# HT/ArmaFlex®

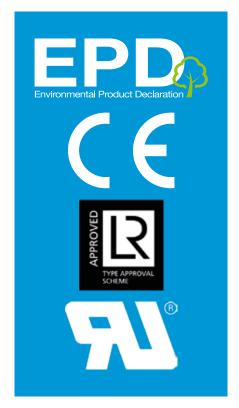


## THE FLEXIBLE INSULATION FOR HIGH TEMPERATURE APPLICATIONS

- High degree of stability for a wide temperature range
- UV resistant and able to withstand typical weathering effects
- Built-in vapour barrier to reduce the risk of corrosion under insulation (CUI)
- Retains its physical characteristics throughout service life
- Reduces energy losses with a low thermal conductivity
- Low maintenance and repair costs

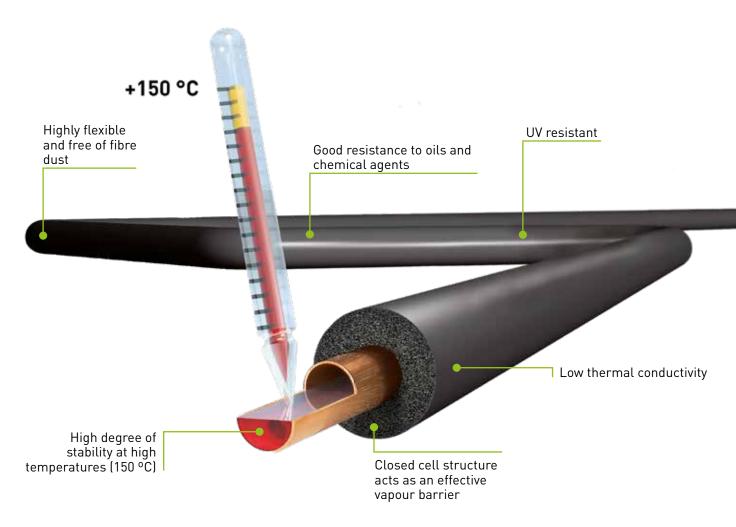




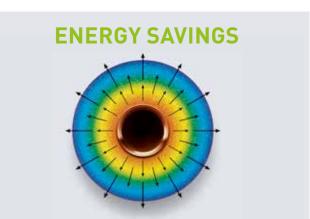




#### **PROPERTIES**







#### **COMPLETE SYSTEM**

The complete insulation system for high temperature applications.

- HT/ArmaFlex
- ArmaFix pipe supports
- ArmaFlex HT625 adhesive



#### RANGE

#### **TUBE**

Tubes coils



#### **SHEET**

Continuous sheet (rolls)



#### **TAPE**



### RECOMMENDED PRODUCTS





For a complete installation

ArmaFlex HT625 adhesive

**ArmaFlex Cleaner** 

### TECHNICAL DATA

Flexible closed cell elastomeric insulation, based on synthetic EPDM rubber, specifically suitable for installations that work at high temperatures.

Material type	Synthetic EPDM rubber based foam.
Colour	Black
Applications	Thermal insulation of pipes, vessels and ducts for solar panels (including outdoors), motor vehicles, hot gas lines, steam and dual temperature lines.
Special features	Fulfills DIN 1988, resistant to UV radiation.
Safety and environment	Type III Environmental Product Declaration (EPD): Declaration number EPD-ARM-20150108-IBB1-DE, institut bauen und umwelt e.V (IBU).
Assembly	The ArmaFlex application guide should be consulted before use.
Remarks	Declaration Of Performance (DOP) is available in accordance with Article 7(3) of regulation (EU) No 305/2011

