



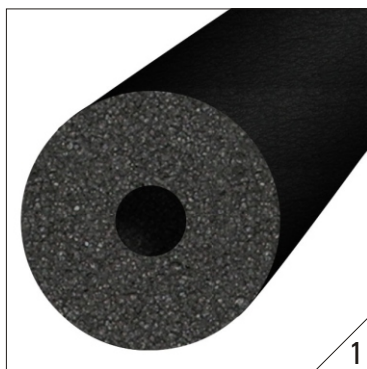
Greenland Systems
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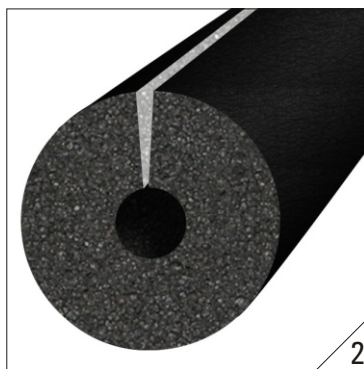


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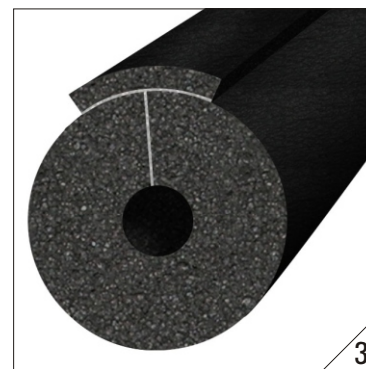
Greenland SSH



Slip-on type



Slit type (self adhesive)



Slit type with flap (self adhesive)

Main Features of GreenLand GREEN-SSH Tube & Pipe thermal Insulation:

- High quality synthetic EPDM-based elastomer with completely closed-cell structure
- Excellent UV resistance
- Supplied in lengths of 2.0 metres
- CFC-free and PVC-free
- High weather and ozone resistance
- Up to 175 °C (347 °F) intermittent operating temperature
- Retains flexibility at temperature as low as -40 °C
- Lambda value 0.039 W/m*K or better at +40 °C
- Self-extinguishing according to UL94-V0 standard, no fireball drops
- Does not cause copper or stainless steel corrosion (ref. DIN 1988)
- < 5 ppb (< 0.005 ppm) nitrosamine content

Packing information:

Metric System	Carton Size	Full Container Load	
	W X H X L (cm) / m ³	20 ft	40 ft
Tube (2 metre length)	45 x 23 x 207 / 0.214	138 ctn	288 ctn

GREEN-SSH is a new, flexible high-temperature insulation material applicable in the fields of sanitation, solar and heating. GREEN-SSH has excellent UV and weather resistance.

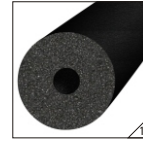
GREEN-SSH is available with longitudinal slits, with peel-protected self-adhesive surfaces and overlap wings. This form is especially suitable for insulating existing pipe works as it can be applied easily without disconnecting pipes / tubes.

Physical Properties [1]		Data					Test Method
Cell Structure		Closed Cell					
Density(kg/dm ³)		0.048-0.096 [3]					ASTM D1667
Thermal conductivity	Mean temp.	-4°F -20°C	32°F 0°C	75°F 24°C	90°F 32°C	104°F 40°C	ASTM C 177 JIS A 1412 DIN 52613
	K. Value (W/m*K)	0.22 0.032	0.23 0.034	0.25 0.037	0.26 0.038	0.27 0.039	
Permanent Service Temperature [4]		-57°C to +125°C					Cell starts to become harder at minus 57°C. Can be used as low as -200°C [4]
Water Vapour permeability		0.10pemm-in(0.15*10 ⁻¹²)					ASTM C 355, E96 [2]
		>5,000					DIN 52615
Water Absorption (% by weight) [5]		5					ASTM D 1056
Ozone Resistance		Excellent					ASTM D 1171
Thermal Stability		7 days 200°F		6% shrinkage			ASTM C 1171
Flammability & Smoke Developed		Class V-0					UL-94
		25/50					ASTM E84
		Self extinguishing					ASTM D 635
		Class 5.3					EMPA (Switzerland)
U.V. weather resistance		Excellent					
Corrosion of Copper, Stainless		Non-corrosive					DIN 1988
Nitrosamines Content [6]		Not detected					US FDA
Sound Reduction		27dB(A) @ 20mm thickness					DIN 52218
Flexibility		Excellent					

Specifications comply with ASTM C534-88.

