



MIRELON® POLAR

PEF - EN 14313 - ST(+) 90 – ST(-) -40 - WS 005 - CL 5 - PH 6,5

Thermoinsulating tube from polyethylene foam with closed cell structure, laminated by reinforced reflective aluminium foil

MIRELON® POLAR are tubes designed to insulation of hot and cold water distribution systems, insulation of central heating lines, insulation of sanitary instalations, insulation of refrigeration piping and for insulation in areas where it is necessary to wash the insulation for hygienic reasons.

MIRELON® POLAR is an ideal thermal insulation material for new buildings, adaptations and renovations due to its excellent thermal insulation properties, flexibility and easy workability.

MISAPPLICATION:

- Thermal insulation of low and high pressure steam distribution systems
- Instalation in places where the ambient temperature exceeds 90°C

Technical data:

- laminated design
- lenght: 2 m (according to EN 14313:2009+A1:2013)
- wall thickness: 9, 13, 20, 25 mm (according to EN 14313:2009+A1:2013)
- internal diameter: 9 až 134 mm (according to EN 14313:2009+A1:2013)

Color: gray-black, silver lamination

MIRELON® POLAR – physical properties

Basic characteristics		Properties				Harmonized technical specification	
Thermal resistance	Coefficient of thermal conductivity W/m.K	°C	λ_D	°C	λ_D	EN 14313:2009+A1:2013	
		-20	0,039	20	0,049		
		0	0,044	50	0,057		
		10	0,046	90	0,069		
	Dimensions and tolerations						
	- wall thickness	9 mm	+/- 1,5 mm	20 a 25 mm	+/- 2,5 mm		
	13 mm	+/- 2 mm	X	X			
- tube lenght	l -1,5% + 2,5%						
- internal diameter	to 35 mm +1 to + 4 mm, from 36 to 100 mm +2 to +6 mm, from 101 mm +3 to +8 mm						
Reaction on fire	Reaction on fire	E ₁ -s3, d2					
Thermal resistance stability in aging/degradation	Coefficient of thermal conductivity W/m.K	see table above					
	Dimensions and tolerations	see table above					
	Dimensions stability	3%					
	Characteristic stability	it does not change					
	Lowest operating temperature	-40°C					
	Highest operating temperature	90°C					
Thermal resistance stability at high temperature	Characteristic stability	it does not change					
	Dimensions stability	3%					
	Highest operating temperature	90°C					

NPD – no property has been determined




Basic characteristics		Properties	Harmonized technical specification
Stability of reaction on fire at high temperature	Characteristic stability	it does not change	EN 14313:2009+A1:2013
Stability of reaction on fire in aging/degradation	Characteristic stability	it does not change	
Compressive strength	-	NPD	
Water permeability	Water absorption	WS 005 ($W_B \leq 0,05$)	
Water vapor permeability	Water absorption	NPD	
	Diffusion resistance	NPD	
Release of corrosive substances	Trace amounts of soluble ions and pH	CL 5 (≤ 5 mg/kg), PH 6,5	
Sound absorption index	Structure sound transmission	NPD	
	Sound absorption	NPD	
Release of hazardous substances into internal environment	Release of hazardous substances	NPD	
Burning by incandescent glow	Burning incandescent glow	NPD	

NPD – no property has been determined

The technical datasheet was drawn up on the basis of the protocols of the notified bodies: no. 1023 (Institut pro testování a certifikaci a.s., třída Tomáše Bati 299, Louky, 763 02 Zlín) a no. 1390 (Centrum stavebního inženýrství a.s., ul. Pražská 16, 102 00 Praha 10).

Approved 25. 5. 2022

			
1023, 1390			
Mirel Vratimov a.s. Mourová 114/7, 739 32 Vratimov 12 POV 2/2020/EN			
EN 14313+A1 MIRELON® POLAR Therma insulation products for use as thermal insulation for equipment, buildings and industrial installations T11B/E11			
Coefficient of thermal conductivity W/m.K			
°C	λ_0	°C	λ_0
-20	0,039	20	0,049
0	0,044	50	0,057
10	0,046	90	0,069
reaction on fire		E ₁ -s3, d2	
wall thickness		see table below	
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wall thickness		9 mm 13 mm 20 mm 25 mm	

