

INSTALL IT. TRUST IT.

HT/ArmaFlex

Flexible elastomeric insulation material specially purposed for high temperature applications

- // Professional solution for high temperature
 applications up to +150 °C
- // UL approved
- // System approach with fit-for-purpose ArmaFlex HT625
 Adhesive



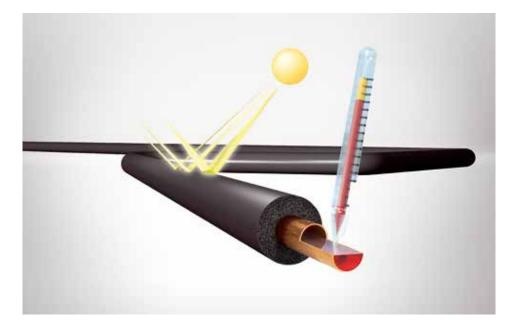


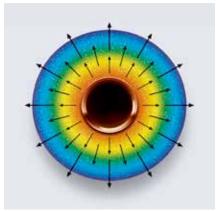


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HT/ArmaFlex The expert for HIGH TEMPERATURE





HT/ArmaFlex[®] is a flexible elastomer insulation material with exceptional resistance to UV radiation and high temperatures. Its closed cell structure and low thermal conductivity keep water vapour from diffusing in and reduce energy losses, protecting and optimising the efficiency and life time expectancy of the installation. While remaining flexible at application temperatures of up to 150°C. HT/ArmaFlex[®] is dust and fibre free and easy to install without special tools. The product does not need additional jacketing, does not degrade in sunlight and withstands incidental oil contact.

Thanks to the thermal properties of the insulation, the heat flow from pipelines insulated with HT/ArmaFlex® is kept at its utmost minimum. The evenly spread, homogenous and longterm stable closed cell structure prevents heat flow on the way of convection, ensuring very low thermal conductivity of the insulation material. This to keep the outer surface temperature at a low level and prevents unnecessary heat losses. Because of the flexibility of HT/ArmaFlex[®], the huge temperature gradient of the thickness of insulation does not result in any internal stress.

TECHNICAL DATA - HT/ARMAFLEX

Brief description	HT/ArmaFlex is a highly flexible, closed-cell insulation material with resistance to UV radiation.				
Material type	Factory-made flexible elastomeric foam based on ethylene propylene diene methylene (EPDM), according to EN 14304.				
Product colour range	Black				
Special features	UV resistance testing regarding of these materials showed excellent results. When used on outdoor applications, the materials showed very good durability even under UV exposure. However, due to the unpredictable nature of outdoor conditions in the whole variety of thinkable installations, there might be occasional weathering influences on the consistence of the material, which cannot be tested in advance. Therefore, installations in extreme environments (regions of extreme weather conditions like high mountains etc.) cannot be recommended. In case of doubt, please contact our Customer Service.				
Applications	Thermal insulation of pipes, vessels and ducts in solar collectors (including outdoors), motor vehicles, hot gas lines, steam lines and dua temperature lines.				
Installation	Please refer to the ArmaFl HT625 adhesive for a relial		nd more information is available in Armacell's Techn ation.	ical Bulletin No. 71. Use ArmaFl	
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Property	Value / Assessment			Standard / Test method	
Temperature range	-				
Service temperature ^{1,2}	Range	Min. °C	Max. °C³	EN 14706, EN 14707, EN 14304	
	Full range	-50	150		
Thermal conductivity					
Declared thermal conductivity	θm		40°C	EN ISO 13787, EN 1266	
	$\lambda d \leq [W/(m \cdot K)]$		0.042	EN ISO 8497	
	Range		Tubes		
	Formula		$\overline{\lambda} = [36.92 + 0.125 \cdot \theta m + 0.0008 \cdot (\theta m - 30)^2] / 1000}$	0	
Declared thermal conductivity	θm		40°C	EN ISO 8497, EN ISO 13787, EN 12667	
	$\lambda d \leq [W/(m \cdot K)]$		0.045	13707, EN 12007	
	Range		Sheets / Tapes		
	Formula		$\lambda = [39.92 + 0.125 \cdot 0m + 0.0008 \cdot (0m - 30)^2] / 1000$)	
Fire Performance and Approvals	5				
Reaction to fire	D(L)-s3,d0 (tubes) D-s3,d0 (sheets, tape)			EN 13501-1, EN ISO 11925-2, EN 13823	
UL standards					
UL 94 V-0	Pass			IEC 60695-11-10	
Fire performance					
Practical fire behaviour	Self-extinguishing, does not				
Others	Class 1			BS 476 Part 7	
Resistance to water vapour					
Water vapour diffusion resistance factor	≥ 4000 (tubes) ≥ 3000 (sheets, tapes)	EN 12086, EN 13469			
Physical attributes					
Dimensions and tolerances	In accordance with EN 1430	EN 822, EN 823, EN 13467			
Weather and UV resistance					
UV resistance ⁴	Very good			EN ISO 4892-2	

Property

Value / Assessment

Standard / Test method

Health and environment			
Volatile organic compounds (VOC) content	Fulfills all VOC requirements (French, Italian, Belgian, German AgBB, Blauer Engel and Eurofins Indoor Air Comfort GOLD).	ISO 16000 Parts 3, 6 & 9	
Environmental Product Declaration (EPD)	 Type III Environmental Product Declaration (EPD): Declaration number "EPD-ARM-20200222-IBA1-EN", Institut Bauen und Umwelt e.V. (IBU)		
Green building assessment	Meets the sustainable construction requirements for LEED v4.1, BREEAM international, WELL v2 and DGNB.		
Additional features	SCCP, MCCP-free		
Other technical features			
AGI designation code	Tubes: 36.12.05.09.02 Sheets: 36.07.05.09.02		
Shelf life⁵	Tape, self-adhesive: 1 year		
Storage	Can be stored in dry, clean rooms at normal relative humidity (50% to 70%) and ambient temperature (0°C to 35°C).		

¹ For temperatures above +125 °C or below -50 °C, please contact our Customer Service Centre to request for the corresponding technical information.

²At high service temperatures, a certain hardening process may start on the inner surface of the material. Investigations have shown that these changes have no impact on the good physical and fire protection properties of the material, provided the material is installed in a correct way with all its joints properly sealed. For specific applications please consult our technical service. ³+85 °C, for products with a self-adhesive layer.

⁴ Extended exposure to certain conditions could result in aesthetic changes to insulation material. This includes examples such as minor discolouration, surface cracks or hardening of inner surface material due to extended exposure to high service line temperatures. These physical changes do not affect the technical performance of the insulation material, such as thermal conductivity and behaviour in case of a fire. For further information, please contact our Technical Service department.

⁵Shelf life (maximum storage time) is limited to ensure that only currently manufactured products are installed on projects. This limitation is restricted solely to storage of the product and does not affect the lifetime of product after it has been installed.

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ABOUT ARMACELL

As the inventor of flexible foam for equipment insulation and a leading provider of engineered foams, Armacell develops innovative and safe thermal and mechanical solutions that create sustainable value for its customers. Armacell's products significantly contribute to global energy efficiency making a difference around the world every day. With more than 3,300 employees and 27 production plants in 19 countries, the company operates two main businesses, Advanced Insulation and Engineered Foams. Armacell focuses on insulation materials for technical equipment, high-performance foams for acoustic and lightweight applications, recycled PET products, next-generation aerogel technology and passive fire protection systems.



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