

## SELECTION & SPECIFICATION DATA

<b>Generic Type</b>	100% Solids Potable Water Epoxy
<b>Description</b>	A 100% solids, two-component high performance epoxy coating specifically formulated for use as a single coat interior lining and exterior coating system for potable water storage facilities, pipe and treatment plants. The 100% solids, high build, single coat applied coating cures to form a tough, durable, non-toxic, monolithic membrane with superior corrosion and water resistance.
<b>Features</b>	<ul style="list-style-type: none"> <li>• Excellent adhesion to steel surfaces, Fusion Bond Epoxy (FBE)</li> <li>• 100% solids</li> <li>• Excellent fresh and salt water resistance</li> <li>• Good flexibility</li> <li>• Good acid and abrasion resistance</li> <li>• High build one-coat application</li> <li>• Certified by UL to meet NSF/ANSI/CAN 61 and NSF/ANSI/CAN 600</li> </ul>
<b>Typical Uses</b>	<ul style="list-style-type: none"> <li>• Potable water storage facilities</li> <li>• Pipes</li> <li>• Treatment plants</li> <li>• All valves, pumps and fittings related to potable water equipment</li> <li>• Coating for dam gates and penstocks</li> </ul>
<b>Color</b>	Blue (0100)
<b>Primer</b>	Self-priming
<b>Dry Film Thickness</b>	406 - 3048 microns (16 - 120 mils) For potable water service 508 - 2032 microns (20 - 80 mils) DFT
<b>Solids Content</b>	By Volume 100%
<b>Theoretical Coverage Rate</b>	39.4 m <sup>2</sup> /l at 25 microns (1604 ft <sup>2</sup> /gal at 1.0 mils) 2.5 m <sup>2</sup> /l at 400 microns (100 ft <sup>2</sup> /gal at 16.0 mils) 0.3 m <sup>2</sup> /l at 3000 microns (13 ft <sup>2</sup> /gal at 120.0 mils) Allow for loss in mixing and application.
<b>VOC Values</b>	<b>As Supplied</b> : 0 g/L
<b>Specific Gravity</b>	Base: 1.60±0.03 Hardener: 1.00±0.03 Mixed Material: 1.45±0.03

## SUBSTRATES & SURFACE PREPARATION

<b>Steel</b>	Cleanliness: NACE No. 2/SSPC-SP 10, SA 2.5 (ISO 8501-1). 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. Profile: 62.5 microns minimum to 125 microns maximum (2.5 mils to 5.0 mils)
--------------	---

## PERFORMANCE DATA (TYPICAL VALUES)

<b>Service Temperature</b>	Up to 65°C (149°F)
----------------------------	--------------------

# SP-7888®

## PRODUCT DATA SHEET



### PERFORMANCE DATA (TYPICAL VALUES)

<b>Adhesion to Steel (Pull Off Strength)</b>	>20 MPa (>3000 psi) @ 25°C (77°F) (ASTM D4541)
<b>Adhesion to Steel (Hot Water Soak)</b>	28 days @ 75°C (167°F): Rating #1 (CSA-Z245.20)
<b>Cathodic Disbondment Resistance</b>	28 days @ 65°C (150°F): 10 mmR @ -1.5 Volts (CSA-Z245.20)
<b>Flexibility</b>	1.5°PPD @ 25°C (77°F) (CSA-Z245.20)
<b>Elongation</b>	6.0% (ASTM D522 Type B)
<b>Hardness</b>	25°C (77°F): 75 Shore D (ASTM D2240)

### MIXING & THINNING

<b>Brush Grade Pot Life</b>	1 hour 30 minutes @ 25°C (77°F)
<b>Spray Grade Gel Time</b>	15 minutes @ Base Temperature 55°C (131°F) and Hardener @ 35°C (95°F)
<b>Mixing</b>	<b>Spray Grade:</b> Agitation of the Part A component is recommended during the preheating process and during application to ensure a uniform heat throughout the base portion when applying material out of drums.  Component Details for Color: Blue (0100): The Base is White (0800) and the Hardener is Blue (0100)
<b>Thinning</b>	Do Not Thin
<b>Ratio</b>	Spray & Brush Grade: 3:1 Base to Hardener, by Volume

### APPLICATION EQUIPMENT GUIDELINES

Listed below are general equipment guidelines for the application of this product. Job site conditions may require modifications to these guidelines to achieve the desired results.

<b>Spray Grade</b>	Plural Component Graco Hydra-Cat Airless Spray: Tip Size: 0.019-0.031
<b>Brush Grade</b>	Brush or Roller

### APPLICATION CONDITIONS

<b>Ambient Temperature</b>	-40°C to 50°C (-40°F to 122°F)
<b>Substrate Temperature</b>	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. Capable of curing down to 5°C (41°F) but the Dry Time will be extended. Refer to Curing Table.



