

NH/Armaflex®

THE NON-HALOGEN INSULATION TO
REDUCE SMOKE AND TOXICITY IN THE
EVENT OF FIRE



- Low amounts of smoke and acid gas in the event of fire, for use in marine and transport applications
- Reduced toxicity and corrosive effects on people and equipment
- Prevents stress corrosion cracking of stainless steel

- Fibre dust free material with low thermal conductivity: $\lambda_{0\text{ }^{\circ}\text{C}} \leq 0.040 \text{ W}/(\text{m} \cdot \text{K})$
- Excellent protection against water vapour diffusion



Technical Data - NH/Armaflex

Brief description	Halogen free, flexible closed-cell insulation material with certification for use in marine environments, rail and military sectors. Also suitable for use in clean rooms and server rooms.
Material type	Elastomeric foam based on synthetic rubber. Factory made flexible elastomeric foam (FEF) according to EN 14304.
Colour	Dark grey / anthracite
Applications	Insulation / protection for air conditioning / refrigeration, ventilation and process equipment to prevent condensation and save energy on pipework, air ducts, vessels (incl. Elbows, fittings, flanges etc.)
Special Features	Zero halogens (chloride, bromide) acc. to DIN / VDE 0472, part 815. Fulfills DIN 1988 Parts 2 and 7.
Safety and Environment	ODP zero GWP zero
Remarks	Declaration of Performance is available in accordance with Article 7(3) of Regulation (EU) No 305/2011 on our homepage: www.armacell.com/DoP

Property	Value/Assessment	Test ^{*1}	Super-vision ^{*2}	Special Remarks
Temperature Range				
Temperature Range	Max. service temperature +110 °C (+85 °C if sheet or tape is glued to the object with its whole surface.) Min. service temperature ¹ -50 °C	EU 5664		Tested according to EN 14706 EN 14707 EN 14304
Thermal Conductivity				
Thermal Conductivity	ϑ_m +/-0 °C $\lambda =$	EU 5664	○	Tested acc. to BS 874 Part 2 1986 EN 12667 ENISO 8497
	$\lambda \leq 0.040$ W/(m · K) $[40 + 0,1 \cdot \vartheta_m + 0,0009 \cdot \vartheta_m^2]/1000$			
Water vapour diffusion resistance				
Water vapour diffusion resistance	$\mu \geq 2,000$	EU 5664		Tested according to DIN 52 615 EN 12086 EN 13469
Fire performance				
Reaction to fire	Class 1	GB 5157	○/●	Tested according to BS 476 Part 7: 1997
	sheets, tape	Euroclass E	EU 5664	Classified acc. to EN 13501-1. Tested according to EN 13823 + EN ISO 11925-2
	tubes	Euroclass D _L -s3, d0		
Other fire class	Ship Building: Bureau Veritas, Det Norske Veritas, Lloyds Register	low flammability	Ship Building: D 5555 / D 5348 EU 5475 &	Ship Building: acc. to IMO A653(16) Railway: acc. to DIN 54837 ISO 5659 (DIN 5510-2)
	Railway sheets up to 25 mm	S4 SR2 ST2	EU 6111	UL: acc. to UL94, IEC 60695 and Can/CSA-C.22.2 No. 0.17., UL 746C
	Railway sheets 6mm , 19 mm	M1 F1, M2 F2	Railway: D 6666 / D 5863 UL: EU 5837	FM: acc. to UBC26-3, Class No.4924
	UL approved	HF-1	FM: D 4266	
Practical fire behaviour	Self-extinguishing, does not drip, does not spread flames			
Other technical features				
Dimensions and tolerances	In accordance with EN 14304, table 1			Tested acc. to EN 822, EN 823, EN 13467
Chemical behaviour	Resistant against commonly used building materials including concrete, lime, gypsum, cement.			
Health aspects	Dust & fibre free			
Storage & Shelf life	Self-adhesive tapes, self-adhesive sheets, self-adhesive tubes: 1 year			Can be stored in dry, clean rooms at normal relative humidity (50% to 70%) and ambient temperature (0 °C – 35 °C).
Resistance to	Building Materials: Very Good Chemicals: Consult Product Test List Ozone: Very Good			
Water Absorption	0.2% by volume			Test acc. to ASTM C 209
Environmental Aspects	ODP zero GWP zero	EU 5197		

1. For temperatures below -50 °C please contact our Technical Department to request the corresponding technical information.

*1 Further documents such as test certificates and approvals can be requested using the registration number given.

*2 ●: Official supervision by independent institutes and /or test authorities
○: In-house quality monitoring

All statements and technical information are based on results obtained under typical conditions. It is the responsibility of the recipient to verify with us that the information is appropriate for the specific use intended. Installation instructions are given in our Armaflex installation manual. Please consult our Technical Department before insulating stainless steel. With some refrigerants the discharge temperature may exceed +110 °C, please consult our Technical Department for further information. Armaflex 520 or Armaflex HT 625 Adhesive must be used to guarantee proper installation. For outside use, Armaflex should be protected with a suitable outer covering within 3 days of installation.

