



AEROFLEX[®]

CLASS 1



Aflex-ECO

Nitrile Insulation Tubes & Sheets

**CLOSED CELL
ELASTOMERIC NITRILE
INSULATION FOAM**

INNER ENGINEERING PRODUCTS AND SYSTEMS PVT LTD



MADHYA PRADESH



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UL 94



ASTM D635



British Standards
476 Part 7

Aflex-ECO
Class 1
BS 476 PART 7

1800 572 7963

www.innerengineering.co.in

ie.inquiry@innerengineering.co.in

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
Odour	Negligible
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.



INNER ENGINEERING PRODUCTS & SYSTEMS PVT LTD

Registered Office (Ahmedabad)

📍 Ground Floor, Showroom No. 3, Brooklyn Tower, Next to YMCA Club, S,G Highway, Ahmedabad - 380015, Gujarat, India.

Branch Offices (Pune - Vadodara)

📍 Office No 501, Fifth Floor, Archway, Plot No 5, Sopan Baug Society, Survey No 2/1, Balewadi, Pune- 421045, Maharashtra, India

📍 713/A, Atlantis Heights, Opp. Swagat Petrol Pump, Nr. Genda Circle, Vadodara - 390021, Gujarat, India

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 informati