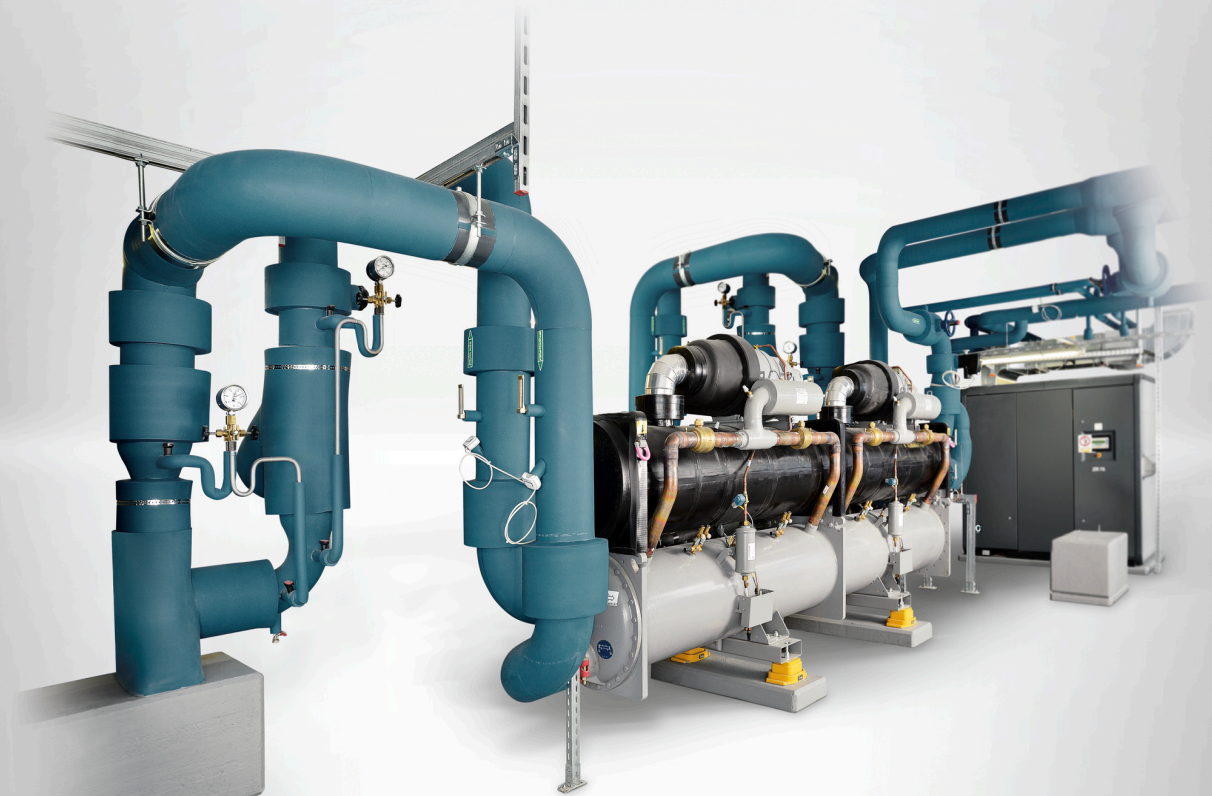


 **armacell**[®]

ARMAFLEX ULTIMA

INSTALL IT. TRUST IT.



- The best flexible insulation with low smoke density in case of fire
- Meets the requirements for sustainable construction
- Complete system integration with adhesives and insulated pipe hangers

EPD
Environmental Product Declaration 



**BUREAU
VERITAS**



APPROVED

ARMAFLEX ULTIMA

With Armaflex Ultima Armacell has set a new safety standard in technical insulation. Based on the patented Armaprene technology, Armaflex Ultima is the first flexible technical insulation material in the world with fire class B_L-s1, d0.

