

## Scar-Guard®

# Composite Mechanical Protection for Directionally Drilled Pipelines

The patented Scar-Guard® line of products is designed to protect field joint and mainline coatings from the mechanical stresses and scarring associated with horizontal directional drilling (HDD), boring and micro-tunneling of pipelines. Scar-Guard® is a composite abrasion resistant overcoat comprised of fiberglass cloth and pre-impregnated flexible resin that is activated by water and cured within minutes. This sacrificial outer laminate system protects preapproved anticorrosion field joint coatings and mainline coatings such as FBE, liquid epoxies, shrink sleeves, and tapes. The Scar-Guard® line of products minimizes the need for costly repairs after pull back, and provides robust protection of the underlying pipeline coating. U.S. Patent #8522827

## Bury, Bore or Drill with Confidence

 Provides unparalleled protection against impact, abrasion, gouge, punctures and tears that may result from directional drilling, rough handling, native backfills or severe in-service conditions

#### Cure Options for any Environment

 Fast cure, slow cure, UV-Curable, UV-Resistant – all available options to suit a wide range of project cycle time requirements and construction conditions

#### Non-Shielding

 Suggested voltages for high-spark voltage testing as per NACE SP0188 pass through Scar-Guard® to ensure the anticorrosion coating can be tested for integrity after pull-through and protected for the lifetime of the asset.

### Fast, Easy Installation

 Scar-Guard® products are simply wrapped onto the existing coatings surface and activated by water. Pre-impregnated moisture cured polyurethane resin means - no field mixing or saturation required!



## **Applications**



Onshore Pipelines



Offshore Pipelines



Abrasion Resistant Overcoat (ARO)



HDD, Drilling and Boring



Girth-Weld Joints



Mainline Coating Protection

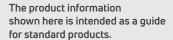
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Properties	Test Method	Scar-Guard <sup>®</sup>
Total Thickness	SSPC-PA-2	68 mils
Thickness per Layer	SSPC-PA-2	34 mils
Density	ASTM D792	n/a
Colour	Visual	Grey
Resin Type	Per Manufacturer	Polyurethane
Impact Resistance	ASTM G14-04	48 Joules
Gouge Resistance	CSA Z245.20.10	16 mils at 50 kg
Abrasion Resistance	ASTM D4060	1667 cycles/mil
Compressive Strength	ASTM D695	27,182 psi
Tensile Strength	ASTM D638	n/a
Dielectric Strength	ASTM D149	263 V/mil
Adhesion to existing coating (FBE)	ISO 21809-3 Annex C	Rating 1
Hardness (Shore D)	ASTM D2240	78 @ < 75°F
Cure Schedule*		
Pot Life (Gel Time)	100-gram resin mass	12 min
Hard Dry Time (Shore D > 70)	ASTM D2240	30 min

<sup>\*</sup>Cure times were tested at an ambient temperature of 24°C (75°F).

Since 1967, Canusa-CPS has been a leading developer and manufacturer of specialty pipeline coatings for the sealing and corrosion protection of pipeline joints and other substrates. Canusa-CPS high performance products are manufactured to the highest quality standards and are available in a number of configurations to accommodate many specific project applications.



Consult your Canusa representative for specific projects or unique applications.



#### Quality Management system registered to ISO 9001

Canusa warrants that the product conforms to its chemical and physical description and is appropriate for the use stated on the product data sheet when used in compliance with Canusa's written instructions. Since many installation factors are beyond our control, the user shall determine the suitability of the products for the intended use and assume all risks and liabilities in connection therewith. Canusa's liability is stated in the standard terms and conditions of sale. Canusa makes no other warranty either expressed or implied. All information contained in this data sheet is to be used as a guide and is subject to change without notice. This data sheet supersedes all previous data sheets on this product. E&OE

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