



CORPORATE HEAD OFFICE
Specialty Polymer Coatings
#101, 20529 - 62nd Avenue, Langley , BC, CANADA V3A 8R4
Tel: (604) 514-9711 • Fax: (604) 514-9722

U.S.A. HEAD OFFICE
Specialty Polymer Coatings USA, Inc
22503 FM521, Angleton, Texas, 77515, USA
Tel: (281) 595-3530 • Fax: (281) 595-3717

PRODUCT DATA SHEET

SP-2888[®] R.G.

DESCRIPTION: SP-2888[®] R.G. is a range of surface coatings based on “State of the Art” epoxy / urethane chemistry. The urethane polymer is pre-bonded to the epoxy resin rendering the coating “isocyanate free”. The synergistic effect of co-polymerizing epoxy and urethane produces a coating with the superior adhesion and permeability of epoxy along with the added toughness and abrasion resistance of urethane. SP-2888[®] R.G. is available in Brush Grade and Spray Grade. SP-2888[®] R.G. is also available in Cartridges for coating repairs.

ADVANTAGES: 100% Solids – No VOCs.
Isocyanate free.
Excellent resistance to high temperature cathodic disbonding up to 80°C (176°F).
Excellent adhesion to grit blasted steel surfaces, Fusion Bond Epoxy (FBE), and Fiber Reinforced Plastic (FRP).
Excellent abrasion and impact resistance.

USES: Internal lining for pipelines.
Exterior coating for pipelines in buried or immersed service.
Coating of pipe, valves and fittings.
Slip bore and directional drilling applications.
Girth weld coatings.

APPLICATION: Spray Grade: Graco Hydra-Cat - Tip Size: .019 - .031
Brush Grade: Brush or Roller
Cartridge: Manual Dispenser

CLEANING MATERIALS: SP-100 Equipment Wash
SP-110 Tool Cleaner
SP-120 Internal Storage Lubricant

All information, recommendations, and test performance results herein were obtained in a controlled environment and SPC makes no claim that the data and tests accurately represent all environments and specific project specification requirements. As application, environmental and design factors can vary significantly, due care should be exercised in the selection and use of the coating. SPC products are sold with the understanding that the purchaser or user is solely responsible for determining their suitability for any purpose, and that the purchaser or user assumes all risks and liability associated with the use of the product. No guarantee, either expressed or implied, is made with respect thereto or with respect to the infringement of any patent. The information herein is not to be copied, used in evidence, released for publication, or public distribution without written permission from Specialty Polymer Coatings.



PRODUCT DATA SHEET

SP-2888[®] R.G.

SURFACE PREPARATION:

Steel Substrate: **Cleanliness:** Near White
Standards: NACE 2, Sa 2½ (Swedish Scale, ISO 8501-1)
SSPC SP-10 (The Society for Protective Coatings)
Profile: 62.5 microns minimum to 125 microns maximum
(2.5 mils to 5.0 mils)

FBE: **Profile:** 62.5 microns (2.5 mils) minimum

MIXING RATIO: Brush Grade or Spray Grade; By Volume: 3 Parts Base to 1 Part Hardener.
Cartridge; By Volume: 2 Parts Base to 1 Part Hardener.

HOSE BUNDLE: Heated hose bundle consisting of 3/8" ID base and 1/4" ID hardener line with 1/4" solvent flush line outside of the bundle. Glycol heat trace or equivalent capable of 80°C (176°F)
* Insulated whip hoses not recommended for glycol heat trace*

TIP SIZE: .019 – .033

RECOMMENDED SPRAY PREHEAT TEMPERATURES IN DRUM / PAIL:

BASE: 70°C (158°F) to 80°C (176°F)
HARDENER: 20°C (68°F) to 30°C (86°F) (Ambient-typically not heated)

Pre-heating of the base material is required to balance the viscosity of base and hardener.

In cases of extreme weather conditions the recommended temperatures may change, please consult your SPC representative.



PRODUCT DATA SHEET

SP-2888[®] R.G.

RECOMMENDED FILM THICKNESS:

Standard Corrosion Protection: 0.50 mm minimum to 1.25 mm (20 mils to 50 mils).

