

COVALENCE[®] MPSM, MEPS-C30-E, HEPS-C30-E
Product Information

Product description: The wrap-around HEPS & MEPS and the tubular MPSM are heat-shrinkable socket joint corrosion protection coatings. HEPS/MEPS/MPSM are typically used on steel or ductile iron pipes coated with PE, concrete or other coatings, i.e. paint and zinc. HEPS/MEPS/MPSM are also used to coat reducers, bends and dielectrical joints. For specially designed bell & spigot type joints, please refer to our special range of products (TISK, TISW-F, TISKW-F).

Construction: Two-layer system

- *First layer:* Visco-elastic butyl based adhesive.
- *Second layer:* Thick-walled, radiation cross-linked, high density polyethylene.

The installation is carried out directly on the cleaned and prepared pipe surface without any primer being required. Heating with a regular gas torch lets the high shrink-ratio backing reduce in size to form a tight and clean fit around the socket joint. While shrinking, the sealant, with its superior flow and fill characteristics, spreads evenly over the complete pipe surface and into all cavities.

Features:

- Backing with enhanced shrink ratio.
- High impact strength & high penetration resistance.
- Fully retains the deflection and longitudinal movement of the socket joint.
- Seal resists vibration, deflection and axial movement.
- No special filler needed.
- No primer needed.
- No special equipment needed.
- Low preheat requirements.

Benefits:

- Conforms easily to socket joint shapes.
- Virtually no risk of damage during operation.
- No break of the sealing ring.
- Reliable, high-performance seal stops water ingress.
- Simple 1 part installation.
- Keeps installation costs low.
- Fast installation – saves time.

Product selection guide

Max. operating temperature	65°C (149°F)
Compatible line coatings	PE, PP, Fibre-Cement Zinc, Bitumen Paint, Cold tape.
Min. preheat temperature	60°C (140°F)
Recommended pipe preparation	ST3
Soil stress restrictions	None
Performance	EN12068 C30 DIN30672 C30 for socket joints AWWA C216 ISO21809-3 Type 14A2

Product properties

Backing				
Property	Test method	Typical value MPSM**	Typical value MPSM/MEPS/HEPS	
Tensile strength at break	ASTM D-638 EN 60684-2	≥13 MPa	22.8 MPa	
Elongation at break	ASTM D-638 EN 60684-2	≥ 350 %	600%	
Hardness, Shore D	ASTM D-2240/ISO 868	50	57	
Shrink force	ASTM D-638, 150° C (302°F)		40 psi	
Dielectric strength	ASTM D-149 EN 60684-2	≥ 10 kV/mm	35 kV/mm	
Moisture absorption	ASTM D-570	0.04%	0.04%	
Adhesive				
Property	Test method	Typical value		
Softening point	ASTM E-28	134°C (273°F)		
Lap shear	EN 12068 @ 10 mm/min ASTM D1002 @ 50 mm/min	> 0.1 N/mm ² 50 psi		
Installed sleeve				
Property	Test method	Typical value		
		MPSM	MEPS	HEPS
Peel to steel	EN 12068 @ 10 mm/min	1.1 N/mm	1.1 N/mm	1.1 N/mm
Impact resistance	EN 12068, Class C	> 15 J	> 15 J	> 15 J
Indentation resistance	EN 12068, Class C30	> 0.6 mm*	> 0.6 mm*	> 0.6 mm*
Resistance to joint deflection and displacement	DIN 30672	Pass	Pass	Pass
Cathodic disbondment	EN 12068 30 days	4 mm radius	9 mm radius	9 mm radius
Longitudinal shrinkage	(Supplied length- Fully recovered length) / Supplied length	Min 45% (< DN300) Min 36% (> DN300)	Min 36%	Min 45%

* Remaining coating thickness

** Tubular extruded backing

Note: The typical values in this data sheet are based on lab prepared samples. Values shown are not to be interpreted as product specifications.