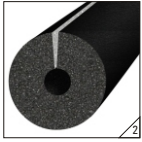
- [1] Above figures show average values obtained by various international testing institutes.
- [2] Tested according to DIN, JIS, ASTM and others.
- [3] Average density of insulation with thickness of 20 mm or more.
- [4] At temperature below -57 °C the cells become hard. This does not affect thermal conductivity or water vapour permeability. In heating applications GREEN-SSH can withstand +125 °C continuously.
- [5] Water vapour permeability tests were carried out according to ASTM E96 dehydrates test method at 37.8 °C.
- [6] It is reported that Nitrosamin is harmful to human health even during storage. No Nitrosamin content was detected in GREEN-SSH.

GREEN-SSH Insulation Tube Specifications: Slip-on type.



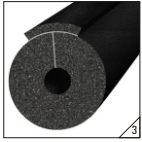
Wall Tube ID (MM)		Wall Thickness		
		13mm	20mm	25mm
13	Part Number	M13013	M20013	M25013
	Metres/Box	120	64	40
16	Part Number	M13016	M20016	M25016
	Metres/Box	100	56	36
19	Part Number	M13019	M20019	M25019
	Metres/Box	80	48	36
22	Part Number	M13022	M20022	M25022
	Metres/Box	64	40	32
25	Part Number	M13025	M20025	M25025
	Metres/Box	60	36	24
27	Part Number	M13027	M20027	M25027
	Metres/Box	60	36	24
28	Part Number	M13028	M20028	M25028
	Metres/Box	56	36	24
32	Part Number	M13032	M20032	M25032
	Metres/Box	48	36	24
35	Part Number	M13035	M20035	M25035
	Metres/Box	40	32	20
38	Part Number	M13038	M20038	M25038
	Metres/Box	36	24	20
42	Part Number	M13042	M20042	M25042
	Metres/Box	36	24	16
45	Part Number	M13045	M20045	M25045
	Metres/Box	36	20	16
48	Part Number	M13048	M20048	M25048
	Metres/Box	32	20	16
51	Part Number	M13051	M20051	M25051
	Metres/Box	28	16	16

GREEN-SSH Insulation Tube Specifications: Slit type (self adhesive).



Tube ID (MM) \ Wall		Wall Thickness		
		13mm	20mm	25mm
13	Part Number	L13013	L20013	L25013
	Metres/Box	120	64	40
16	Part Number	L13016	L20016	L25016
	Metres/Box	100	56	36
19	Part Number	L13019	L20019	L25019
	Metres/Box	80	48	36
22	Part Number	L13022	L20022	L25022
	Metres/Box	64	40	32
25	Part Number	L13025	L20025	L25025
	Metres/Box	60	36	24
27	Part Number	L13027	L20027	L25027
	Metres/Box	60	36	24
28	Part Number	L13028	L20028	L25028
	Metres/Box	56	36	24
32	Part Number	L13032	L20032	L25032
	Metres/Box	48	36	24
35	Part Number	L13035	L20035	L25035
	Metres/Box	40	32	20
38	Part Number	L13038	L20038	L25038
	Metres/Box	36	24	20
42	Part Number	L13042	L20042	L25042
	Metres/Box	36	24	16
45	Part Number	L13045	L20045	L25045
	Metres/Box	36	20	16
48	Part Number	L13048	L20048	L25048
	Metres/Box	32	20	16
51	Part Number	L13051	L20051	L25051
	Metres/Box	28	16	16

GREEN-SSH Insulation Tube Specifications: Slit type with flap (self adhesive).



Tube ID (MM) \ Wall		Wall Thickness		
		13mm	20mm	25mm
13	Part Number	F13013	F20013	F25013
	Metres/Box	120	64	40
16	Part Number	F13016	F20016	F25016
	Metres/Box	100	56	36
19	Part Number	F13019	F20019	F25019
	Metres/Box	80	48	36
22	Part Number	F13022	F20022	F25022
	Metres/Box	64	40	32
25	Part Number	F13025	F20025	F25025
	Metres/Box	60	36	24
27	Part Number	F13027	F20027	F25027
	Metres/Box	60	36	24
28	Part Number	F13028	F20028	F25028
	Metres/Box	56	36	24
32	Part Number	F13032	F20032	F25032
	Metres/Box	48	36	24
35	Part Number	F13035	F20035	F25035
	Metres/Box	40	32	20
38	Part Number	F13038	F20038	F25038
	Metres/Box	36	24	20
42	Part Number	F13042	F20042	F25042
	Metres/Box	36	24	16
45	Part Number	F13045	F20045	F25045
	Metres/Box	36	20	16
48	Part Number	F13048	F20048	F25048
	Metres/Box	32	20	16
51	Part Number	F13051	F20051	F25051
	Metres/Box	28	16	16