Directional & Mechanical Protection: 1.00 mm minimum to 1.78 mm (40 mils to 70 mils).

Depends upon application; consult with SPC Representative.

BACKFILLING:

Mechanical stress including backfilling or lowering in, shall not be applied to the coating until it has reached a Shore D Hardness ≥ 80 .

COMPATIBILITY WITH OTHER ANTI CORROSION COATINGS:

SP-2888[®] R.G. is compatible with all SPC and fusion bonded epoxy (FBE) anti-corrosion coatings.

For compatibility with other anti-corrosion coatings, please consult with SPC

RE-COAT INTERVAL:

Brush Grade:

@ 25°C (77°F) Maximum: 120 Minutes

@ 80°C (176°F) Maximum: 3 Minutes

Spray Grade:

@ 25°C (77°F) Maximum: 120 Minutes

@ 80°C (176°F) Maximum: 2 Minutes



PRODUCT DATA SHEET

SP-2888[®] R.G.

HANDLING PROPERTIES:

Brush Grade

Spray Grade

Pot Life [100 gm (3.5 oz) mass @ 25 C (77 F)]	15 Minutes	
Gel time [200 gm (7.0 oz) mass, Base 70°C (158°F), Hardener 25°C (77°F)].....		1.5 Minutes
Dry Time (ASTM D1640) [0.60 mm (25 mils) coating thickness @ 25 C (77 F)]		
Touch Dry Time	55 Minutes	40 Minutes
Dry Hard Time.....	3.5 Hours	2.5 Hours

Ambient Temperature Brush Grade, Spray Grade or Cartridge: -40°C to 50°C (-40°F to 122°F)

Substrate Temperature.... The acceptable substrate (metal surface) temperature range for the application of SP-2888[®] R.G. is 10°C (50°F) to 100°C (212°F). Preheating of the substrate is required if the surface to be coated is below 10°C (50°F). The substrate temperature must be a minimum of 3°C (5°F) above the dew point temperature before proceeding with the coating operation. Refer to the Curing Table (APPENDIX “A”).

Storage / Shelf Life Store in a cool, dry, well-ventilated area at temperatures between 5°C (41°F) and 50°C (122°F). Keep in a tightly sealed container when not in use. The Shelf Life of SP-2888[®] R.G. is a maximum of 24 months from the date of manufacture if the materials are in unopened containers.

LIQUID PROPERTIES:

BASE

HARDENER

Appearance.....	White Viscous Liquid	Blue Liquid
Solids Content (%)	100	100
Specific Gravity (ASTM D1475)....	1.55 ± 0.03 (Spray Grade)	1.03 ± 0.03 (Spray Grade)
Specific Gravity (ASTM D1475)....	1.55 ± 0.03 (Brush Grade)	1.05 ± 0.03 (Brush Grade)
Specific Gravity (ASTM D1475)....	Base & Hardener Mixed:	1.42 ± 0.03 (Spray Grade)
Specific Gravity (ASTM D1475)....	Base & Hardener Mixed:	1.42 ± 0.03 (Brush Grade)
Coverage (Theoretical).....	Base & Hardener Mixed:	39.0 m ² /Litre/25 microns [1604 ft ² /U.S. Gallon/mil]

All information, recommendations, and test performance results herein were obtained in a controlled environment and SPC makes no claim that the data and tests accurately represent all environments and specific project specification requirements. As application, environmental and design factors can vary significantly, due care should be exercised in the selection and use of the coating. SPC products are sold with the understanding that the purchaser or user is solely responsible for determining their suitability for any purpose, and that the purchaser or user assumes all risks and liability associated with the use of the product. No guarantee, either expressed or implied, is made with respect thereto or with respect to the infringement of any patent. The information herein is not to be copied, used in evidence, released for publication, or public distribution without written permission from Specialty Polymer Coatings.



PRODUCT DATA SHEET

SP-2888[®] R.G.

