



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

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## PRODUCT DATA SHEET

**SP-1890**

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**DESCRIPTION:** **SP-1890** is a two-component 100% solids modified epoxy polymer designed to provide superior adhesion between three-layer (“3L”) Polyolefin (“PE & PP”) and liquid epoxy joint coatings.

**ADVANTAGES:**

- Provides outstanding adhesion to properly prepared Polyolefin (PE & PP) surfaces and liquid epoxy field joint coatings.
- 100% Solids – No VOCs.

**USES:** Adhesion enhancer for liquid epoxy joint coatings when utilized on pipelines coated with 3L Polyolefin (PE & PP).

**APPLICATION:** Brush Grade: Brush or roller.

### **SURFACE PREPARATION:**

- All surfaces to be treated or coated shall be free of grease, oil, moisture, soil, dust, abrasive material and all other contaminants.
- The surface of the Polyolefin (PE & PP) shall be prepared by sweep blasting. Refer to the SP-1890 Application Specification.
- Sweep blasting procedure: Sweep blast or brush off blast (SSPC SP 7) the Polyolefin (PE & PP) surface to be coated using grit abrasive. Avoid aggressive blasting of the Polyolefin (PE & PP) surface because this will cause a “burr” or carpet like effect on the surface that will lead to poor adhesion. The resulting surface roughness profile shall be 75-100 microns (3-4 mils). There should be **NO GLOSSY OR SHINY** areas on the Polyolefin (PE & PP) surface, these areas or missed spots must be re-blasted.
- Sanding may be used for preparing small areas of Polyolefin (PE & PP) coatings where blasting is impractical.

**MIXING RATIO:** By Volume: 2.5 Parts Base to 1 Part Hardener.

### **MIXING INSTRUCTIONS:**

- Base and Hardener components are to be uniformly mixed together using a variable speed drill fitted with a mixing impeller. During mixing, care is to be taken to prevent the introduction of air into the product.
- Refer to the SP-1890 Application Specification.

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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### RECOMMENDED DRY FILM THICKNESS (DFT):

- 100-150 microns (4-6 mils) on the sanded or sweep blasted Polyolefin (PE & PP) surface.
- The maximum allowable DFT is 400-480 microns (10-12 mils).

### APPLICATION INSTRUCTIONS:

- Refer to the SP-1890 Application Specification.
- Avoid coating the blasted bare steel surface with SP-1890. If any SP-1890 is accidentally spilled onto the steel surface, remove it with a clean cloth.
- Allow SP-1890 to wet the substrate well.
- Heat SP-1890 to 90°C (194°F). This temperature shall be maintained for one (1) minute. Heating shall be performed by using an industrial hot air gun or by radiant heating unit. Induction coils shall not be used to heat the primed surface.
- The topcoat should be applied to the PE or PP substrate at a slightly tacky stage of the SP-1890.

### OVER-COAT INTERVAL:

- Avoid leaving SP-1890 without over-coating for an extended time due to the increased possibility of surface contamination by airborne particles.
- The maximum over-coat interval at 25°C (77°F) is six (6) hours.

### HANDLING PROPERTIES:

Pot Life [25°C (77°F)] ..... 60 ± 20 Minutes

Minimum Application Temperature..... 10°C (50°F)

Substrate Temperature..... The substrate temperature must be a minimum of 3°C (5°F) above the dew point temperature to avoid the risk of condensation.

Storage / Shelf Life ..... Store in a cool, dry, well-ventilated area at temperatures between 5°C (41°F) and 40°C (104°F) away from incompatible materials and all sources of ignition. Keep in tightly sealed containers when not in use. The Shelf Life is a maximum of 24 months from the date of manufacture if the materials are in unopened containers.

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### LIQUID PROPERTIES:

Appearance .....	Pastel Pink
Volume Solids Content (%) .....	100%
Specific Gravity (ASTM D1475) .....	1.56 ± 0.03 (Base)
	1.04 ± 0.03 (Hardener)
Coverage (Theoretical, Base & Hardener Mixed) ....	39.0 m <sup>2</sup> /Litre/25 microns
	[1604 ft <sup>2</sup> /U.S. Gallon/mil]

### PHYSICAL PROPERTIES:

#### Adhesion to PE & PP:

Dry Adhesion [MPa (psi)] [ASTM D4541-95-A4 (Pull-off Strength)] (Self-Alignment Adhesion Tester, Type IV) [25°C (77°F)] .....	>17.23 (>2500)
Wet Adhesion [MPa (psi)] [ASTM D4541-95-A4 (Pull-off Strength)] (Self-Alignment Adhesion Tester, Type IV) [28 Days, 80°C ± 3°C (176°F ± 5°F)].....	>10.34 (>1500)

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

**WEBSITE:** [www.spc-net.com](http://www.spc-net.com)

**EFFECTIVE DATE:** October 21, 2016 Rev. 3

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