



FLEXIBILITY AT HIGH
TEMPERATURES

HT/ArmaFlex®

Flexible elastomeric foam insulation
for use in high temperature applications

- // Advanced insulation for industrial applications
- // Reduces risk of corrosion under insulation (CUI)
- // Built-in UV-resistance for long service life

www.armacell.com



 **armacell**
ArmaFlex®

TECHNICAL DATA - HT/ARMAFLEX

| | | | |
|-------------------|--|--|--|
| Brief description | HT/ArmaFlex is a highly flexible, closed-cell insulation material with resistance to UV radiation. | | |
| Material type | Flexible elastomeric foam (FEF), factory made according to EN 14304, based on ethylene propylene diene terpolymer (EPDM). | | |
| Colour | Black. | | |
| 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 installation manual and technical bulletin no. 71 prior to installation. Please request a copy from the Technical department if you have not received this. | | |
| Remarks | Declaration of Performance is available in accordance with Article 7(3) of Regulation (EU) No 305/2011 on www.armacell.com/DoP. | | |

| Property | Value/Assessment | | | Standard/Test method | |
|--|---|----------------|------------------------|---|--|
| Temperature range | | | | | |
| Service temperature ¹ | Max. service temperature | +150 °C | +85 °C for tapes | Tested according to EN 14706, EN 14707 and EN 14304 | |
| | Min. service temperature ¹ | -50 °C | | | |
| Thermal conductivity | | | | | |
| | θm | 40 | °C | Declared according to EN ISO 13787. Tested according to EN 12667, EN ISO 8497 | |
| tubes | λ ≤ | 0.040 | W / (m·K) | | λ = [36.92 + 0.125 · θ _m + 0.0008 · (θ _m - 30) ²] / 1000 |
| sheets / tape | λ ≤ | 0.045 | W / (m·K) | | λ = [39.92 + 0.125 · θ _m + 0.0008 · (θ _m - 30) ²] / 1000 |
| Water vapour diffusion resistance | | | | | |
| Water vapour diffusion resistance factor | tubes | μ ≥ | 4,000 | Tested according to EN 12086, EN 13469 | |
| | sheets / tape | μ ≥ | 3,000 | | |
| Fire performance & approvals | | | | | |
| Reaction to fire | Euroclass (tubes) | | D _L -s3, d0 | Classified according to EN 13501-1. Tested according to EN 13823 and EN ISO 11925-2 | |
| | Euroclass (sheets / tape) | | D-s3, d0 | | |
| Fire performance according to building regulations | Class 1 | | | BS 476 Part 7: 1997 | |
| Flammability | V-0 rating | | | UL94, IEC 60695 and Can/CSA-C.22.2 No0.17., UL746C | |
| 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 according to EN 822, EN 823, EN 13467 | |
| UV resistance | High | | | Tested according to EN ISO 4892-1 | |
| Storage | Material shall be stored in dry, clean rooms at normal relative humidity (50% to 70%) and ambient temperature (0 °C – 35 °C). | | | | |
| Shelf (storage life) | Tape, self-adhesive: 1 year. | | | | |
| AGI designation code | tubes: | 36.12.05.09.02 | | | |
| | sheets: | 36.07.05.09.02 | | | |

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

2. At 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. Under certain conditions in outdoor applications, there may be surface discolouration and minor surface cracks on the material. However, this visual changes has no impact on the physical properties of the material, such as thermal conductivity and behaviour in case of fire.

All data and technical information are based on results achieved under typical application conditions. Recipients of this information should, in their own interest and responsibility, clarify with our Technical department in due time whether or not the data and information apply to the intended application area. Installation instructions are available in our ArmaFlex installation manual. Please consult our Customer Service Centre before insulating stainless steel. ArmaFlex HT625 adhesive should be used.

Tubes (length: 2.0m)