PHYSICAL / MECHANICAL / ELECTRICAL PROPERTIES:

Taber Abrasion Resistance [Average Weight Loss (g)] (ASTM D4060-10) (CS-17 Wheel, 1000 gram load with 5000 cycles).....	0.3562
Adhesion to Steel:	
Dry Adhesion (Pull-off Strength) [MPa (psi)] (ASTM D4541-95-A4) (Self-Alignment Adhesion Tester, Type IV) [25°C (77°F)].....	> 20 (> 3000)
Wet Adhesion (Hot Water Soak) (CSA-Z245.20-10, Clause 12.14, 120 Days) [75°C ± 3°C (167°F ± 5°F)]	Rating #1
Cathodic Disbonding Test [Average Radius (mm)] [CSA-Z245.20-10, Clause 12.8, System 1A, 28 Days @ 65°C (149°F)]	6.50
Cathodic Disbonding Test [Average Radius (mm)] [CSA-Z245.20-10, Clause 12.8, System 1A, 28 Days, modified to 80°C (176°F)]....	7.00
Compressive Strength (psi) (ASTM D695) [25 C (77 F)]	1.56 x 10 ⁴
Dielectric Strength (volt/10 ⁻³ in) (ASTM D149).....	400
Dielectric Constant (60 cycles) (ASTM D150).....	4.2
Elongation at Break (%) (ASTM D882 Method A) [25°C (77°F)] [DFT 0.50-0.75 mm (20-30 mils)]	4.20
Hardness (Shore D) (ASTM D2240-91) [25 C (77 F)].....	85
Impact [Joules (ft-lbf)] (CSA-Z245.20-10, Clause 12.12) [-30°C ± 3°C (-22°F ± 5°F)]	
Spray Grade	3.0 (2.21)
Brush Grade.....	3.0 (2.21)
Impact [Joules (ft-lbf)] (CSA-Z245.20-10, Clause 12.12) [25°C ± 3°C (77°F ± 5°F)]	
Spray Grade	5.0 (3.69)
Brush Grade.....	5.0 (3.69)
Tensile Break Strength [MPa (psi)] (ASTM D882 Method A) [25 C (77 F)] [DFT 0.50-0.75 mm (20-30 mils)]	44.86 (6506.40)
Water Vapour Permeability (perm-in) (ASTM D1434).....	0.003
Water Absorption (% , 24 ^h , r.t.) (ASTM D570).....	0.1
Volume Resistivity (ohm-cm) (ASTM D257)	1.0 x 10 ¹⁴

All information, recommendations, and test performance results herein were obtained in a controlled environment and SPC makes no claim that the data and tests accurately represent all environments and specific project specification requirements. As application, environmental and design factors can vary significantly, due care should be exercised in the selection and use of the coating. SPC products are sold with the understanding that the purchaser or user is solely responsible for determining their suitability for any purpose, and that the purchaser or user assumes all risks and liability associated with the use of the product. No guarantee, either expressed or implied, is made with respect thereto or with respect to the infringement of any patent. The information herein is not to be copied, used in evidence, released for publication, or public distribution without written permission from Specialty Polymer Coatings.



PRODUCT DATA SHEET

SP-2888® R.G.

CHEMICAL RESISTANCE (ASTM G20) (90 days immersion @ ambient temperatures):

Ammonium Chloride, 10% solution.....	No change observed.
Bio Diesel.....	No change observed.
Calcium Chloride, 10% solution.....	No change observed.
Chromic Acid 5% solution.....	No change observed.
Diesel.....	No change observed.
Hydrochloric Acid, 5% solution.....	No change observed.
Jet Fuel.....	No change observed.
Mineral Oil.....	No change observed.
Monoethylene Glycol.....	No change observed.
Naphtha.....	No change observed.
Nitric Acid, 5% solution.....	No change observed.
Potassium Chloride, 10% solution.....	No change observed.
Sodium Carbonate, 10% solution.....	No change observed.
Sodium Chloride, 10% solution.....	No change observed.
Sodium Silicate solution.....	No change observed.
Sodium Hydroxide, 10% solution.....	No change observed.
Sulphuric Acid, 5% solution.....	No change observed.
Zinc Sulphate, 10% solution.....	No change observed.

SAFETY: Read the Material Safety Data Sheets before use.

REFER TO COLOUR CHART AT END OF PRODUCT DATA SHEET.

