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## PRODUCT DATA SHEET

**SP-1628**

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**DESCRIPTION:** **SP-1628** is the latest addition to the family of SPC's range of pipeline coatings. **SP-1628** is a unique two-component epoxy coating with superior surface wetting, flexibility, high operating temperature, and cathodic disbonding resistance up to 95°C (203°F) for use as a field joint coating. The superior wetting characteristic provides excellent adhesion and long term corrosion protection of the steel surface. **SP-1628** is available in Brush Grade and Spray Grade. **SP-1628** is also available in Cartridges for coating repairs.

**ADVANTAGES:**

- 100% Solids - No VOCs.
- Isocyanate free.
- Excellent resistance to high temperature cathodic disbonding up to 95°C (203°F).
- Excellent adhesion to grit blasted steel surfaces, Fusion Bond Epoxy, FRP and 3LPP or 3LPE treated with SPC's proprietary system..
- Excellent Adhesion and Corrosion Protection on steel surfaces.

**USES:**

- Exterior coating for pipelines in buried or immersed service.

**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

### **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)

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.



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- MIXING RATIO:**
- By Volume: 2 Parts Base to 1 Part Hardener.
  - By Weight: 100 grams Base to 34.20 grams Hardener.

**RECOMMENDED FILM THICKNESS:**

- **Wet:** 0.50 mm minimum to 1.25 mm maximum (20 mils to 50 mils).
- **Dry:** 0.50 mm minimum must be achieved.

- RE-COAT INTERVAL:**
- @ 25°C (77°F) - Maximum: 12 Hours
  - @ 100°C (212°F) - Maximum: 10 Minutes

- Sweep blasting of the surface is required if the maximum re-coat interval is exceeded. Small areas  $\leq 316$  sq. cm. ( $\leq 49$  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.

**HANDLING PROPERTIES:**

Pot Life [100 gm (3.5 oz.) mass @ 25°C (77°F)] .....	40 Minutes
Dry Time (ASTM D1640) [0.64 mm (25 mils) coating thickness @ 25°C (77°F)]	
Tack Free Time.....	3 Hours
Dry Hard Time .....	6 Hours

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

Substrate Temperature.... The acceptable substrate (metal surface) temperature range for the application of SP-1628 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.

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.

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### LIQUID PROPERTIES:

### BASE

### HARDENER

Appearance.....	Green	Amber Liquid.
Solids Content (%) .....	100	100
Specific Gravity (ASTM D1475).....	1.54 ± 0.03	1.055 ± 0.03
Specific Gravity (ASTM D1475).....	Base & Hardener Mixed:	1.38 ± 0.03
Coverage (Theoretical).....	Base & Hardener Mixed:	39.0 m <sup>2</sup> /Litre/25 microns [1604 ft <sup>2</sup> /U.S. Gallon/mil]

### PHYSICAL / MECHANICAL / ELECTRICAL PROPERTIES:

#### Adhesion to Steel:

Dry Adhesion [MPa (psi)] (ASTM D4541-95-A4)	
(Self-Alignment Adhesion Tester, Type IV) [25°C (77°F)].....	>27 (>4000)
Wet Adhesion (Hot Water Soak) (CSA-Z245.20-10, Clause 12.14, 28 Days)	
[75°C (167°F)].....	Rating #2
Cathodic Disbonding Test [Average Radius (mm)]	
(CSA-Z245.20-10, Clause 12.8, System 1A, 28 Days) [20°C (68°F)] .....	3.8
Cathodic Disbonding Test [Average Radius (mm)]	
(CSA-Z245.20-10, Clause 12.8, System 1A, 28 Days) [65°C (149°F)] .....	7.4
Cathodic Disbonding Test [Average Radius (mm)]	
(CSA-Z245.20-10, Clause 12.8, System 1A, 28 Days) [95°C (203°F)] .....	7.0
Elongation (%) (ASTM D522-93a) [25°C (77°F)] .....	15
Flexibility (° PPD) (CSA-Z245.20-10, Clause 12.11) [25°C (77°F)].....	3.00
Flexibility (° PPD) (CSA-Z245.20-10, Clause 12.11) [0°C (32°F)].....	1.20
Flexibility (° PPD) (CSA-Z245.20-10, Clause 12.11) [-30°C (22°F)] .....	0.81

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### PHYSICAL / MECHANICAL / ELECTRICAL PROPERTIES (cont.)

Hardness (Shore D) (ASTM D2240-91) [25°C (77°F)].....	85
Impact [Joules (ft-lbf)] (CSA-Z245.20-10, Clause 12.12) [25°C (77°F)] .....	5.0 (3.69)
Impact [Joules (ft-lbf)] (CSA-Z245.20-10, Clause 12.12) [-30°C (-22°F)].....	1.5 (1.10)
Penetration Resistance (% of Penetration) (ASTM G17-07) [25°C (77°F)].....	0
Penetration Resistance (% of Penetration) (ASTM G17-07) [65°C (149°F)].....	0
Penetration Resistance (% of Penetration) (ASTM G17-07) [80°C (176°F)].....	1.54
Taber Abrasion (Average Weight Loss) (ASTM D4060-10) (CS-17 Wheel, 5000 cycles).....	0.4236 grams

**SAFETY:** Read the Material Safety Data Sheets before use.

**EFFECTIVE DATE:** October 21, 2016

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