- Tubes with an insulation thickness of 32 mm
- Sheets with an insulation thickness of 32 mm
- Armaflex SF Cleaner

European
patent

No. 2 261 305

PATENTED



SOLVENT-FREE ACCESSORIES FOR A SUSTAINABLE INSULATION SYSTEM

Besides Armaflex Ultima 700 adhesive, Armacell provides a solvent-free product. **Armaflex Ultima SF990** meets the higher requirements of green building schemes regarding environmental and health aspects of the building products used. A completely new addition to the range of accessories is a solvent-free cleaner: the **Armaflex SF cleaner** can be used to clean soiled surfaces of technical installations and also the surface of insulation materials. The cleaner is supplied in a practical spray bottle so that it can be applied sparingly and precisely.

1 - NEW SAFETY STANDARD IN TECHNICAL INSULATION

95 % of fire fatalities occur due to smoke inhalation. In a fire, low smoke density can be a matter of life or death for those trapped. With the innovative Armaprene technology Armacell has been able to resolve the conflict of objectives between high flame resistance and minimal smoke development. Armaflex Ultima is the only elastomeric product in the market to achieve the fire class B_L-s1, d0. In comparison to a standard product, the flame-resistant insulation material exhibits 10 times less smoke development.



2 - THE FUTURE BELONGS TO SUSTAINABLE CONSTRUCTION

Today Armacell is the only manufacturer of flexible technical insulation materials to publish environmental product declarations based on an independent life cycle assessment (LCA). Environmental product declarations (EPDs) provide a transparent, independent and reproducible analysis of the environmental impacts of construction products and give detailed information with sound data and figures. As a "sustainability passport" EPDs form the basis for designing green buildings in accordance with certification schemes such as LEED, BREEAM, HQE or DGNB.

3 - JÜRGEN SAALFELD, INSULATOR, SCHMENGLER DÄMMTECHNIK GMBH, GERMANY

"We used Armaflex Ultima for the first time on cold installations in Yara's German distribution centre. In a fire, Armaflex Ultima develops 10 times less smoke than traditional flexible insulation materials, making it the safest insulation product for cold applications. The new material is slightly darker than the first Ultima generation. The foam is very flexible, but it is firmer than other rubber insulation materials and keeps its shape very well. The product can be cut and glued very easily and neatly."

Technical Data - ArmaFlex Ultima

Brief description	Flexible elastomeric foam on the basis of patented synthetic rubber composition with improved fire retardant properties, low smoke generation and a closed-cell material structure. For use in HVAC, refrigeration and process equipment applications.
Material type	Elastomeric foam based rubber; Manufactured with Armaprene® Patented Technology US Patent no. 8,163,811, EU patent no. 2 261 305. Factory made flexible elastomeric foam (FEF) according to EN 14304.
Colour	dark blue
Material Special Information	Self-adhesive coating: pressure-sensitive adhesive coating on modified acrylate basis with mesh structure, covered with polyethylene foil. Traces of silicon can be found on the protection paper/foil used to protect self-adhesive closures.
Applications	Insulation / protection of pipes, air ducts, vessels (incl. elbows, fittings, flanges etc.) to prevent condensation and save energy. Self-adhesive tubes shall additionally be secured by applying ArmaFlex Ultima Tape.
Special Features	Low smoke performance
Safety and Environment	Meets the requirements for sustainable construction in combination with ArmaFlex Ultima SF990 adhesive such as LEED. Type III Environmental Product Declaration (EPD): Declaration number "EPD-ARM-20200218-IBB1-EN", Institut Bauen und Umwelt e.V. (IBU)
Remarks	Declaration of Performance is available in accordance with Article 7(3) of Regulation (EU) No 305/2011 on our homepage: www.armacell.com/DoP