| Item | 10mm | 13mm | 19mm | 25mm | Pipe maximum outer diameter [mm] | Minimum insulation inner diameter [mm] | Maximum insulation inner diameter [mm] |
|-----------|--------------------|-----------|--------------------|-----------|----------------------------------|--|--|
| | Carton content [m] | Item | Carton content [m] | Item | | | |
| HT-10X010 | 192 | HT-13X010 | 140 | | 10 | 11.5 | 13.0 |
| HT-10X012 | 172 | HT-13X012 | 130 | HT-19X012 | 80 | 12 | 13.5 |
| HT-10X015 | 144 | HT-13X015 | 112 | HT-19X015 | 64 | HT-25X015 | 40 |
| HT-10X018 | 130 | HT-13X018 | 98 | HT-19X018 | 58 | HT-25X018 | 36 |
| HT-10X022 | 108 | HT-13X022 | 84 | HT-19X022 | 50 | HT-25X022 | 36 |
| HT-10X028 | 82 | HT-13X028 | 64 | HT-19X028 | 48 | HT-25X028 | 32 |
| HT-10X035 | 60 | HT-13X035 | 50 | HT-19X035 | 32 | HT-25X035 | 24 |
| HT-10X042 | 50 | HT-13X042 | 40 | HT-19X042 | 24 | HT-25X042 | 20 |
| | | HT-13X048 | 32 | HT-19X048 | 22 | HT-25X048 | 16 |
| | | HT-13X054 | 32 | HT-19X054 | 18 | HT-25X054 | 16 |
| | | HT-13X060 | 28 | HT-19X060 | 16 | HT-25X060 | 16 |
| | | HT-13X076 | 24 | HT-19X076 | 18 | HT-25X076 | 12 |
| | | HT-13X089 | 18 | HT-19X089 | 16 | HT-25X089 | 12 |

Other information

Length tolerance ± 1.5%

Thickness tolerance 10mm - 13mm: ± 1.5mm
19mm - 25mm: ± 2.5mm

Coils

| Item | 13mm | 19mm | Pipe maximum outer diameter [mm] | Minimum insulation inner diameter [mm] | Maximum insulation inner diameter [mm] |
|-------------|--------------------|-------------|----------------------------------|--|--|
| | Carton content [m] | Item | | | |
| HT-13X015/E | 26 | HT-19X015/E | 16 | 15 | 16.5 |
| HT-13X018/E | 22 | HT-19X018/E | 14 | 18 | 19.5 |
| HT-13X022/E | 18 | HT-19X022/E | 12 | 22 | 23.5 |

Other information

Length tolerance ± 1.5%

Thickness tolerance 10mm - 13mm: ± 1.5mm
19mm - 25mm: ± 2.5mm



Rolls (Width: 1.0m)

| Item | Insulation thickness | Length | Carton content |
|-------------|----------------------|--------|----------------|
| | [mm] | [m] | [sqm] |
| HT-10-99/E | 10 | 10 | 10 |
| HT-13-99/E | 13 | 8 | 8 |
| HT-19-99/E | 19 | 6 | 6 |
| HT-25-99/E | 25 | 4 | 4 |
| HT-32-99/E* | 32 | 3 | 3 |

*Made to order. Minimum order quantities and different lead times may apply.

Other information

| | |
|---------------------|----------------------|
| Length tolerance | ± 1.5% |
| Thickness tolerance | 10mm - 19mm: ± 1.5mm |
| | 25mm - 32mm: ± 2.5mm |

Accessories

| Item | Carton content | Article description |
|----------------|----------------------|---|
| HT-TAPE | 12 rolls | HT/ArmaFlex insulation tape (3mm thickness x 50mm width x 15m) |
| ADH-HT625/0,25 | 40 x 0.25 litre cans | ArmaFlex HT 625 adhesive |
| ADH-HT625/0,5 | 12 x 0.5 litre cans | ArmaFlex HT 625 adhesive |
| ADH-HT625/1,0 | 12 x 1.0 litre cans | ArmaFlex HT 625 adhesive |



//Cover Photo

Piping systems found in industrial applications, such as hot gas lines, steam lines and dual-temperature lines, can reach to +150 °C. Hence, process plants and factories such as Bayer AG, Degussa AG (German Gold and Silver Refinery) and Alfred Ritter GmbH & Co. KG (Makers of Ritter Sport chocolates) trust and install HT/ArmaFlex in their facilities for personnel safety and to save energy.

All data and technical information are based on results achieved under the specific conditions defined according to the testing standards referenced. 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. Armacell takes every precaution to ensure the accuracy of the data provided in this document and all statements, technical information and recommendations contained within are believed to be correct at the time of publication. By ordering/receiving product you accept the **Armacell General Terms and Conditions of Sale** applicable in the region. Please request a copy if you have not received these.

© Armacell, 2020. ® and ™ are trademarks of the Armacell Group and is registered in the European Union, United States of America, and other countries.

00234 | HT/ArmaFlex | ArmaFlex | TDS | 012020 | APAC | EN

ABOUT ARMACELL

As the inventors of flexible foam for equipment insulation and a leading provider of engineered foams, Armacell develops innovative and safe thermal, acoustic 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 3,100 employees and 24 production plants in 16 countries, the company operates two main businesses, Advanced Insulation and Engineered Foams. Armacell focuses on insulation materials for technical equipment, high-performance foams for high-tech and lightweight applications and next generation aerogel blanket technology.

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