Property	Value/Assessment	Test	Standards & Remarks
Temperature Range			
Max service temperature	+150°C, +85°C for tape		Tested acc. to EN 14706
Min service temperature	-50°C	EU 5666	& EN 14707
Thermal Conductivity			
Tubes	$\lambda 40^{\circ}\text{C} \le 0.042 \text{ W/(m·K)}  [36.92 + 0.125 \cdot \vartheta_{\text{m}} + 0.0008 \cdot (\vartheta_{\text{m}} - 30)^{2}]/1000$	==	Tested acc. to BS 874
Sheets	$\lambda 40^{\circ}\text{C} \le 0.045 \text{ W/(m·K)}  [39.92 + 0.125 \cdot \vartheta_{\text{m}} + 0.0008 \cdot (\vartheta_{\text{m}} - 30)^{2}]/1000$	EU 5666	Part 2 1986, EN 12667 & EN ISO 8497
Water Vapour Diffusion Re	esistance		
Tubes	µ ≥ 4000	EILE///	Tested acc.to EN 12086
Sheet	μ » 3000	EU 5666	& EN 13469
Fire Performance			
Reaction to fire	Class 1 Euroclass tubes & sheets D-s3, d0 & D <sub>L</sub> -S3,d0 UL94	GB 5904 & EU5666	Tested acc. to BS476 Part 7: 1997 Classified acc. to EN 13501-1 Tested acc. to EN 13823 EN ISO 11925-2
Other fire class	UL approved V-0 Lloyds register material having low flame spread characteristics	UL:EU 5837 Lloyd R: EU 6136	UL tested acc. to UL94 IEC 60695 & Can/ CSA-C.22.2. No.0.17, UL 746C. Lloyds Register: Tested acc. to BS 476 Part 7
Practical fire behaviour	Self-extinguishing, doesn't drip, doesn't spread flames		
Other technical features			
Dimensions & tolerances	In accordance with EN 14304, table 1	EU 5316	Tested acc. to EN 822, EN 823 & EN 13467
UV resistance	Good		
Health aspects	Dust & fibre free		
Storage & shelf life	Tape & self-adhesive sheets	1 year	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, UV: Very good		
Environmental aspects	ODP zero, GWP zero	EU 5197	

#### **TUBE**

Length - 2m, Colour - Black



Pipe max.	Inner tube Ø	Inner tube Ø	10mm INSULA	TION THICK	NESS	13mm INSULA	TION THICK	NESS
Outside - Ø (mm)	min (mm)	max (mm)	Code	m/carton		Code	m/carton	
10	11.5	13	HT-10X010 •	192		HT-13X010 •	140	
12	13.5	15	HT-10X012 •	172		HT-13X012 •	130	
15	16.5	18	HT-10X015	144		HT-13X015	112	
18	19.5	21	HT-10X018 •	130		HT-13X018 •	98	
22	23.5	25	HT-10X022	108		HT-13X022	84	
28	29.5	31	HT-10X028 •	82		HT-13X028 •	64	
35	36.5	38.5	HT-10X035 •	60		HT-13X035	50	
42	44	46	HT-10X042 •	50		HT-13X042	40	
48	50	52				HT-13X048	32	
54	55.5	57.5				HT-13X054	32	
60	62	64				HT-13X060	28	
76	77.5	80				HT-13X076	24	
89	91	93				HT-13X089	18	

Pipe max.	ax. Inner tube Ø Inner tube Ø 19mm INSULATION THICKNESS		NESS	25mm INSULA	TION THICK	NESS		
Outside - Ø (mm)	min (mm)	max (mm)	Code	m/carton		Code	m/carton	£/m
12	13.5	15	HT-19X012 •	80				
15	16.5	18	HT-19X015	64		HT-25X015	40	
18	19.5	21	HT-19X018 •	58		HT-25X018 •	36	
22	23.5	25	HT-19X022	50		HT-25X022	36	
28	29.5	31	HT-19X028	48		HT-25X028	32	
35	36.5	38.5	HT-19X035	32		HT-25X035	24	
42	44	46	HT-19X042	24		HT-25X042	20	
48	50	52	HT-19X048	22		HT-25X048	16	
54	55.5	57.5	HT-19X054	18		HT-25X054	16	
60	62	64	HT-19X060	16		HT-25X060	16	
76	77.5	80	HT-19X076	18		HT-25X076	12	
89	91	93	HT-19X089	16		HT-25X089	12	