Property	Value/Assessment	Test ¹	Super- vision ²	Special Remark			
Temperature Range							
Temperature Range	max. service temperature	+110 °C	EU 5846	o/●	Tested acc. to EN 14706 EN 14707 and EN 14304		
	min. service temperature ¹	-50 °C (-200 °C)				(+ 85 °C if sheet or tape is glued to the object with its whole surface.)	
Thermal Conductivity							
Thermal Conductivity	ϑ_m	±0 °C	EU 5846	o/●	Declared acc. to EN ISO 13787 Tested acc. to EN 12667 EN ISO 8497		
	λ	≤ 0,040				W/(m · K)	> 0 °C: $[40 + 0,1 \cdot \vartheta_m + 0,0009 \cdot \vartheta_m^2]/1000$
							≤ 0 °C: $[41,25 + 0,1 \cdot \vartheta_m - (\vartheta_m+50)^2 \cdot 0,0005]/1000$
Water vapour diffusion resistance							
Water vapour diffusion resistance	μ	≥	7.000	EU 5846	o/●	Tested acc. to EN 12086 EN 13469	
Fire performance							
Reaction to fire	Tubes, Tubes self-adhesive, open tubes (up to 300 min insulated \varnothing_a)	B _L -s1,d0	EU 5846	o/●	Classified acc. to EN 13501-1 Tested acc. to EN 13823 and EN ISO 11925-2		
	Sheets, sheets self-adhesive	B-s2,d0					
	Tape	B-s1,d0					
Other Fire Class	Ship Building	low-flammable - 2010 FTP Code	D 5243 D 5555 EU 5954	o/●	Classified acc. to MED 96/98/EC MODULE D Tested acc. to IMO Resolution		
Practical Fire Behaviour	Self-extinguishing, does not drip, does not spread flames; low smoke density						
Fire resistance of structural element	EI 30 - EI 120		EU 5846 EU 5584	o/●	Classified acc. to EN 13501-2 Tested acc. to EN 1366-3		
Other	FM-approved		D 5192	o/●	FM: Tested according to UBC26-3, Class No.4924		
Dimensions and tolerances	In accordance with EN 14304, table 1		EU 5846	o/●	Tested according to EN 822, EN 823 EN 13467		
UV resistance ²	Protection against UV-radiation is necessary.						
Storage & Shelf life	self-adhesive tubes, self-adhesive sheets, self-adhesive tape: 1 year Can be stored in dry, clean rooms at normal relative humidity (50% to 70%) and ambient temperature (0 °C – 35 °C).						
Antimicrobial behaviour	No fungal growth observed		EU 5961		Tested acc. to EN ISO 846 (VDI 6022)		

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

² If Armaflex is applied under UV-radiation the material must be protected within 3 days with a covering.

*1 Further documents such as test certificates, approvals and the like can be requested using the registration number given.

*2 ●: Official supervision by independent institutes and /or test authorities
○: Own in-factory quality monitoring

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 us 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 Center before insulating stainless steels. For some refrigerants the discharge temperature may exceed +110 °C, please consult our Customer Service Center for further information.

ArmaFlex Ultima tubes



Length 2,0 m, Color blue, B_L-s1,d0

Pipe max. Outside-Ø [mm]	9,0 mm insulation thickness			13,0 mm insulation thickness		
	Code	m/carton	€/m	Code	m/carton	€/m
6	-	-	-	UD-13X006	164	xxx
10	-	-	-	UD-13X010	140	xxx
12	UD-09X012 ●	192	xxx	UD-13X012	130	xxx
15	UD-09X015	180	xxx	UD-13X015	112	xxx
18	UD-09X018	150	xxx	UD-13X018	98	xxx
22	UD-09X022	124	xxx	UD-13X022	88	xxx
28	UD-09X028	96	xxx	UD-13X028	64	xxx
35	UD-09X035	70	xxx	UD-13X035	56	xxx
42	UD-09X042	56	xxx	UD-13X042	48	xxx
48	UD-09X048	52	xxx	UD-13X048	40	xxx
54	UD-09X054	42	xxx	UD-13X054	36	xxx
60	UD-09X060	40	xxx	UD-13X060	28	xxx
64	UD-09X064 ●	28	xxx	UD-13X064 ●	26	xxx
76	UD-09X076	32	xxx	UD-13X076	24	xxx
89	UD-09X089	24	xxx	UD-13X089	18	xxx

