



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

www.armacell.in

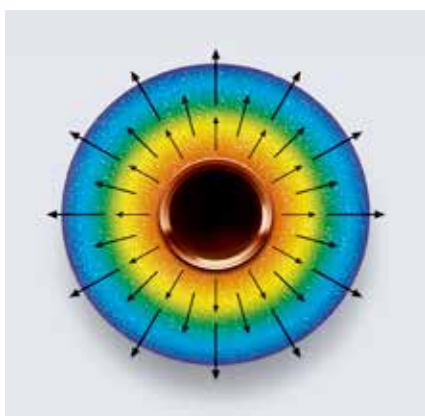
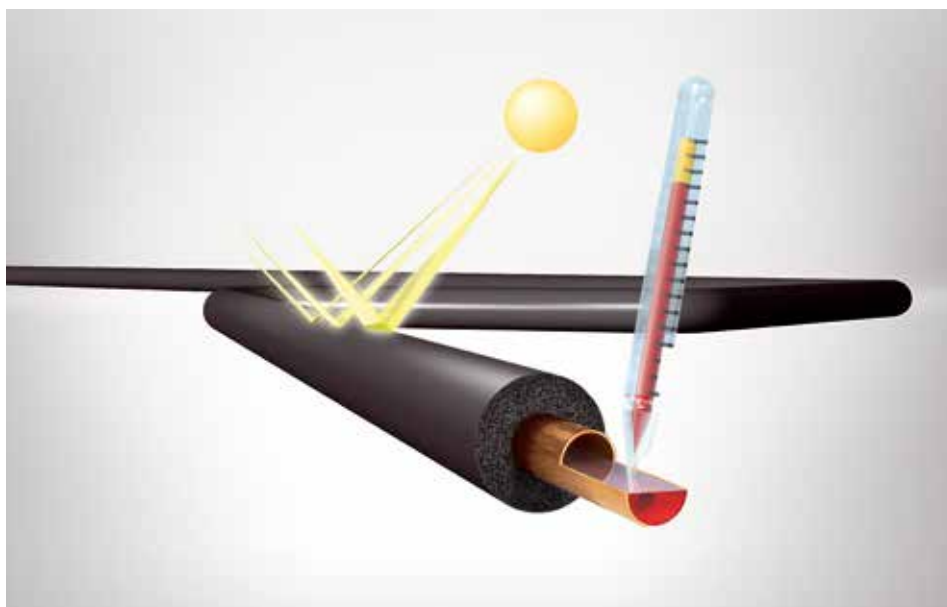


 **armacell**[®]
ArmaFlex[®]

INSTALL IT. TRUST IT.

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 dual temperature lines. |
| Installation | Please refer to the ArmaFlex application manual and more information is available in Armacell's Technical Bulletin No. 71. Use ArmaFlex HT625 adhesive for a reliable and seamless installation. |

| Property | Value / Assessment | | Standard / Test method |
|--|---|--|--------------------------------------|
| Temperature range | | | |
| Service temperature ^{1,2} | Range | Min. °C | EN 14706, EN 14707, EN 14304 |
| | Full range | -50 | |
| Thermal conductivity | | | |
| Declared thermal conductivity | θm | 40°C | EN ISO 13787, EN 12667, EN ISO 8497 |
| | λd ≤ [W/(m·K)] | 0.042 | |
| | Range | Tubes | |
| | Formula | $\lambda = [36.92 + 0.125 \cdot \theta_m + 0.0008 \cdot (\theta_m - 30)^2] / 1000$ | |
| Declared thermal conductivity | θm | 40°C | EN ISO 8497, EN ISO 13787, EN 12667 |
| | λd ≤ [W/(m·K)] | 0.045 | |
| | Range | Sheets / Tapes | |
| | Formula | $\lambda = [39.92 + 0.125 \cdot \theta_m + 0.0008 \cdot (\theta_m - 30)^2] / 1000$ | |
| Fire Performance and Approvals | | | |
| 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 ⁴ | Pass | | IEC 60695-11-10 |
| Fire performance | | | |
| Practical fire behaviour | Self-extinguishing, does not drip, does not spread flames. | | |
| Others | Class 1 | | BS 476 Part 7 |
| Physical attributes | | | |
| Dimensions and tolerances | In accordance with EN 14304, table 1. | | EN 822, EN 823, EN 13467 |
| Weather and UV resistance | | | |
| UV resistance ⁵ | Very good | | EN ISO 4892-2 |
| 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) | | |

| Property | Value / Assessment | Standard / Test method |
|---------------------------------|---|------------------------|
| 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 life ⁶ | 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). | |

¹For 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.

⁴Only for products without self-adhesive-layer.

⁵Extended 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.

⁶Shelf 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.

All data and technical information are based on results achieved under the specific conditions defined according to the testing standards referenced. Despite taking every precaution to ensure that said data and technical information are up to date, Armacell does not make any representation or warranty, express or implied, as to the accuracy, content or completeness of said data and technical information. Armacell also does not assume any liability towards any person resulting from the use of said data or technical information. Armacell reserves the right to revoke, modify or amend this document at any moment. It is the customer's responsibility to verify if the product is suitable for the intended application. The responsibility for professional and correct installation and compliance with relevant building regulations lies with the customer. This document does not constitute nor is part of a legal offer to sell or to contract.

At Armacell, your trust means everything to us, so we want to let you know your rights and make it easier for you to understand what information we collect and why we collect it. If you would like to find out about our processing of your data, please visit our Data Protection Policy.

Trademarks followed by © or ™ are trademarks of the Armacell Group. © Armacell, 2024. All rights reserved.

TDS | 052024 | en-IN

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 25 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.



For more information, please visit:
www.armacell.com