Product thickness

	HEPS C30-E	MEPS C30-E	MPSM** ≤ DN100	MPSM DN150-DN300	MPSM > DN300
Backing as supplied	0.7 mm (0.028 in)	0.9 mm (0.035 in)	0.7 mm (0.028 in)	0.7 mm (0.028 in)	0.9 mm (0.035 in)
Backing fully free recovered	1.4 mm (0.055 in)	1.4 mm (0.055 in)	2.4 mm (0.095 in)	1.4 mm (0.055 in)	1.4 mm (0.055 in)
Adhesive as supplied	1.5 mm (0.059 in)	1.5 mm (0.059 in)	0.7 mm (0.027 in)	0.9 mm (0.035 in)	0.9 mm (0.035 in)
Shrinkage	45%	36%	65%	45%	36%

1. PRODUCT DATA SHEET

Ordering information

Covalence® HEPS products are available

- As a roll (closure patches to be ordered separately)

Covalence® MEPS products are available

- As a roll (closure patches to be ordered separately)
- As Uni-sleeve (pre-cut with attached closure patch)

MPSM type products are available

- As ready-to-size tubular sleeves

Rolls can have a splice. Max 10% of the roll order will have a splice. Min partial length will be 5M or 15 ft.

MPSM (tubular)

Example	MPSM C30-UNIV-300-DN150	
	Designation	Standard ordering options
C30	Performance classification	C30
300	Sleeve width	300 mm*(12") * nominal width
DN150	Nominal pipe diameter	DN80-700 (3.50"-30")

MEPS (wrap-around) Uni-sleeve

Example	MEPS-C30-E-(UNIV)-DN150-300	
	Designation	Standard ordering options
C30	Performance class	C30
(UNIV)	Universal socket joint (special cut length)	
DN150	Nominal pipe diameter	DN150-1000 (6.625-40") (>DN1000 (40") on request only)
300	Sleeve width	300 mm*(12") * nominal width

MEPS roll form (closure patch to be ordered separately)

Example	MEPS-C30-E-12X100-RL	
	Designation	Standard ordering options
C30-E	Performance class	C30
12	Roll width (in)	12, 17, 24 (300, 450, 600 mm*) * nominal width
100	Roll length	100 ft (30 m)
RL	Unit of measure	Roll

HEPS roll form (closure patch to be ordered separately)

Example	HEPS-C30-E-17X100-RL	
	Designation	Standard ordering options
C30-E	Performance class	C30-E
17	Roll width (in)	17, 24 (450, 600 mm*) * nominal width
100	Roll length	100 ft (30 m)
RL	Unit of measure	Roll

HEPS & MEPS closure patches (to be ordered separately)

Example	WPCP-IV-6x12	
	Designation	Standard ordering options
6	Patch width (in)	6, 8 (150, 200 mm)
12	Patch length (in)	12, 17, 24 (300, 450, 600 mm*) * nominal width

General information

Product dimension	Sleeve cut lengths and appropriate closure patch widths depend on pipe size and product construction, see application table AT-MEPS/MPSM.
Installation guide	For proper product installation, see latest installation instruction.
Handling	Handle with care. Keep boxes upright.
Storage	Store indoor, clean and dry, away from direct sunlight in a cool place below +50°C. Unlimited shelf life.

Information

Documentation	Extensive information is available on our website. Application instructions and other documentation can be obtained by contacting our head office, from our local distributor or by sending an email to info@sealforlife.com
Certified staff	Application of the described coating system shall be carried out by certified personnel.



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DISCLAIMER: Seal For Life Industries warrants that the product conforms to its chemical and physical description and is appropriate for the use stated on the technical data sheet when used in compliance with Seal For Life Industries' written instructions. Because many installation factors are beyond the control of Seal For Life Industries, the user shall determine the suitability of the products for the intended uses and assume all risks and liabilities in connection herewith. Seal For Life's liability is stated in its General Terms and Conditions of Sale. Seal For Life Industries makes no other warranty either express or implied. All information contained in this document is to be used as a guide and is subject to change without notice. This technical data sheet supersedes all previous data sheets on this product.