EFFECTIVE DATE: October 24, 2016 Rev. 5

All information, recommendations, and test performance results herein were obtained in a controlled environment and SPC makes no claim that the data and tests accurately represent all environments and specific project specification requirements. As application, environmental and design factors can vary significantly, due care should be exercised in the selection and use of the coating. SPC products are sold with the understanding that the purchaser or user is solely responsible for determining their suitability for any purpose, and that the purchaser or user assumes all risks and liability associated with the use of the product. No guarantee, either expressed or implied, is made with respect thereto or with respect to the infringement of any patent. The information herein is not to be copied, used in evidence, released for publication, or public distribution without written permission from Specialty Polymer Coatings.














CORPORATE HEAD OFFICE
 Specialty Polymer Coatings
 #101, 20529 - 62nd Avenue, Langley , BC, CANADA V3A 8R4
 Tel: (604) 514-9711 • Fax: (604) 514-9722

U.S.A. HEAD OFFICE
 Specialty Polymer Coatings USA, Inc
 22503 FM521, Angleton, Texas, 77515, USA
 Tel: (281) 595-3530 • Fax: (281) 595-3717

BRUSH GRADE COATING KITS

COLOUR CHART

**Match Base & Hardener Based on Colour Coded Dots Below.
 Mixing Ratio By Volume: 3 Parts Base to 1 Part Hardener.**

<u>SIZE</u>	<u>COLOUR</u>	<u>VOLUME</u>	
		<u>BASE</u>	<u>HARDENER</u>
0.50 Litres	PINK 	0.3750 Litres	0.1250 Litres
0.75 Litres	FL GREEN 	0.5625 Litres	0.1875 Litres
0.90 Litres	FL YELLOW 	0.6750 Litres	0.2250 Litres
1.00 Litres	RED 	0.7500 Litres	0.2500 Litres
1.25 Litres	PURPLE 	0.9375 Litres	0.3125 Litres
1.50 Litres	YELLOW 	1.1250 Litres	0.3750 Litres
1.75 Litres	ORANGE 	1.3125 Litres	0.4375 Litres
2.00 Litres	BLACK 	1.5000 Litres	0.5000 Litres
2.25 Litres	BLUE 	1.6875 Litres	0.5625 Litres
2.50 Litres	GREEN 	1.8750 Litres	0.6250 Litres
2.75 Litres	WHITE 	2.0600 Litres	0.6900 Litres
Note: FL = Fluorescent			

APPENDIX “A”



CORPORATE HEAD OFFICE
Specialty Polymer Coatings
#101, 20529 - 62nd Avenue, Langley, BC, CANADA V3A 8R4
Tel: (604) 514-9711 • Fax: (604) 514-9722

U.S.A. HEAD OFFICE
Specialty Polymer Coatings USA, Inc
22503 FM521, Angleton, Texas, 77515, USA
Tel: (281) 595-3530 • Fax: (281) 595-3717

SP-2888 R.G. CURING TABLE

SUBSTRATE TEMPERATURE	DRY HARD CURING TIME	
	Brush Grade	Spray Grade
90°C (194°F)	2 Minutes	1.6 Minutes
80°C (176°F)	3 Minutes	2 Minutes
70°C (158°F)	5 Minutes	3 Minutes
60°C (140°F)	9 Minutes	9 Minutes
50°C (122°F)	37 Minutes	16 Minutes
40°C (104°F)	1 Hour 20 Minutes	38 Minutes
30°C (86°F)	1 Hour 45 Minutes	1 Hour 40 Minutes
25°C (77°F)	3 Hours 30 Minutes	2 Hours 30 Minutes
20°C (68°F)	5 Hours 40 Minutes	4 Hours 50 Minutes
10°C (50°F)	16 Hours	14 Hours

Substrate: 12 mm (0.5 in.) Thick Steel Panels

Brush Grade Material Temperature: Base and Hardener: 25°C (77°F)

Spray Grade Material Temperature: Base: 70°C (158°F)
Hardener: 25°C (77°F)

Dry Film Thickness: 0.50 mm (20 mils) DFT as per ASTM D1640

Note: The information above is to serve as a guide only. The test results were compiled under laboratory-controlled conditions. Field results may vary due to variable conditions such as radiant heat loss and the cooling effects of wind.

Date: August 28, 2015