Pipe max. Outside-Ø [mm]	19,0 mm insulation thickness			25,0 mm insulation thickness		
	Code	m/carton	€/m	Code	m/carton	€/m
10	UD-19X010	92	xxx	-	-	-
12	UD-19X012	84	xxx	-	-	-
15	UD-19X015	64	xxx	-	-	-
18	UD-19X018	58	xxx	UD-25X018	46	xxx
22	UD-19X022	56	xxx	UD-25X022	36	xxx
28	UD-19X028	40	xxx	UD-25X028	36	xxx
35	UD-19X035	40	xxx	UD-25X035	28	xxx
42	UD-19X042	24	xxx	UD-25X042	24	xxx
48	UD-19X048	24	xxx	UD-25X048	20	xxx
54	UD-19X054	24	xxx	UD-25X054	18	xxx
60	UD-19X060	16	xxx	UD-25X060	18	xxx
64	UD-19X064	16	xxx	UD-25X064	16	xxx
76	UD-19X076	16	xxx	UD-25X076	12	xxx
89	UD-19X089	16	xxx	UD-25X089	12	xxx

Pipe max. Outside-Ø [mm]	32,0 mm insulation thickness					
	Code	m/carton	€/m			
15	UD-32X015 ●	32	xxx	-	-	-
18	UD-32X018 ●	32	xxx	-	-	-
20	UD-32X020 ●	24	xxx	-	-	-
22	UD-32X022 ●	24	xxx	-	-	-
28	UD-32X028 ●	24	xxx	-	-	-
35	UD-32X035 ●	18	xxx	-	-	-
42	UD-32X042	16	xxx	-	-	-
48	UD-32X048	12	xxx	-	-	-
54	UD-32X054	12	xxx	-	-	-
60	UD-32X060	10	xxx	-	-	-
64	UD-32X064 ●	10	xxx	-	-	-
76	UD-32X076	10	xxx	-	-	-
89	UD-32X089	8	xxx	-	-	-

Length tolerance for tubes

± 1,5 %

Thickness tolerance

9 mm, 13 mm : ±1,5 mm
19 mm, 25 mm, 32 mm : ±2,5 mm

Remark

Up to 10% of the carton contents can also be delivered with tubes in 1 m length.
For carton contents below 20 m a single 2 m tube can be replaced by two 1 m tubes.

● Item not in stock. Delivery on request. [MTO]

ArmaFlex Ultima open tubes

Color blue, Open tube: for pipe diameter from 89 to 300 mm including insulation - B_L-s1,d0

Code	Insulation thickness [mm]	m ² /carton	€/m ²
UD-09X300 ●	9,0	10	xxx
UD-13X300	13,0	8	xxx
UD-19X300	19,0	5	xxx
UD-25X300	25,0	4	xxx
UD-32X300 ●	32,0	3	xxx

Thickness tolerance

9 mm - 19 mm : ±1,5 mm
25 mm - 32 mm : ±2,0 mm

● Item not in stock. Delivery on request. [MTO]

ArmaFlex Ultima tubes self-adhesive



Length 2,0 m, Color blue, B_L-s1,d0

Pipe max. Outside-Ø [mm]	9,0 mm insulation thickness			13,0 mm insulation thickness		
	Code	m/carton	€/m	Code	m/carton	€/m
15	UD-09X015-A ●	180	xxx	UD-13X015-A ●	112	xxx
18	UD-09X018-A ●	150	xxx	UD-13X018-A ●	98	xxx
22	UD-09X022-A ●	124	xxx	UD-13X022-A ●	88	xxx
28	UD-09X028-A ●	96	xxx	UD-13X028-A ●	64	xxx
35	UD-09X035-A ●	70	xxx	UD-13X035-A ●	56	xxx
42	UD-09X042-A ●	56	xxx	UD-13X042-A ●	48	xxx
48	UD-09X048-A ●	52	xxx	UD-13X048-A ●	40	xxx
54	UD-09X054-A ●	42	xxx	UD-13X054-A ●	36	xxx
60	UD-09X060-A ●	40	xxx	UD-13X060-A ●	28	xxx
76	UD-09X076-A ●	32	xxx	UD-13X076-A ●	24	xxx
89	UD-09X089-A ●	24	xxx	UD-13X089-A ●	18	xxx

