

STOPAQ® OUTERWRAP FLEX PE

Product Information

Product description: Stopaq® Outerwrap Flex PE is a flexible tape that is used for the mechanical protection of Stopaq® corrosion preventative coating systems for buried and submerged pipelines that further comprise Stopaq® Wrappingband CZ or Stopaq® Wrappingband CZH. It is made of a flexible Polyethylene backing and a heavy duty adhesive. It has good adhesion to the outer surface of Stopaq® Wrappingband as well as to its own backing, even when operated at its maximum service temperature for long time. It also provides good resistance to impact and indentation to the complete Stopaq® coating system.

Features:

- Wide service temperature range
- Good adhesion to Stopaq® Wrappingband and to its own backing
- Good resistance to thermal ageing and to hot water immersion
- Good resistance to impact and indentation
- Supports self-healing of small defects
- Compliant with ISO 21809-3:2016 coating type 13A-2
- Complies with various regulations regarding substances in articles like REACH-SVHC

Benefits:

- Very well suited for manual application
- Easy to apply, cold application
- Flexible, good conformity to irregular shaped objects
- No curing or waiting time, ready for immediate commissioning

Application examples

Pipes and vessels: As part of Stopaq® corrosion preventative coatings applied on pipelines and vessels.

Field joints: As part of Stopaq® corrosion preventative coatings applied on girth-weld joints of pipeline structures.

Pipe fittings: As part of Stopaq® corrosion preventative coatings applied on pipe fittings like elbows, bends, tees, reducers and flanges

Product properties of Stopaq® Outerwrap Flex PE

Colour	Black	
Thickness	Backing:	0,38 mm [15 mils] ± 10 %
	Total:	0,50 mm [20 mils] ± 10 %
Temperature ranges	Thermal resistance:	Max. +90 °C [194 °F]
	Continuous buried and submerged services:	-45 to +70 °C [-49 to 158 °F]
Peel strength between layers	Before ageing ^{A)} - at +23 °C [73 °F]: ≥ 0,20 N/mm [≥18 ozf/in] (typical 0,6 N/mm [54 ozf/in]) - at +70 °C [158 °F]: ≥ 0,02 N/mm [≥1.8 ozf/in] (typical 0,07 N/mm [6.4 ozf/in]) After thermal ageing for 100 days at 90 °C [194 °F] - Peel strength at 23 °C [73 °F] ≥ 0,20 N/mm [≥18 ozf/in] (typical 1,0 N/mm [91 ozf/in]) - P'100 / P'0 ≥ 0,50 ^{A)} After hot water immersion for 100 days at 70 °C [158 °F] - Peel strength at 23 °C [73 °F] ≥ 0,20 N/mm [≥18 ozf/in] (typical 0,4 N/mm [37 ozf/in])	
Thermal ageing resistance	After thermal ageing for 100 days at +90 °C [194 °F] ^{A)} - Elongation at break: E'100 / E'0 ≥ 0,75	
Properties of complete coating system		
Construction	- 1 layer of Stopaq® Wrappingband CZH - 2 layers of Stopaq® Outerwrap Flex PE	
Thickness	Typical 3,0 mm [118 mils]	
Impact resistance	Tested at 15 J [132 in.lbf] and +23 °C [73 °F] ^{A)} - no holidays	
Indentation resistance	Tested with pressure of 1,0 N/mm ² [145 psi] at 23 °C and at 70 °C [73 and 158 °F] ^{A)} - residual coating thickness ≥ 0,6 mm [24 mils]	
Cathodic disbondment resistance	28 days at 23 °C and at 70 °C [73 and 158 °F] ^{A)} - Disbondment 0 mm, no holiday - Self-healing completed within 24 hours	
Self-healing test	Self-healing of an artificial defect Ø 6 mm [1/4"] at 23 °C and at 70 °C [73 and 158 °F] - No holiday after 24 hours	