#### Other information and remarks

Length toloerance for tubes  $\pm 1.5\%$ 

Thickness tolerance for tubes 10 - 13mm  $\pm 1.5$ mm

19 - 25mm ± 2.5mm

• Not a stock item

### COILS

Colour - Black



Pipe max.	Inner tube Ø	Inner tube Ø	13mm INSULATION THICKNESS			19mm INSULATION THICKNESS		
Outside - Ø (mm)	min (mm)	max (mm)	Code	m/carton		Code	m/carton	
15	16.5	18	HT-13X015/E •	26		HT-19X015/E •	16	
18	19.5	21	HT-13X018/E •	22		HT-19X015/E •	14	
22	23.5	25	HT-13X022/E •	18		HT-19X015/E •	12	

### **CONTINUOUS SHEET (ROLLS)**

Width - 1m, Colour - Black



Code	Thickness (mm)	Roll Length (m)	m²/carton	
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	

Other information and remarks		
Length toloerance for tubes	± 1.5%	
Thickness tolerance for tubes	10 - 13mm	± 1.5mm
	19 - 25mm	± 2.5mm
Length toloerance for sheet	± 1.5% - 5%	
Thickness tolerance for sheet	10 - 19mm	± 1.5mm
	25 - 32mm	± 2mm
Not a stock item		

#### **TAPE**

Colour - black



Code	Width (mm)	Roll Length (m)	Thickness (mm)	Rolls/carton	
HT-TAPE	E 50		3	12	

### ArmaFlex HT625

# THE HIGH TEMPERATURE ADHESIVE FOR USE WITH HT/ARMAFLEX

• Specially formulated for a wide range of temperatures and applications

 Water-tight bonding of HT/ArmaFlex® and ArmaFlex® DuoSolar insulation systems

• For operating temperatures up to +150 °C

• High performance, one component industrial grade adhesive

• Low-viscosity air-drying contact adhesive



	ive for high temperature applications, specifically developed for HT/ArmaFlex installations but also suitable for rubber based insulation materials.
Material type	Contact adhesive on polychloroprene basis, free of aromatic components.
Colour	Beige
Material special info	Liquid
Applications	Application on pipes and tanks with service temperature up to +150°C. Gluing of HT/ArmaFlex insulation materials and other ArmaFlex synthetic rubber based insulation materials (except ArmaFlex Ultima).
Special features	Specially formulated adhesive for uniform and safe seam bonding of ArmaFlex insulation materials applied on high temperature lines.
Assembly	Please observe our installation instructions/product data sheets.  Application temperature: ideally +20°C, not below 0°C. At temperatures below +5°C or high humidity approx above 80%), increased condensation may form on the surfaces to be glued or adhesive films. In these cases bonding is poor or impossible. This can be tested by using absorbent paper (blotting or crepe paper).  Work should not be carried out on operating plant or areas exposed to strong sunlight.
Remarks	The adhesive achieves its final strength after 36 hours. Only then should plant be put into operation. Wait 36 hours before applying coatings (exception: ArmaFinish 99), adhesive tape, coverings etc.

