



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-7888[®] - 100% SOLIDS EPOXY

DESCRIPTION: SP-7888[®] is a 100% solids, two-component epoxy used as a single coat interior lining and exterior coating system for potable water storage facilities, pipe and treatment plants. Also utilized on valves, pumps and fittings related to potable water equipment.

QUALIFICATIONS:

- Certified by NSF International in accordance with NSF/ANSI Standard 61 for use on the interior of potable water storage tanks of 1,892 Litres (500 U.S. Gallons) and greater, and valves and pipes with diameters greater than 20 centimetres (8 inches).
- SP-7888[®] meets the requirements of ANSI/AWWA Standard C210-97, Liquid Epoxy Coating Systems for the Interior and Exterior of Steel Water Pipelines.

ADVANTAGES:

- 100% Solids – no VOCs.
- Superior fresh and salt water resistance.
- Superior corrosion resistance.
- Self-priming to steel substrates.
- Single coat application to thicknesses normally requiring two to three coats.

USES:

- Lining for water storage tanks and pipelines.
- Coating for water and sewage treatment plants.
- Coating for dam gates and penstocks.

APPLICATION:

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

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-7888[®] - 100% SOLIDS EPOXY

- CLEANING MATERIALS:**
- SP-100 Equipment Wash
 - SP-110 Tool Cleaner
 - SP-120 Internal Storage Lubricant

SURFACE PREPARATION:

- (Steel Substrate):**
- **Cleanliness:** Near White. Surfaces to be treated shall be completely dry and free of grease, oil, soil, dust, abrasive material or other contaminants at the time the coating is applied. Remove grease and oil with a suitable detergent. Remove salts and other contaminants by high-pressure fresh water cleaning.
 - **Standards:** NACE 2, Sa 2 ½ (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)
- (Concrete Substrate):**
- **Cleanliness:** Remove all laitance and other surface contaminants by grit blasting or mechanical scarification. Following the preparation of the concrete surface, an initial thin light coat of SP-7888[®] is to be applied to the surface and thoroughly rolled into the pores of the concrete. SP-7888[®] is then to be applied to the specified coating thickness.

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

PRIMER COAT: None – SP-7888[®] is self-priming.

RECOMMENDED DRY FILM THICKNESS:

- SPC Recommended: 500 microns minimum to 2000 microns maximum (20 to 80 mils)
- NSF Certified for potable water service: 400 microns minimum to 3000 microns maximum
(16 to 120 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.



PRODUCT DATA SHEET

SP-7888[®] - 100% SOLIDS EPOXY

RE-COAT INTERVAL:

- Minimum: 2 Hours @ 25°C (77°F)
- Maximum: 48 Hours @ 25°C (77°F)
- SP-7888[®] is a one-coat application product. However, to correct film thickness deficiencies, coating damage or for application to concrete after the re-coat interval of the initial thin coat has been exceeded, the surface must be sweep blasted or sanded to ensure inter-coat adhesion. Large areas >316 sq. cm (>49 sq. in.) must be sweep blasted. 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.

HANDLING PROPERTIES:

Pot Life (Spray Application) [Base @ 55°C (131°F) & Hardener @ 35°C (95°F)]....	15 minutes
Pot Life (Brush Application) [Base & Hardener @ 25°C (77°F)]	1 hour 30 minutes
Dry Time (ASTM D1640) [25°C (77°F)]	
Tack-Free Time	5 Hours
Dry Hard Time	10 Hours
Full Cure.....	4 Days

Substrate Temperature.....

- Minimum Substrate Temperature: 10°C (50°F).
- To avoid condensation, the substrate temperature must be a minimum of 3°C (5°F) above the dew point temperature. SP-7888[®] is capable of curing down to 5°C (41°F) but the Dry Time will be extended. Refer to Curing Table (Appendix “A”).

Drum Temperature Spray Application:

- Base: 50°C – 55°C (122°F – 131°F)
- Hardener: 25°C – 35°C (77°F – 95°F)

In-Line Temperature Spray Application:

- Base: 65°C – 75°C (149°F – 167°F)
- Hardener: 25°C – 35°C (77°F – 95°F)

Mixed Temperature Spray Application: 65°C – 75°C (149°F – 167°F)

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-7888® - 100% SOLIDS EPOXY

HANDLING PROPERTIES (cont.)

Coating Temperature Range... Brush Application for Striping / Coating Repairs: The ideal coating temperature range for mixing and application is from 15°C to 25°C (59°F to 77°F).

Storage / Shelf Life Store in a cool, dry, well-ventilated area at temperatures between 5°C (41°F) and 40°C (104°F). Keep the container lids sealed 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.

LIQUID PROPERTIES:

	<u>BASE</u>	<u>HARDENER</u>
Appearance.....	White Viscous Liquid.	Blue Liquid.
Volume Solids (%).....	100	100
Specific Gravity (ASTM D1475)....	1.60	1.00
Coverage (Theoretical).....	Base & Hardener Mixed: 2.5 sq. m/litre (400 microns DFT). [102 sq. ft./U.S. Gallon (16 mils DFT)]	

PHYSICAL PROPERTIES:

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-Z245.20-10, Clause 12.14, 28 Days) [Modified to 75°C (167°F)].....	Rating #1
Cathodic Disbonding Test [Average Radius (mm)] (CSA-Z245.20-10, Clause 12.8) [Modified to 28 Days @ 65°C (150°F)].....	10
Elongation (%) (ASTM D522 Type B).....	6.0
Flexibility (°PPD) (CSA-Z245.20-10, Clause 12.11).....	>1.5
Hardness (Shore D) (ASTM D2240-91) [25°C (77°F)].....	75

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-7888[®] - 100% SOLIDS EPOXY

SAFETY: Read the Material Safety Data Sheets before use.

NOTE: All epoxy coatings will change colour, lose gloss and chalk on exterior exposure. However, the protective properties of the material will not be affected.

WEBSITE: www.spc-net.com

EFFECTIVE DATE: October 24, 2016 Rev. 4

SPC / PDS_SP-7888-09-19-12.docx

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.

APPENDIX “A”



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-7888[®] - 100% SOLIDS EPOXY CURING TABLE

SUBSTRATE TEMPERATURE		DRY HARD TIME CURING TIME	
°C	°F	Spray Grade	Brush Grade
50	122	2 hrs. 15 min.	2 hrs. 45 min.
40	104	3 hrs.	3 hrs. 30 min.
30	86	6 hrs.	6 hrs. 30 min.
20	68	12 hrs.	13 hrs.
10	50	24 hrs.	27 hrs.

Substrate: 12 mm (0.5 in.) Thick Steel Panels

Material Temperature: Spray Grade: Base 60°C (140°F); Hardener: 40°C (104°F)

Brush Grade: Base 25°C (77°F); Hardener: 25°C (77°F)

Dry Film Thickness: 0.50 mm (20 mils) DFT as per ASTM D1640.

Note #1: Specialty Polymer Coatings, Inc. does not recommend post-curing or force-curing SP-7888[®] - 100% Solids Epoxy at temperatures above 50°C (122°F).

Note #2: The information above is to serve as a guide only. The test results were compiled under laboratory-controlled conditions. Field results may vary due to variable conditions such as radiant heat loss and the cooling effects of wind.

Date: January 21, 2014

SPC / SP-7888_Curing_Table.docx