

NH/Armaflex®

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



- Low amounts of smoke and acid gas in a fire for marine and transport applications
- Reduces 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
- IMO certified, UL and FM-approved



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	EC Certificate of Conformity no. 0543 of Güteschutzgemeinschaft Hartschaum e.V. , Celle				

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.)	EU 5316		Tested according to EN 14706 EN 14707 EN 14304	
	Min. service temperature ¹	-50 °C					
Thermal Conductivity							
Thermal Conductivity	ϑ_m	+/-0	°C	$\lambda =$	D 4788 D 4810	○	Tested acc. to BS 874 Part 2 1986 EN 12667 ENISO 8497
	λ	≤ 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	μ	\geq	2,000	EU 5316		Tested according to DIN 52 615 EN 12086 EN 13469	
Fire performance							
Reaction to fire	Class 1			GB 5157 EU 5316	○/●	Tested according to BS 476 Part 7: 1997 Classified acc. to EN 13501-1. Tested according to EN 13823 + EN ISO 11925-2	
	sheets, tape		Euroclass E				
	tubes		Euroclass D _L -s3, d0				
Other fire class	Ship Building		Bureau Veritas, Det Norske Veritas	Ship Building: D 4200 / D 2563 / N 2778	○/●	Tested according to: Ship Building: acc. to IMO A653(16) Railway: acc. to DIN 54837 ISO 5659 (DIN 5510-2) UL: acc. to UL94, IEC 60695 and Can/ CSA-C.22.2 No. 0.17., UL 746C	
	Railway		Exova Brandhaus	Railway: D 4675 / D 4676 UL: D 3763 FM: D 4266			
	UL - approved						
	FM - approved					FM: acc. to UBC26-3, Class No.4924	
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			D4524			

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.