### TECHNICAL DATA

Temperature Range	
Max service temperature	+150°C (For temperatures above +110°C please contact our technical department)
Min service temperature	-50°C (For temperatures below -50 °C please contact our technical department)
Performance	
Coverage (guidance only)	Minimum consumption with the adhesive applied to both surfaces:  ArmaFlex tubes (thickness > consumption unslit > consumption slit)  • 10mm > 1120m per litre > 140m per litre  • 20mm > 280m per litre > 70m per litre  • 30mm > 175m per litre > 45m per litre  • 40mm > 130m per litre > 35m per litre  Sheets  • 3-4 m² per litre
Storage & shelf life	
	12 months in an unopened container.  Do not store with expolsive substances / spontaneously combusting substances.  Store as cool as possible but protected from frost. In the event of frost any gelification is reversible on warming
Preparation of surfaces	
	Clean surfaces and ArmaFlex surface with ArmaFlex Cleaner. Compatibility with bases:  • Very good adhesion to metallic sufaces.  • The adhesive's compatibility with colour coated sufaces needs to be tested.  • Incompatible with Asphalt, bitumen and red lead (linseed oil-based)
Woking time	
Drying time	3- 5 mins
Contact adhesion	15 - 20 mins
Setting	36 hours
	The open time depends on the quantity as well as indoor climate conditions. Before operating plant the setting time needs to be allowed to lapse.
Other technical features	
Flash point	approx -26 °C
Expolsion limits	Lower: approx 1.1 Vol % Upper: approx 12.8 Vol %
Hazard class	Highly flammable
Ageing stability	Very good
Resistance to weathering	Very good
Recycling	Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company. For details see relevant Safety Data Sheet.  Packaging must be emptied of all residues. Packaging with traces of cured product can be recycled.  Packaging with uncured product must be recycled into new product.
Transport classes	Depending on the type of transport

#### **ARMAFLEX HT625 ADHESIVE**



Code	Description	Pieces/carton	£/pc
ADH-HT625/0.25 •	ArmaFlex HT625 one component adhesive, 0.25 Litre can, with brush	40	21.30
ADH-HT625/0.5	ArmaFlex HT625 one component adhesive, 0.5 Litre can, with brush	12	29.35
ADH-HT625/1.0	ArmaFlex HT625 one component adhesive, 1 Litre can, with brush	12	48.53

# ArmaFlex Cleaner

### SURFACE CLEANER FOR ARMAFLEX INSTALLATIONS

- Ensures a clean surface before the use of ArmaFlex® Adhesives
- Removal of dirt from surfaces
- Cleaning of brushes and tools contaminated with ArmaFlex® adhesive



ARMAFLEX Cleaner Special cleaner for use with all ArmaFlex adhesives				
Colour Clear				
Material special info	Liquid			
Applications	Cleaning of surfaces where ArmaFlex is to be installed.			
Assembly	To ensure a perfect adhesion all contaminated sufaces, including ArmaFlex, must be cleaned. In addition the cleaner can be used to sufaces where ArmaFinish 99 is being applied.			
Remarks	Can also be used to clean tools.			

### TECHNICAL DATA

Technical features		
Storage & shelf life	12 months sealed in original container. Keep container tightly closed in a cool, well ventilated place. Protect from heat & direct sunlight. Do not store together with explosive substances or spontaneously combusting subtances.	
Preparation of surfaces	Clean surfaces and ArmaFlex surface with ArmaFlex Cleaner. Compatibility with bases:  • Very good adhesion to metallic sufaces.  • The adhesive's compatibility with colour coated sufaces needs to be tested.  • Incompatible with asphalt, bitumen and red lead (linseed oil-based)	
Flash point	approx -20 °C	
Explosion limits	Lower: approx 1% Vol, Upper: approx 13 % Vol. Regulation of inflammable liquids.	
Recycling	Allocation of a waste code number, according to the European Waste Catalouge, should be carried out in agreement with the regional waste disposal company. For details see relevant Safety Data Sheet. Packaging must be emptied of all residues. Cans must be emptied prior to recycling. Cans containing adhesive must be recycled into new product.	
Transport classes	Dependent on the transport sector	

#### **ARMAFLEX CLEANER**



Code	Description	Pices/carton
CLEANER/1.0	Special cleaner for use with ArmaFlex Adhesive	4

### UK & Ireland team

Always at your service



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