

## Premier 80 Epoxy Heat Shrink Sleeve (Premier 80 EHSS)

Premier 80 EHSS is a three-layer field joint coating system designed for corrosion protection of pipelines that operate up to a maximum operating temperature of 80°C.

### Composition

First layer: Two Part Epoxy primer, solvent free

Second layer: Hot Melt Sealant Adhesive pre-applied to the polyolefin backing

Third layer: Thick-wall irradiated cross linked polyolefin

### Uses

Premier 80 EHSS is used to protect welded field joints in distribution and transmission networks.

### Characteristics

Premier 80 EHSS is:

- compatible with most standard pipe coatings,
- stable over a wide temperature range,
- suitable for protection of bare, replacement sections,
- designed for long-term corrosion protection,
- highly resistant to mineral acids, alkalis and salts,
- resistant to cathodic disbondment,
- engineered for high-soil stress environments,
- resistant to vibration and substrate movement,
- tough but flexible- even at low temperatures.

### Surface Preparation

See *Instructions for Use* for additional detail.

Bevel the previous coating and clean the surrounding area to be covered.

Heat the area to 50°C. Blast to a surface profile of 50µm minimum and Sa 2½.

### Application

See *Instructions for Use* for additional detail.

Mix the two components of epoxy primer. Ensure thorough mixing prior to application. Apply to a minimum thickness of 100 µm and covering at least

10 mm of the adjacent coating. Never mix more primer than can be applied during the pot life. While the epoxy is still wet, apply the sleeve. The adhesive should be heated before application. Once the sleeve is wrapped, the closure patch must be heated and applied. The whole sleeve should be heat-shrunk to fit tightly around the joint. Post heating is used to soften the sleeve and allow the removal of any trapped air.

### Availability

Epoxy primer

Available as a pre-measured kit

Heat shrink sleeve (backing with adhesive)

Available in 30 metre rolls, 350 mm, 450 mm & 500 mm widths – other widths are available on request  
*N.B. When calculating the minimum sleeve width, allow for a minimum of 10% shrinkage during installation of the sleeve.*

Premier 80 EHSS:

- can be supplied as a custom-made, ready-to-use sleeve with the closure patch pre-attached,
- can be supplied in a bulk roll to be cut to size on-site. (Closure patches sold separately)

### Storage Conditions

Store all components upright in original packaging in a cool, dry, area. Do not store at temperatures above 30°C. During field application, store in a shaded area.

### Waste material

Please minimise or avoid waste wherever possible. Please do not discard waste material, including packaging, in the surrounding environment. Follow the waste hierarchy and all relevant legislation for disposal.

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## Typical properties

Test	Method	Unit	Value
Epoxy primer pot life		Minutes	20
Epoxy primer volume solids		%	100
Backing Thickness (as supplied)	ASTM D1000	mm	1.08
Adhesive Thickness (as supplied)	ASTM D1000	mm	1.59
Total Thickness (as installed)	ASTM D1000	mm	mean 2.85 max 3.0
Hardness at 23°C	ASTM D2240	Shore D	50
Ring & Ball Softening Point	ASTM E28	°C	113
Impact Resistance	EN 12068	J	15
Peel Strength (to pipe):			
- at 23°C	EN 12068	N/mm	8.7
- at 80°C	EN 12068	N/mm	0.22
Hot Soak Test at 80°C	ASTM D870	N/mm	1.29
Cathodic Disbondment Resistance			
- at 23°C	EN 12068	mm	4
- at 80°C	EN 12068	mm	11
Lap Shear Strength at 80°C			
- to pipe surface	EN 12068	N/mm <sup>2</sup>	0.11
- to PE factory coating	EN 12068	N/mm <sup>2</sup>	0.05
Electrical Insulation Resistance	EN 12068	Ωm <sup>2</sup> RS100	2 x 10 <sup>9</sup>
Ultimate Elongation	ASTM D638	%	550
Heat Ageing, 21 days at 150°C			
- Elongation	ASTM D638	%	284%
Thermal Ageing Resistance, 100 days at 100°C			
- Elongation at break	EN 12068	1.25 ≤ E <sub>100</sub> /E <sub>0</sub> ≥ 0.75	0.87
		E <sub>100</sub> /E <sub>70</sub> ≥ 0.8	1.0
- Peel strength to pipe surface	EN 12068	A <sub>100</sub> /A <sub>T</sub> ≥ 0.75	4.1
		A <sub>100</sub> /A <sub>70</sub> ≥ 0.8	0.8
Heat Shock, 4 hours at 225°C	ASTM D2671	Visual	Passed
Indentation Resistance at 80°C	EN 12068	N/mm <sup>2</sup>	1.05
Soil Stress Creep Resistance	TP 206	mm	0.46
Holiday Detection	EN 12068		Passed
Ultraviolet Irradiation resistance			
- Elongation at break	EN 12068	1.25 ≥ E <sub>x</sub> /E <sub>0</sub> ≥ 0.75	0.95

Important: Premier Coatings Ltd. pursue a policy to develop and continually improve all of our products and therefore the information given in this data sheet is intended as a general guide and does not constitute a warranty of specification. However, our sales personnel are committed to assist the user in establishing the suitability of the product for its intended purpose and additional specific information is available on request. Premier Coatings Ltd operate a Quality Management System registered to BS EN ISO 9001 (BSI Certificate no. Q09303) and an Environmental Management System registered to BS EN ISO 14001 (BSI Certificate no. EMS 677780).

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