NH/Armaflex tubes



Length 2.0 m

Pipe max. Outside-Ø [mm]	9,0 mm insulation thickness		13,0 mm insulation thickness	
	Code	m/carton	Code	m/carton
10	NH-09X010 ●	266	NH-13X010 ●	156
12	NH-09X012 ●	200	NH-13X012 ●	162
15	NH-09X015 ●	192	NH-13X015 ●	120
18	NH-09X018 ●	166	NH-13X018 ●	112
22	NH-09X022 ●	136	NH-13X022 ●	98
28	NH-09X028 ●	98	NH-13X028 ●	78
35	NH-09X035 ●	76	NH-13X035 ●	56
42	NH-09X042 ●	60	NH-13X042 ●	48
48	NH-09X048 ●	50	NH-13X048 ●	40
54	-	-	NH-13X054 ●	34
60	-	-	NH-13X060 ●	32
76	-	-	NH-13X076 ●	22
89	-	-	NH-13X089 ●	18

Pipe max. Outside-Ø [mm]	19,0 mm insulation thickness		25 mm insulation thickness	
	Code	m/carton	Code	m/carton
15	NH-19X015 ●	78	NH-25X015 ●	40
18	NH-19X018 ●	60	NH-25X018 ●	40
22	NH-19X022 ●	56	NH-25X022 ●	40
28	NH-19X028 ●	48	NH-25X028 ●	32
35	NH-19X035 ●	36	NH-25X035 ●	24
42	NH-19X042 ●	32	NH-25X042 ●	22
48	NH-19X048 ●	24	NH-25X048 ●	18
54	NH-19X054 ●	24	NH-25X054 ●	16
60	NH-19X060 ●	18	NH-25X060 ●	12
76	NH-19X076 ●	12	NH-25X076 ●	10
89	NH-19X089 ●	12	NH-25X089 ●	8
114	NH-19X114 ●	8	NH-25X114 ●	6

Length tolerance for tubes: ± 1.5 %
 Thickness tolerance 9-13 mm ± 1.5 mm
 19-25 mm ± 2.0 mm

● Not a stock item. Delivery on request.

NH/Armaflex self-adhesive tubes (Self Seal)



Pipe max. Outside-Ø [mm]	13,0 mm insulation thickness		19,0 mm insulation thickness	
	Code	m/carton	Code	m/carton
15	NH-13X015-A ●	120	NH-19X015-A ●	78
18	NH-13X018-A ●	112	NH-19X018-A ●	60
22	NH-13X022-A ●	98	NH-19X022-A ●	56
28	NH-13X028-A ●	78	NH-19X028-A ●	48
35	NH-13X035-A ●	56	NH-19X035-A ●	36
42	NH-13X042-A ●	48	NH-19X042-A ●	32
48	NH-13X048-A ●	40	NH-19X048-A ●	24
54	NH-13X054-A ●	34	NH-19X054-A ●	24
60	NH-13X060-A ●	32	NH-19X060-A ●	18
76	-	-	NH-19X076-A ●	12
89	-	-	NH-19X089-A ●	12

Length tolerance for tubes: ± 1,5 %
 Thickness tolerance ≤ 13 mm ± 1,5 mm
 >19 mm ± 2,5 mm

● Not a stock item. Delivery on request.

NH/Armaflex continuous sheets (rolls)



Width 1.0 m

Code	Thickness [mm]	Roll length [m]	m ² /carton	
NH-03-99/E ●	3.0	30	30	
NH-06-99/E ●	6.0	15	15	
NH-10-99/E ●	10.0	10	10	
NH-13-99/E ●	13.0	8	8	
NH-19-99/E ●	19.0	6	6	
NH-25-99/E ●	25.0	4	4	
NH-32-99/E ●	32.0	3	3	

Length tolerance for sheets ± 5 % - 1.5%
 Thickness tolerance for sheets
 3-6 mm ± 1,0 mm
 10-19 mm ± 1,5 mm
 25-32 mm ± 2,0 mm

● Not a stock item. Delivery on request.

NH/Armaflex continuous sheets self-adhesive (rolls)



Width 1.0 m

Code	Thickness [mm]	Roll length [m]	m ² /carton	
NH-06-99/EA ●	6.0	15	15	
NH-10-99/EA ●	10.0	10	10	
NH-13-99/EA ●	13.0	8	8	
NH-19-99/EA ●	19.0	6	6	
NH-25-99/EA ●	25.0	4	4	
NH-32-99/EA ●	32.0	3	3	

Length tolerance for sheets ± 5 % - 1.5%
 Thickness tolerance for sheets
 ≤ 6mm = ± 1mm
 10 - 19mm = ± 1.5mm
 25 - 32mm = ± 2mm

● Not a stock item. Delivery on request.

NH/Armaflex self-adhesive tapes



Code	Width [mm]	Length [m]	Thickness [mm]	Rolls/carton	
NH-TAPE ●	50.0	15	3	12	

● Not a stock item. Delivery on request.