^{A)} ISO 21809-3:2016 coating type 13A

General order information

Product	Stopaq® Outerwrap Flex PE is available in rolls, wound on cardboard cores, packed in cardboard boxes:
Art. Nr.:	Product dimensions (W x L) and contents:
12611-03000	50mm x 30m [2"x98'], 18 pcs/box
12612-03000	75mm x 30m [3"x98'], 12 pcs/box
12613-03000	100mm x 30m [4"x98'], 12 pcs/box
12614-03000	150mm x 30m [6"x98'], 6 pcs/box
Handling	Handle with care. Keep boxes upright.
Storage	Store indoor, clean and dry, away from direct sunlight in a cool place below +45 °C [113 °F]. Shelf life 5 years.

Application instruction - Job preparation		Example - Pipe wrapping (continued) Continue spiral wrapping until reaching the boundary of the area to be coated, leaving 3 mm [1/8"] of the previously applied Stopaq® Wrappingband visible at the boundary. When more than one roll of Stopaq® Outerwrap Flex PE is needed to continue wrapping, an overlap of at least 100 mm [4"] on the end of the previously applied material should be created. End wrapping with two full circumferential wraps perpendicular to the pipe. End with a quarter circumferential wrap without tension. In case of wrapping on horizontal pipes, the tape end should face downwards ending at 3 o'clock position. Cut off in a tie-form. The applied Stopaq® Outerwrap Flex PE must look smooth and tight and should be shaped around all details and into corners.
Tools, equipment and auxiliaries	– Scissors, Knife, Measuring tape	
Additional coating materials	Stopaq® Outerwrap Flex PE is applied on Stopaq® corrosion preventative coating materials, such as: - Stopaq® Wrappingband CZ or CZH - Stopaq® Paste CZ or CZH Additional mechanical protective materials may be applied over Stopaq® Outerwrap Flex PE, e.g.: - Stopaq® Polyester - Stopaq® Outerglass Shield	
Work area and substrate	The substrate must be dry, clean and protected against negative weather influences. The substrate should be free from condensing water which can be reached by keeping the temperature at least 3 °C [6 °F] above dew point. Temperature of the substrate should preferably be between +10 °C and +70 °C [50 to 158°F].	
Product conditions	Stopaq® Outerwrap Flex PE must be dry and the temperature should preferably be between +10 °C and +30 °C [50 to 86 °F] for the ease of application.	
Application instruction – Brief version		Handling and commissioning
Specific Stopaq application instructions are available at Seal For Life Industries, e.g. for wrapping of pipes, field joints, fittings, etc.		Exposure to loads
Example - Pipe wrapping	Horizontal pipelines should be spirally wrapped from left-to-right or from right-to-left. Pipelines positioned with an angle deviating from horizontal should be wrapped from bottom to top (e.g. risers). In general Stopaq® Outerwrap Flex PE should be applied with tension by gently pulling the roll of material, unless stated otherwise in specific application instructions. Start wrapping with two full circumferential wraps perpendicular to the pipe, leaving 3 mm [1/8"] of the previously applied Stopaq® Wrappingband visible at the boundary. Continue wrapping spirally with an overlap of at least 50%. Avoid air inclusions. Avoid tenting and bridging.	Objects coated with Stopaq® Outerwrap Flex PE should not be exposed to excessive loads e.g. from supports- or lifting equipment.
		Immersion or burying
		Immersion or burying is possible immediately after completion of the coating application. Consult data sheets for specific instructions of additional materials used. Backfill and compact with clean sand and filling material without sharp stones or hard lumps of soil.
		Information
		Documentation
		Extensive information is available on our web-site. Application instructions and other documentation can be obtained by contacting our head office, from our local distributor or by sending email to info@sealforlife.com
		Certified staff
		Application of the described coating system should be carried out by certified personnel.



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Further information is available on our website www.sealforlife.com, or by sending an inquiry to info@sealforlife.com

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 technical data sheet 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.