



AEROFLEX[®]

CLASS 1

Aflex-ECO

Nitrile Insulation Tubes & Sheets

**CLOSED CELL
ELASTOMERIC NITRILE
INSULATION FOAM**



AFlex-ECO Class 1 Nitrile Insulation Sheets/ Tubes

AFlex-ECO is a closed cell flexible elastomeric foam made from Nitrile rubber. This material has low thermal conductivity and high water vapour diffusion resistance. It is CFC/ HCFC free and dust and fiber free. It ensures energy saving in eco-friendly manner. This product meets insulation requirement in diverse fields such as the automobile, air conditioning & refrigeration industry, construction industry, pharma industry, hotels/ hospital and cold storage industry.

Product Features

Completely closed cell elastomeric nitrile insulation | Quick and easy to install with no special tools | Flexible, durable and easy to handle | Excellent compression strength due to closed cell structure. | Superior thermal insulation properties over other open or semi closed cell insulation material | Very high diffusion resistance and no cladding is required if installed inside. | Class 1 fire safety as per BS 476 part 7.

Size availability

- 6mm, 9mm, 13mm, 19mm, 25mm and 32mm wall thickness to fit all standard copper and iron pipes diameters from 6mm (¼") to 108mm (4 ¼").
- Other size available on request.
- Tube length: 1.83 meters (6 ft).
- Available in special sizes and long coils on request.

Specification sheet

Technical Performance

Density	50 Kg/M ³ ± 20% Sheet 60 Kg/M ³ ± 20% Tube
Temperature Range *	-40°C to + 105 °C
Thermal Conductivity W/m.K ASTM-C-518 & ISO 8301	≤ 0.035 W/m ² K @ 10°C ≤ 0.036 W/m ² K @ 20°C ≤ 0.037 W/m ² K @ 30°C ≤ 0.038 W/m ² K @ 40°C
Water vapour diffusion Resistance factor μ	≥ 7,000
Ecological Data	No asbestos, No HCFC - CFC, No Formaldehyde - Cd-Hg etc.
Cell Structure	Closed Cell
Ozone resistance	Very Good
Resistance to Oil and Grease	Very Good
Odour	Negligible
Noise reduction	upto 35dB (A)
Reaction to Fire a) Surface flame spread b) Rate of Burning (Vertical Position) c) Practical fire Behaviour	Class I - BS 476 Part Class V-0 - UL94-1997 Self-Extinguishing, does not drip, does not spread flame ASTM D 635-06

* For temperature below -40°C pls consult our engineering group.

AFlex-ECO Tubing (Class 1 Nitrile Insulation Tube Packing List)

Packing Details for AFlex-ECO Tubing Tubes:

Size-ID		6mmThk		9mmThk		13mmThk		19mmThk		25mmThk		32mmThk	
mm	inch	Pcs./ Crtn	Mtr./ Crtn	Pcs./ Crtn	Mtr./ Crtn	Pcs./ Crtn	Mtr./ Crtn	Pcs./ Crtn	Mtr./ Crtn	Pcs./ Crtn	Mtr./ Crtn	Pcs./ Crtn	Mtr./ Crtn
6	1/4	250	457.5	156	285.48	110	201.3	54	98.82				
10	3/8	200	366	120	219.60	80	146.4	40	73.2	25	45.75		
13	1/2	150	274.5	100	183.00	72	131.76	36	65.88	20	36.6		
16	5/8	120	219.6	90	164.70	63	115.29	35	64.05	20	36.6	20	36.6
19	3/4	100	183	72	131.76	56	102.48	30	54.9	20	36.6	20	36.6
22	7/8	90	164.7	64	117.12	48	87.84	30	54.9	18	32.94	18	32.94
25	1	80	146.4	56	102.48	42	76.86	25	45.75	16	29.28	16	29.28
28	1 1/8	70	128.1	49	89.67	36	65.88	25	45.75	16	29.28	12	21.96
32	1 1/4	60	109.8	42	76.86	30	54.9	20	36.6	15	27.45	12	21.96
35	1 3/8			40	73.20	30	54.9	18	32.94	12	21.96	12	21.96
38	1 1/2			36	65.88	25	45.75	16	29.28				
42	1 5/8			30	54.90	25	45.75	16	29.28	12	21.96	10	18.3
45	1 3/4			30	54.90	20	36.6						
48	1 7/8			28	51.24	20	36.6	15	27.45	10	18.3	10	18.3
51	2			24	43.92	20	36.6	12	21.96	9	16.47	8	14.64
54	2 1/8			21	38.43	20	36.6	12	21.96	9	16.47	6	10.98
57	2 1/4			20	36.60								
60	2 3/8			20	36.60	18	32.94	10	18.3	9	16.47	6	10.98
63	2 1/2			20	36.60	15	27.45	10	18.3				
67	2 5/8			18	32.94	15	27.45	9	16.47	8	14.64	6	10.98
73	2 7/8			18	32.94	13	23.79	9	16.47	8	14.64	6	10.98
76	3			18	32.94	12	21.96	8	14.64	8	14.64	5	9.15
79	3 1/8			16	29.28	12	21.96	8	14.64	8	14.64	5	9.15
84	3 1/3									6	10.98		
89	3 1/2			16	29.28	12	21.96	6	10.98	6	10.98	5	9.15
92	3 5/8												
98	3 7/8												
102	4							4	7.32	5	9.15	4	7.32
105	4 1/8												
108	4 1/4					8	14.64	4	7.32	4	7.32	4	7.32
114	4 1/2											2	3.66

Length: 1830 ± 20mm. Thickness from 6mm to 19mm ± 1mm and for 25mm & 32mm ± 2mm.

Tolerance (ID): from 6mm to 42mm +2/-0mm, 42mm to 73mm +3/-0mm and above 73mm +6mm/-0mm.

Note: Laminated product not available in tubes. (Special sizes available on request).

Tubes can also be available ID - 127mm, 130mm, 140mm, 165mm size as per customer requirement.

AFlex-ECO Class 1 Nitrile Insulation Sheet packing list

AFlex-ECO Continuous Sheets

Sheet Thickness * (mm)	Dimensions	Roll Content sq. mtr.	Sheet Thickness (mm)	Dimensions	Roll Content sq. mtr.
6	1 x15m / 1 x 40m	15/40**	19	1m x 15m	15
9	1 x15m/ 1 x 30m	15/30**	25	1m x 10m	10
13	1 x15m/ 1 x 25m	15/25**	32	1m x 8m	8
16	1 x15m/ 1 x 20m	15/20**			

* 3mm sheet is available with one side skin only | * Tolerance for thickness from 6mm to 19mm ±1mm & for 25mm & 32 mm ±2mm |

** Roll content 40/30/25/20 m is available in lamination product such as Aluminum Foil, Glass Cloth, Self Adhesive.



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Disclaimer: Although these values represent actual results achieved in tests, they should only be used as a guide. ALP Aeroflex cannot guarantee the performance of the product as all situations are different & should be treated separately. All statements & technical informations are based on results obtained under typical conditions. It is the responsibility of the recipient to verify with us that the informations are appropriate for specific use intended by the recipient.