Pipe max. Outside-Ø [mm]	19,0 mm insulation thickness			25,0 mm insulation thickness		
	Code	m/carton	€/m	Code	m/carton	€/m
15	UD-19X015-A ●	64	xxx	-	-	-
18	UD-19X018-A ●	58	xxx	UD-25X018-A ●	46	xxx
22	UD-19X022-A ●	56	xxx	UD-25X022-A ●	36	xxx
28	UD-19X028-A ●	40	xxx	UD-25X028-A ●	36	xxx
35	UD-19X035-A ●	40	xxx	UD-25X035-A ●	28	xxx
42	UD-19X042-A ●	24	xxx	UD-25X042-A ●	24	xxx
48	UD-19X048-A ●	24	xxx	UD-25X048-A ●	20	xxx
54	UD-19X054-A ●	24	xxx	UD-25X054-A ●	18	xxx
60	UD-19X060-A ●	16	xxx	UD-25X060-A ●	18	xxx
76	UD-19X076-A ●	16	xxx	UD-25X076-A ●	12	xxx
89	UD-19X089-A ●	16	xxx	UD-25X089-A ●	12	xxx

Length tolerance for tubes

± 1,5 %

Thickness tolerance

9 mm, 13 mm : ±1,5 mm
19 mm, 25 mm : ±2,5 mm

● Item not in stock. Delivery on request. [MTO]

ArmaFlex Ultima sheets endless



Width 1,0 m, Color blue, B-s2,d0

Code	Insulation thickness [mm]	Roll length [m]	m ² /carton	€/m ²
UD-03-99/E	3,0			xxx
UD-06-99/E	6,0	15	15	xxx
UD-09-99/E	9,0	10	10	xxx
UD-13-99/E	13,0	8	8	xxx
UD-19-99/E	19,0	5	5	xxx
UD-25-99/E	25,0	4	4	xxx
UD-32-99/E ●	32,0	3	3	xxx

Length tolerance for sheets	±1,5 %
Thickness tolerance for sheets	6 mm : ±1,0 mm
	9 mm - 19 mm : ±1,5 mm
	25 mm - 32 mm : ±2,0 mm

● Item not in stock. Delivery on request. [MTO]

ArmaFlex Ultima sheets endless self-adhesive



Width 1,0 m, Color blue, B-s2,d0

Code	Insulation thickness [mm]	Roll length [m]	m ² /carton	€/m ²
UD-03-99/EA ●	3,0			xxx
UD-06-99/EA	6,0	15	15	xxx
UD-09-99/EA	9,0	10	10	xxx
UD-13-99/EA	13,0	8	8	xxx
UD-19-99/EA	19,0	5	5	xxx
UD-25-99/EA	25,0	4	4	xxx
UD-32-99/EA ●	32,0	3	3	xxx

Length tolerance for sheets	±1,5 %
Thickness tolerance for sheets	6 mm : ±1,0 mm
	9 mm - 19 mm : ±1,5 mm
	25 mm - 32 mm : ±2,0 mm

● Item not in stock. Delivery on request. [MTO]

ArmaFlex Ultima tapes self-adhesive



Color blue, B-s1,d0

Code	Width [mm]	Length [m]	Thickness [mm]	Rolls/carton	€/roll
UD-TAPE	50,0	15	3	12	xxx

ArmaFlex Ultima adhesive



Code	Article description	Pieces/carton	€/pc
AHU-700/1,0	Armaflex Ultima Adhesive 700, 1 liter cans	12	xxx
AHU-SF990/0,8	Armaflex Ultima Adhesive SF990, 0,8 liter cans	12	xxx

ArmaFlex Ultima cleaner



Code	Article description	Pieces/carton	€/pc
SF-CLEANER/1,0	Solvent-free cleaner for use with Armaflex	6	xxx

