

SELECTION & SPECIFICATION DATA

Generic Type	Trowel applied, reinforced novolac vinyl ester lining
Description	Protecto-Line 900 uses several layers of thermosetting, filled novolac vinyl ester resin to build up the protection that metal and concrete need in chemical manufacturing or processing operations. When fully cured, the separate elements lose their individual identity and become a single, monolithic lining.
Features	<ul style="list-style-type: none"> • Low Permeability • Conductive Version Available
Typical Uses	<ul style="list-style-type: none"> • Plating Room Floors • Acid Neutralization • Food Processing • Plating Room Floors • Concentrated Acid Spills • Paint Rooms
Primer	Primer 27 or Primer 27C Primer 27 is designed to prevent abrasive blasted metal from developing rust bloom prior to the application of the Protecto-Line 900. Primer 27C is designed for applications on concrete where spark testing is required or specified.
Application Thickness	~60 mils (1524 microns) For estimating purposes approximately 16sq. ft. per gallon of resin and 1 lbs per sq. ft. of G-1 Filler will provide coverage for the combined trowelable basecoat and saturant layers. It is common practice to increase the area to be coated 10% in order to account for waste and fiberglass mat overlaps.
Solids Content	By Volume 100%
Dry Temp. Resistance	Continuous: 200°F (93°C) Non-Continuous: 250°F (121°C)
Chemical Resistance	<ul style="list-style-type: none"> • Inorganic Acids • Organic Acids • Dilute Alkali Solutions • Oils • Fluorides (905/905AR) • Salts
Temperature Resistance (Immersion)	Immersion up to 180°F (82°C)

Protecto-Line 900

PRODUCT DATA SHEET



SUBSTRATES & SURFACE PREPARATION

Concrete	Concrete must be mechanically prepared to remove surface laitance. Oils, grease or other contaminant must be removed prior to surface preparation. Concrete must be free of curing compounds and form release agents. Surface texture should be similar to 40-60-grit sandpaper or the visual standard, CSP-5 from the International Concrete Repair Institute with exposed pea gravel. The prepared surface should have a nominal tensile strength of 250 PSI per ASTM D4541. All concrete substrates must be checked for moisture prior to product application using the Plastic Sheet Test, ASTM D4263.
	Additional surface preparation will be required if a 40-60 grit texture with exposed pea gravel is not achieved and the surface laitance not completely removed with the first mechanical preparation procedure.
Metal	Abrasive blast to a white metal finish according to SSPC SP5 or NACE # 1 and a 3.0 mil minimum profile.

PERFORMANCE DATA

All test data was generated under laboratory conditions. Field testing results may vary.

Test Method	Results
Coefficient of Expansion (ASTM D696)	12-15 x 10 ⁻⁶ in./in./°F
Compressive Strength (ASTM C579)	12,500 PSI (86.2 MPa)
Electrical Properties (ASTM F150, NFPA #99)	0-200,000 Ohms
Flame Spread (ASTM D635)	<5 mm
Taber Abrasion* (ASTM D4060)	40 mg (G-1)
Tensile Strength (ASTM C307)	2,400 PSI (16.5 MPa)
WVT ASTM E-96	0.0017 perm. in.

*CS-17 wheel, 1000 cycles, 1000 gram load

MIXING & THINNING

Mixing	For Protecto-Line 900: Add the correct amount of PH- 1 Hardener to the resin. Mix thoroughly for 2-3 minutes. Add 18-25 lbs. of G-1 Filler/gal. Mix well and apply a 1/16" thick basecoat, using a plasterer's trowel. Apply to an even finish. For Protecto-Line 900AR: Add 25-30 lbs. of AR Filler/gallon. Mix well and apply a 1/16" thick basecoat, using a plasterer's trowel.
	Ratio Hardener: PH-1 @ 60°F-70°F (16°C-21°C): 3-4 oz. PH-1 @ 70°F-90°F (21°C-32°C): 2-3 oz.
Pot Life	60 minutes @ 50°F (10°C) 40 minutes @ 75°F (21°C) 25 minutes @ 90°F (32°C)
	Pot life of the mixed Protecto-Line 900 will depend on the temperature. To prevent material waste and avoid damage to equipment, do not mix more material than can be used according to the above. Do not attempt to store mixed material. Residual material should be properly disposed of at the end of each work period.

APPLICATION EQUIPMENT GUIDELINES

Listed below are general equipment guidelines for the application of this product. Job site conditions may require modifications to these guidelines to achieve the desired results.

Brush & Roller (General)	Immediately after the trowel application and before the topcoat has cured, dampen a natural bristle brush (thick bristle 4" wide) or roller with S-30 Smoothing Liquid. Lightly brush or roll the wet topcoat to remove trowel marks and pinholes. Never allow S-30 Smoothing Liquid to puddle on the topcoat.
	Use brush application for small touch-up or repair work only.

APPLICATION CONDITIONS

Condition	Material	Humidity
Minimum	50°F (10°C)	0%
Maximum	110°F (43°C)	90%

Substrate temperature must be 5°F (3°C) above the dew point.

CLEANUP & SAFETY

Cleanup	Use S-10 Cleaning Solvent to clean tools and equipment.
Safety	Read and follow all caution statements on this product data sheet and on the SDS. Employ normal safety precautions. Keep container closed when not in use.
Ventilation	Ventilation must be used during and after application until the coating is cured. The ventilation system should be capable of preventing the solvent vapor concentration from reaching the lower explosion limit for the solvents used. User should test and monitor exposure levels to insure all personnel are below guidelines. Use MSHA/NIOSH approved air respirators as needed.
Caution	Fire and explosion hazards: This product contains less than 1% volatile components, however, vapors are heavier than air and can travel long distances, ignite and flash back. Eliminate all Ignitions sources. Keep away from sparks and open flames. All electrical equipment and installations should be made and grounded in accordance with the National Electric Code. In areas where explosion hazards exist, workers should be required to use non-ferrous tools and wear conductive and non-sparking shoes.

PACKAGING, HANDLING & STORAGE

Packaging	1 Gallon Kits:
	Part A: 0.97 Gallons (in a 3.5 gal steel pail)
	Part B: 0.03 Gallons (in a 1 gal metal box)
	5 Gallon Kits:
	Part A: 4.85 Gallons (in a 5 gal steel pail)
	Part B: 0.15 Gallons (in a 1 gal metal box)
	Filler and Roving(Ordered Separately)
	G-1 or AR Filler - 50lb bag (22.68 kg)
	9.8oz Woven Roving (100sf roll) - 12 lbs (5.4 kg)
	9.8oz Woven Roving (500sf roll) - 40 (18 kg)
	9.8oz Woven Roving (1000sf roll) - 75 lbs (34 kg)
	9.8oz Woven Roving (2000sf roll) - 146 lbs (66 kg)

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PACKAGING, HANDLING & STORAGE

Shelf Life	Part A: 3 months Part B: 6 months
Storage	All Dudick products classified by DOT with either white, yellow or red labels must not be mixed or stored together as an explosive reaction can occur. All products should be stored in a cool, dry area, away from open flames, sparks, or other hazards.
Shipping Weight (Approximate)	1 gallon kits: 14.6 lbs 5 gallon kits: 50.5 lbs

WARRANTY

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