

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[®] **DW**

DESCRIPTION: SP-1386[®] DW is a two-component polyurethane coating formulated for use as a

lining for potable water storage tanks and as an interior lining for pipes carrying potable water. SP-1386[®] DW is a 100% solids coating, high build single coat application forming a monolithic membrane with excellent resistance to moisture.

CERTIFICATION: Certified by NSF International in accordance with NSF/ANSI Standard 61 for use

on the interior of potable water storage tanks, pipes and valves.

ADVANTAGES

- 100% Solids No VOCs.
- Good flexibility with >50% elongation.
- Excellent water resistance.
- Good abrasion resistance.
- High build one-coat application.
- Lloyd's Register of Shipping Approval.
- Meets the AWWA C222 Requirements.

USES: • Lining for potable water storage tanks, pipelines and valves.

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



SP-1386[®] DW

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-7888[®] - 100% Solids Epoxy. Certified by NSF to NSF/ANSI Standard 61.

- **Cleanliness:** Remove laitance and other surface contaminants by grit blasting or mechanical scarification. The concrete must be dry with a moisture content of less than 4% measured with a moisture meter. Following the preparation of the concrete surface, spray an initial thin light coat of SP-7888® onto the surface and thoroughly roll into the pores of the concrete.
- Concrete Tank Coating Procedure: The procedure for coating concrete potable water tanks is to use the spray-roll-spray technique. Spray a thin coat 75-125 microns (3.0-5.0 mils) of SP-1386® DW over the prepared concrete surface. Then roll the thin coat of SP-1386® DW with a short nap roller forcing the wet coat to penetrate into the concrete. Follow the first coat with an additional spray application of SP-1386® DW to the specified thickness. Care must be taken to stay within the specified overcoat times for this product.

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 1.25 mm maximum (20 mils to 50 mils)
 Tank Lining: 0.50 mm minimum to 1.25 mm maximum (20 mils to 50 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 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.



SP-1386[®] DW

RE-COAT INTERVAL:

- Spray Grade @ 25°C (77°F): Maximum: 12 Hours
 Brush Grade @ 25°C (77°F): Maximum: 14 Hours
- SP-1386[®] DW 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. Areas ≥ 316 sq. cm (49 sq. in.) must be blast roughened to a profile of 75 microns (3.0 mils) minimum to 125 microns (5.0 mils) maximum.

| HANDLING PROPERTIES: | | Brush Grade | Spray Grade | |
|--|---|----------------------------------|--|--|
| Pot Life [25°C (77°F) Ambient Temperature] Pot Life [55°C (131°F) Spray Grade Base Temperature] | | 15 Minutes N/AP | 7 Minutes 2 Minutes | |
| Dry Time (ASTM D1640) [25°C (77°F) Ambient Temperature] Tack-Free Time | | 3 Hours 12 Hours se Temperaturel | 2 Hours 9 Hours | |
| Tack-Free Time Dry Hard Time | [55 00 C (151 110 1) Spirity Grade Bu | N/AP N/AP 4 Days | 1 Hour 10 Minutes 6 Hours 4 Days | |
| Ambient Temperature | Brush or Spray Grade: 0°C Minimum | to 100°C Maxim | um (32°F to 212°F) | |
| Substrate Temperature | The acceptable substrate temperature range for the application of SP-1386® DW 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® DW 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. | | | |

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SP-1386[®] DW

HANDLING PROPERTIES (cont.):

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° DW 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[®] DW Activator is a maximum of 12 months from

the date of manufacture if the materials are in unopened containers.

DO NOT FREEZE THE ACTIVATOR.

| LIQUID PROPERTIES: | BASE | ACTIVATOR |
|-------------------------------|---|-------------------------------|
| 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] | |



SP-1386[®] **DW**

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 [Joules (ft-lbf)] (CSA-Z245.20-10, Clause12.12) [25°C (77°F)] | |
| Volume Resistivity (ohm-cm) (ASTM D257) | 1.0×10^{14} |
| Water Vapour Permeability [perm-cm (perm-in)] (ASTM D1434) | 0.0027 (0.004) |
| | |

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. 4



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SP-1386® DW BRUSH GRADE COATING KITS <u>COLOUR CHART</u>

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

| | | | VOLUME | |
|-------------|------------------------|---|---------------|-----------------|
| SIZE | COLOU | R | BASE | <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 | - | | 1 |

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