## APPLICATION CONDITIONS

<b>Material Temperature</b>	<p><b>Drum Temperature - Spray Application:</b> Base: 50°C – 55°C (122°F – 131°F) Hardener: 25°C – 35°C (77°F – 95°F)</p> <p><b>In-Line Temperature - Spray Application:</b> Base: 65°C – 75°C (149°F – 167°F) Hardener: 25°C – 35°C (77°F – 95°F)</p> <p><b>Mixed Temperature - Spray Application:</b> 65°C – 75°C (149°F – 167°F)</p> <p><b>Brush Application for Striping / Coating Repairs:</b> The ideal coating temperature range for mixing and application is from 15°C to 25°C (59°F to 77°F).</p>
-----------------------------	---

## CURING SCHEDULE

<b>Touch Dry</b>	5 hours @ 25°C (77°F)
<b>Recoat Interval</b>	<p>Maximum 5 hours @ 25°C (77°) @ 50% RH</p> <p>This product 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 &gt;316 sq. cm (&gt;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.</p>

Surface Temp.	Dry Hard (Brush Grade)	Dry Hard (Spray Grade)
10°C (50°F)	27 Hours	24 Hours
20°C (68°F)	13 Hours	12 Hours
25°C (77°F)	10.75 Hours	10 Hours
30°C (86°F)	6.5 Hours	6 Hours
40°C (104°F)	3.5 Hours	3 Hours
50°C (122°F)	2.75 Hours	2.25 Hours

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

Note: SPC does not recommend post-curing or force-curing at temperatures above 50°C (122°F). 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 effect of wind.

**Full Cure** | 4 days @ 25°C (77°F)

## CLEANUP & SAFETY

<b>Cleanup</b>	Carboline Thinner 2 or SP-100 Equipment Wash
<b>Safety</b>	Refer to SPC's Safety Data Sheet prior to use. Carefully read and follow all safety instructions on labels and packaging. Handle and store material with care in accordance to the Safety Data Sheet. Follow and observe any applicable local or national laws and regulations.

## TESTING / CERTIFICATION / LISTING



### TESTING / CERTIFICATION / LISTING

<b>Potable Water Certifications</b>	<b>Potable Water Use Limitations @ 75°F (24°C):</b>
	<i>Meets drinking water criteria of NSF/ANSI/CAN 600</i>
	Max DFT: 120 mils (3048 microns)
	# Coats: 1
	Tank Rating: >500 gal (1892.71 Liters)
	Pipe Rating: 8" or larger (30.48 cm)
	Valve Rating: 6" or larger (10.16 cm)
	Thinning: N/A
4 Day Cure Required before service	
Approved Colors: 0100 (Blue)	

### PACKAGING, HANDLING & STORAGE

<b>Shelf Life</b>	24 months
	*Shelf life: (actual stated shelf life) when kept at recommended storage conditions and in original unopened containers.
<b>Storage</b>	Store in a cool, dry, well-ventilated area at temperatures between 5°C (41°F) and 50°C (122°F). Keep the container lids sealed when not in use. DO NOT FREEZE.
<b>Packaging - Spray Grade</b>	<b>80 Liter (21.1 Gallon) Kit</b>
	Part A: 60 liters (15.9 gallons)
	Part B: 20 liters (5.3 gallons)
	<b>800 Liter (211.3 Gallon) Kit</b>
Part A: 600 liters (158.5 gallons)	
Part B: 200 liters (52.8 gallons)	
<b>Packaging - Brush Grade</b>	<b>1 Liter (0.26 Gallon) Kit</b>
	Part A: 0.75 liters (0.2 gallons)
	Part B: 0.25 liters (0.06 gallons)
	<b>2 Liter (0.53 gallons) Kit</b>
Part A: 1.5 liters (0.40 gallons)	
Part B: 0.5 liters (0.13 gallons)	

### WARRANTY

To the best of our knowledge the technical data contained herein is true and accurate on the date of publication and is subject to change without prior notice. User must contact Carboline Company to verify correctness before specifying or ordering. No guarantee of accuracy is given or implied. We guarantee our products to conform to Carboline quality control. We assume no responsibility for coverage, performance, injuries or damages resulting from use. Carbolines sole obligation, if any, is to replace or refund the purchase price of the Carboline product(s) proven to be defective, at Carbolines option. Carboline shall not be liable for any loss or damage. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY CARBOLINE, EXPRESS OR IMPLIED, STATUTORY, BY OPERATION OF LAW, OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. All of the trademarks referenced above are the property of Carboline International Corporation unless otherwise indicated.