric Strength (V/mil)	ASTM D149	527
Ratio – A/B	PBV	3:1

TYPICAL PROCESSING PROPERTIES:

Dry to Touch (75°F)	Minutes	120
To Normal Use (75°F)	Hours	24
Potable Water Use (75°F)	Hours	72

RECOMMENDED EQUIPMENT SETTINGS:

Resin Temperature	ºF	120-160
Activator Temperature	ºF	80-160
Line Temperature	ºF	120-160
Spray Pressure	psi	2000

SPECTRUM
4527 Sunbeam Road
Jacksonville, FL 32257
(904) 419-4889
FAX (904) 419-4892
www.spectrashield.com

APPLICATION EQUIPMENT:

This material must be applied utilizing a high pressure plural component pump (3:1 by Volume) such as a Graco® XP2 proportioning unit and a Graco® GX-7DI spray gun. This proportioning unit must be capable of supplying the correct pressure and heat for the required hose length on a consistent basis. This characteristic is mandatory to apply this elastomer in a consistent, efficient manner.

INSTALLATION RECOMMENDATIONS:

Substrate surfaces should be free of loose particles, laitance, rust, grease and spills. Chloride, moisture and pH levels should be checked prior to application. Always agitate the A-side before using.

CONCRETE:

Old Concrete - Sandblasting, shot blasting or water blasting is required to remove surface contamination. Any oils or grease must be removed prior to product application.

New Concrete - The concrete should be allowed to cure for a minimum of 28 days. Shot -blasting, sand blasting, water blasting or acid etching is required to remove the surface laitance that appeared during the curing process.

Carbon Steel- The steel must be prepared to a "near white metal," equivalent to SSPC 10 or NACE 2. For immersion service, a 3-mil blast profile is recommended.

SAFETY AND HANDLING:

Refer to MSDS sheets

SHELF LIFE AND STORAGE:

Twelve months in factory delivered unopened drums. Keep away from extreme heat, cold, and moisture. Maintain at a proper storage temperature of 40°F - 120°F.

CHEMICAL RESISTANCE:

Chemical	Result (25ºC)
Acetic Acid (<50%)	R
Acetone	NR
Ammonium Hydroxide (50%)	R
Benzene	NR
Brine-Saturated Water	R
Chlorinated Water	R
Clorox® (10%) H2O	R
Diesel Fuel	R
Gasoline	RC
Gasoline / 5% Methanol	RC
Hydrochloric Acid (37%)	R
Hydrofluoric Acid (10%)	R
Hydraulic Fluid (oil)	R
Isopropyl Alcohol	RC
Lactic Acid (85%)	R
MEK	RC
Methanol	RC
Methylene Chloride	NR
Mineral Spirits	RC
Motor Oil	R
NaCl / H2O (10%)	R
Nitric Acid (70%)	RC
Phosphoric Acid (85%)	R
Potassium Hydroxide	R
Propylene Glycol	R
Skydrol®	RC
Sodium Hydroxide (50%)	R
Sodium Hypochlorite (10%)	R
Sodium Bicarbonate	R
Soft Drink Concentrate	R
Sugar / H2O	R
Sulfuric Acid (50%)	R
Sulfuric Acid (70%)	RC
Sulfuric Acid (93%)	NR
Syrup	R
Toluene	RC
l,l,l-Trichlorethane	NR
Vegetable Oils	R
Water (Distilled)	R
Water (Fresh)	R
Water (Sea)	R
Xylene	RC

R → Recommended → Little or no visible damage
RC → Recommended Conditional → Some effect, swelling, discoloration
C → Conditional → Crackling – wash down within 1 hour of spillage to avoid defects
NR → Not Recommended

ADHESION RESULTS:

ASTM D-4541

Concrete	400 psi → Concrete Failure
Steel	>1500 psi