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PRODUCT DATA SHEET

SP-8833 TC

DESCRIPTION: SP-8833 TC is a uniquely designed coating that offers a “trio” of properties: outstanding gouge resistance, excellent abrasion resistance and high temperature corrosion resistance. The epoxy polymer is coupled with an alloy polymer providing superior adhesion and corrosion resistance. SP 8833 TC is ideal for use in Horizontal Directional Drilling (“HDD”) applications requiring superior abrasion and gouge resistance. SP 8833 TC can also be used as an internal liner for slurry pipelines requiring exceptional abrasion resistance coupled with extremely low frictional properties.

ADVANTAGES:

- 100% Solids - No VOCs.
- Isocyanate free.
- Excellent resistance to high temperature cathodic disbonding up to 120°C (242°F).
- Excellent adhesion to grit blasted steel surfaces, Fusion Bond Epoxy, FRP, and treated 3L PE or 3L PP.
- Excellent Abrasion Resistance.
- Excellent Gouge Resistance.

USES:

- Coating for directional drill, slip bore and river crossing pipelines.
- Internal liner for slurry pipelines.

APPLICATION: • Spray Grade: Graco Hydra-Cat - Tip Size: .021 - .027

CLEANING MATERIALS:

- SP-100 Equipment Wash
- SP-110 Tool Cleaner
- SP-120 Internal Storage Lubricant

RECOMMENDED FILM THICKNESS: Minimum – 40 mils (1000 microns) *

* Consult with your SPC Representative.

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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- SURFACE PREPARATION:** (Steel Substrate)
- **Cleanliness** : Near White
 - **Standards** : NACE 2, Sa 2½ (Swedish Scale, ISO 8501-1)
: SSPC SP-10 (Steel Structures Painting Council)
 - **Profile** : 2.5 mils minimum to 5.0 mils maximum
(62.5 microns to 125 microns)

- RE-COAT INTERVAL:**
- @ 25°C (77°F) - Maximum: see below.
 - @ 100°C (212°F) - Maximum: see below.
 - SP-8833 TC is designed as a single-coat application coating; however, to correct anomalies or make repairs, an additional coat may be necessary. In these situations, sweep blasting of the surface is necessary to obtain inter-coat adhesion. Small areas ≤ 316 sq. cm. (≤ 49 sq. in.) may be sanded using a medium grit (80-100) carborundum cloth. Due to intrinsic slip of the SP-8833 TC coating surface, this step **MUST** be followed. The surface can be prepared after the coating has cured [normally after 6 hours at 25°C (77°F) and less at higher temperatures.] All dust from the sanding or blast roughening must be removed from the surface prior to the application of the coating.

- MIXING RATIO:**
- Spray Grade - By Volume: 3 Parts Base to 1 Part Hardener

HANDLING PROPERTIES:

Pot Life [100 gm mass @ 25°C (77°F)]	30 Minutes
Dry Time (ASTM D-1640) [30 mil coating thickness @ 25°C (77°F)]	
Tack Free Time.....	60 Minutes
Accept to Touch Time	3 Hours
Dry Hard Time.....	6 Hours

Substrate Temperature.... The acceptable substrate (metal surface) temperature range for the application of SP-8833 TC is 10°C (50°F) to 100°C (212°F). Preheating of the substrate is required if the surface to be coated is below 10°C (50°F). 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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HANDLING PROPERTIES (cont.):

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 lids sealed. The Shelf Life is a maximum of 24 months in unopened containers.

LIQUID PROPERTIES:

BASE

HARDENER

Appearance.....	Black Viscous Liquid.	Amber Liquid.
Solids Content (%).....	100	100
Specific Gravity (ASTM D-792).....	1.75 ± 0.03	1.03 ± 0.02
Specific Gravity (ASTM D-792).....	Base & Hardener Mixed:	1.57 ± 0.03
Coverage (Theoretical).....	Base & Hardener Mixed:	1604 (ft ² /U.S. Gallon/mil) 39.0 (m ² /Litre/25 microns)

PHYSICAL / MECHANICAL / ELECTRICAL PROPERTIES:

Adhesion to Steel:

Dry Adhesion (Pull-off Strength) [PSI (KPa)] (ASTM D-4541-95-A4) [25°C (77°F)] (Self-Alignment Adhesion Tester, Type IV).....	>4000 (27.6)
Wet Adhesion (Hot Water Soak) (CSA-Z245.20-02, Clause 12.14, 28 Days) [Modified to 95°C (203°F)].....	Rating #1

Partech Gouge Test:

Gouge Depth @ 100 Kg loading / 0 holidays using a wet sponge @ 62.5 V DC [mils (µm)]	36.4 (925)
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Taber Abrasion (ASTM D-4060-01) mg loss per 1000 cycles after 5000 cycles using CS-17 wheel, 1 kg load.....	47.1
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Cathodic Disbonding Test (mm) (CSA-Z245.20-02, Clause 12.8) [Modified to 14 Days @ 95°C (203°F)].....	4.32
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Cathodic Disbonding Test (mm) (CSA-Z245.20-02, Clause 12.8) [Modified to 14 Days @ 120°C (248°F)].....	6.2
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Cathodic Disbonding Test (mm) (CSA-Z245.20-02, Clause 12.8) [Modified to 28 Days @ 120°C (248°F)].....	5.8
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Flexibility (° PPD) (CSA-Z245.20-02, Clause 12.11) [25°C (77°F)].....	1.04
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Flexibility (° PPD) (CSA-Z245.20-02, Clause 12.11) [0°C (32°F)].....	0.58
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Flexibility (° PPD) (CSA-Z245.20-02, Clause 12.11) [-30°C (-22°F)].....	0.42
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Hardness (Shore D) (ASTM D-2240-91) [25°C (77°F)].....	82
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PHYSICAL / MECHANICAL / ELECTRICAL PROPERTIES (cont.):

Impact [Joules (inch-lb)] (CSA-Z245.20-02, Clause 12.12) [25°C (77°F)]	5.70 (50.5)
Impact [Joules (inch-lb)] (CSA-Z245.20-02, Clause 12.12) [0°C (32°F)]	4.20 (37.2)
Impact [Joules (inch-lb)] (CSA-Z245.20-02, Clause 12.12) [-30°C (-22°F)]	3.00 (26.6)

CHEMICAL RESISTANCE (One week immersion @ ambient temperatures):

Nitric acid, 10% solution.....	No change observed.
Sulphuric acid, 5% solution	No change observed.
Acetic acid, 5% solution.....	No change observed.
Sodium hydroxide, 10% solution	No change observed.
Sodium chloride, 10% solution	No change observed.
Toluene	No change observed.
Ethyl acetate	No change observed.
Ethanol, 50% solution	No change observed.
Mineral Oil	No change observed.

SAFETY: Read the Material Safety Data Sheets before use.

EFFECTIVE DATE: October 24, 2016

SPC / Product Data Sheet SP-8833

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