



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-1386[®]

DESCRIPTION: SP-1386[®] is a hybrid two-component elastomeric polyurethane coating designed for long-term corrosion protection of steel and concrete substrates. SP-1386[®] is available in Spray Grade and Brush Grade. For potable water tanks and pipelines, use SP-1386[®] DW.

ADVANTAGES:

- 100% Solids - No VOCs.
- Good flexibility with >50% elongation.
- Excellent fresh and salt water resistance.
- Good acid and abrasion resistance.
- Excellent adhesion to steel surfaces, Fusion Bond Epoxy (FBE), Fiber Reinforced Plastic (FRP) and concrete.
- High build one-coat application.
- Lloyd's Register of Shipping Approval.
- Meets the AWWA C 222 Requirements.

USES:

- Coating of on-shore and offshore structures and pipe, i.e. steel piles.
- Coating of sewer lines and general piping.
- Coating of dam gates and penstocks.
- Coating of pipelines, valves and fittings.
- Rehabilitation of existing pipelines.
- Coating of girth welds.
- Lining of tanks and sewage digesters.
- Lining of open-top gondola railcars used for transporting sulphur and coal.

APPLICATION:

- Spray Grade: Graco Hydra-Cat - Tip Size: .019 - .031
- Brush Grade: Brush or Roller

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-1386[®]

SURFACE PREPARATION:

A) Steel Substrate:

- **Primer:** No primer required.
- **Cleanliness:** Near White
- **Standards:** NACE 2, Sa 2½ (Swedish Scale, ISO 8501-1)
SSPC SP-10 (Steel Structures Painting Council)
- **Profile:** 75 microns minimum to 125 microns maximum
(3.0 mils to 5.0 mils)

B) Concrete Substrate:

- **Primer:** SP-1264 Damp Concrete Primer Sealer required prior to application of SP-1386[®] to concrete.
- **Cleanliness:** Remove laitance and other surface contaminants by grit blasting or mechanical scarification. Seal using SP-1264 Damp Concrete Primer Sealer.

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

RECOMMENDED FILM THICKNESS:

- **Pipelines:** 0.50 mm minimum to 3.0 mm maximum (20 mils to 120 mils)
- **Tank Lining:** 0.50 mm minimum to 3.0 mm maximum (20 mils to 120 mils)

RE-COAT INTERVAL:

- Spray Grade @ 25°C (77°F) Maximum: 12 hours
- Brush Grade @ 25°C (77°F) Maximum: 14 hours
- SP-1386[®] is a one-coat application system. However, if there are areas below the specified thickness and the coating has cured beyond the specified re-coat window, roughening of the surface is necessary to ensure inter-coat adhesion. 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.

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-1386[®]

HANDLING PROPERTIES:

	<u>Brush Grade</u>	<u>Spray Grade</u>
Pot Life [25°C (77°F) Ambient Temperature]	15 Minutes	7 Minutes
Pot Life [55°C (131°F) Spray Grade Base Temperature]	N/AP	2 Minutes
Dry Time (ASTM D1640) [25°C (77°F) Ambient Temperature]		
Tack-Free Time	3 Hours	2 Hours
Dry Hard Time	12 Hours	9 Hours
Dry Time (ASTM D1640) [55-60°C (131-140°F) Spray Grade Base Temperature]		
Tack-Free Time		
(Minimum before immersion for dock piles)	N/AP	1 Hour 10 Minutes
Dry Hard Time	N/AP	6 Hours
Full Cure	4 Days	4 Days

Ambient Temperature Brush or Spray Grade: 0°C Minimum to 100°C Maximum (32°F to 212°F)

Substrate Temperature.... The acceptable substrate (metal or concrete surface) temperature range for the application of SP-1386[®] is 1°C (33°F) to 100°C (212°F). Preheating of the substrate is required if the surface to be coated is below 1°C (33°F). Relative Humidity prior to and during the application of SP-1386[®] must be 80% or less. 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 20°C (68°F) and 35°C (95°F). Keep in tightly sealed containers when not in use. The Shelf Life of SP-1386[®] Base is a maximum of 24 months from the date of manufacture if the materials are in unopened containers. The Shelf Life of SP-1386[®] Activator is a maximum of 12 months from the date of manufacture if the materials are in unopened containers.
DO NOT FREEZE THE ACTIVATOR.

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-1386[®]

LIQUID PROPERTIES:

	<u>BASE</u>	<u>ACTIVATOR</u>
Appearance.....	Grey Liquid	Amber Liquid
Solids Content (%)	100	100
Specific Gravity (ASTM D1475)....	1.36 ± 0.03 (Spray Grade)	1.22 ± 0.03 (Spray Grade)
Specific Gravity (ASTM D1475)....	1.36 ± 0.03 (Brush Grade)	1.22 ± 0.03 (Brush Grade)
Specific Gravity (ASTM D1475)....	Base & Activator Mixed:	1.32 ± 0.03 (Spray Grade)
Specific Gravity (ASTM D1475)....	Base & Activator Mixed:	1.32 ± 0.03 (Brush Grade)
Coverage (Theoretical).....	39.0 m ² /Litre/25 microns [1604 ft ² /U.S. Gallon/mil]	

PHYSICAL PROPERTIES:

Taber Abrasion Resistance [Average Weight Loss (g)] (ASTM D4060-10) (CS-17 Wheel, 1000 gram load with 5000 cycles).....	0.3788
Adhesion to Steel:	
Dry Adhesion (Pull-off Strength) [MPa (psi)] (ASTM D4541-95-A4) (Self-Alignment Adhesion Tester, Type IV) [25°C (77°F)].....	>13 (>2000)
Wet Adhesion (Hot Water Soak) (CSA-Z245.20-10, Clause 12.14) [40°C (104°F)].....	Rating #1
Cathodic Disbonding Test [Average Radius (mm)] [CSA-Z245.20-10, Clause 12.8, System 1A, 7 Days @ 25°C (77°F)]	9.78
Elongation (%) (ASTM D522) [25°C (77°F)]	66
Flexibility (° PPD) (CSA-Z245.20-10, Clause 12.11) [25°C (77°F)].....	3
Hardness (Shore D) (ASTM D2240-91) [25°C (77°F)].....	60
Impact Strength [Joules (ft-lbf)] (CSA-Z245.20-10, Clause 12.12) [25°C (77°F)].....	> 8.0 (> 5.9)
Volume Resistivity (ohm-cm) (ASTM D257)	1.0 x 10 ¹⁴
Water Vapour Permeability [perm-cm (perm-in)] (ASTM D1434).....	0.0027 (0.004)

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-1386®

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

Ammonium hydroxide, 10% solution	No change observed.
Hydrochloric acid, 5% solution.....	No change observed.
Mineral Oil	No change observed.
Monoethylene glycol.....	No change observed.
Nitric acid, 5% solution.....	No change observed.
Sodium carbonate, 10% solution.....	No change observed.
Sodium chloride, 10% 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

WEBSITE: www.spc-net.com

EFFECTIVE DATE: October 21, 2016 Rev. 3

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

SP-1386[®] BRUSH GRADE COATING KITS

COLOUR CHART

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

<u>SIZE</u>	<u>COLOUR</u>	<u>VOLUME</u>	
		<u>BASE</u>	<u>ACTIVATOR</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			