



CORPORATE HEAD OFFICE
Specialty Polymer Coatings
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U.S.A. HEAD OFFICE
Specialty Polymer Coatings USA, Inc
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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



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SURFACE PREPARATION:

- Steel Substrate:**
- **Cleanliness** : Near White
 - **Standards** : NACE 2, Sa 2½ (Swedish Scale, ISO 8501-1)
SSPC SP-10 (Steel Structures Painting Council)
 - **Profile** : 62.5 microns minimum to 125 microns maximum
(2.5 mils to 5.0 mils)
- FBE:**
- **Profile** : 6.25 microns (2.5 mils) minimum
- Polyolefin:**
- **Profile** : 100 microns (4.0 mils) minimum

- MIXING RATIO:**
- Brush Grade and Spray Grade: By Volume: 3 Parts Base to 1 Part Hardener.
 - Cartridge: By Volume: 2 Parts Base to 1 Part Hardener.

RECOMMENDED FILM THICKNESS:

- **Standard Corrosion Protection:** 0.50 mm minimum to 1.25 mm maximum (20 mils to 50 mils).
- **Directional & Mechanical Protection:** 1.00 mm minimum to 1.78 mm maximum
(40 mils to 70 mils).
- Depends upon application; consult with SPC Representative.

- RE-COAT INTERVAL:**
- @ 25°C (77°F) - Maximum: 4 Hours
 - @ 100°C (212°F) - Maximum: 20 Minutes

- Sweep blasting of the surface is required if the maximum re-coat interval is exceeded. Small areas ≤ 316 sq. cm. (≤ 49 sq. in.) may be sanded using a medium grit (80-100) carborundum cloth. All dust from the sanding or blast roughening must be removed from the surface prior to the application of the coating.



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HANDLING PROPERTIES:

Brush Grade

Spray Grade

Pot Life [100 gm (3.5 oz) mass @ 25°C (77°F)]	15 ± 5 minutes	11 ± 3 minutes
Dry Time (ASTM D1640) [0.50 mm (20 mils) coating thickness @ 25°C (77°F)]		
Touch Dry Time.....	75 minutes	60 minutes
Tack Free Time.....	120 minutes	75 minutes
Dry Hard Time.....	4.0 hours	3.5 hours

Ambient Temperature..... Both Brush & Spray Grade: -30°C to 105°C (-22°F to 221°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 attached Curing Tables.

Storage / Shelf Life..... Store in a cool, dry, well-ventilated area at temperatures between 5°C (41°F) and 40°C (104°F). Keep lids sealed. The Shelf Life is a maximum of 24 months 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]



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PHYSICAL / MECHANICAL / ELECTRICAL PROPERTIES:

Abrasion Resistance (ASTM D4060) (CS-17 Wheel, 1000 gram load with 5000 cycles).....	0.3562 grams loss
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-Z245.20-06, Clause 12.14, 120 Days) [75°C ± 3°C (167°F ± 5°F)]	Rating #1
Cathodic Disbonding Test [Average Radius (mm)] [CSA-Z245.20-06, Clause 12.8, System 1A, 28 Days @ 65°C (149°F)].....	6.50
Cathodic Disbonding Test [Average Radius (mm)] [CSA-Z245.20-06, 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-Z245.20-06, 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-Z245.20-06, 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



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

Nitric acid, 10% solution.....	No change observed.
Sulfuric acid, 5% solution	No change observed.
Acetic acid, 5% solution.....	No change observed.
Sodium hydroxide, 10% solution	No change observed.
Sodium chloride, 10% solution	No change observed.
Toluene	No change observed.
Ethyl acetate	No change observed.
Ethanol, 50% solution	No change observed.
Mineral Oil	No change observed.

SAFETY: Read the Material Safety Data Sheets before use.

REFER TO COLOUR CHART AT END OF PRODUCT DATA SHEET.

EFFECTIVE DATE: March 25, 2011














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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			