

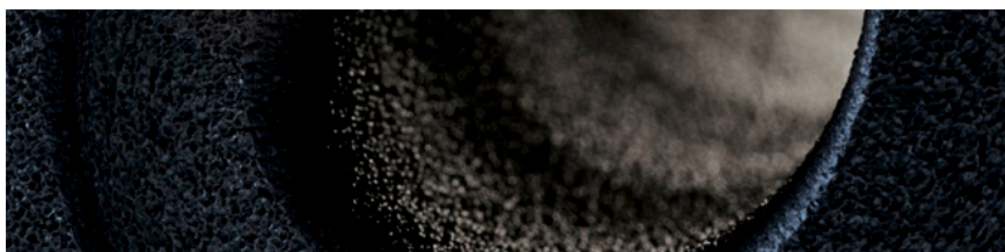
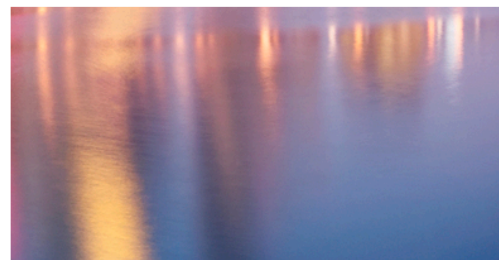


INSTALL IT. TRUST IT.

# AF/ArmaFlex Evo

Discover the new generation in elastomeric insulation. AF/ArmaFlex Evo. The safest AF/ArmaFlex ever.

- // Fire Safety – B/B(L)-s2,d0
- // Antimicrobial Protection – Microban
- // System reliability – One-Stop Solution
- // Environmental Product Declaration (EPD)
- // Dust and fiber free
- // Available in self-seal tube for quicker install



 **armacell**<sup>®</sup>  
ArmaFlex<sup>®</sup>

INSTALL IT. TRUST IT.

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# AF/ArmaFlex<sup>®</sup> Evo

## THE SAFEST AF/ARMAFLEX EVER.

History meeting the future through generations. That's what AF/ArmaFlex stands for. For more than 40 years. We strive for perfection so you can benefit from the best ArmaFlex experience. Now it's time to discover the new generation in elastomeric insulation.

Today, in its 8<sup>th</sup> product generation, we present a new AF/ArmaFlex technology that combines excellent condensation control and energy efficiency with advanced fire safety. The new B/B<sub>L</sub>-s2,d0 product provides highest insulation reliability and contributes to the overall safety in buildings.



### // Fire safety

At Armacell, safety comes first and maximum reliability is crucial. AF/ArmaFlex Evo increases the fire safety in buildings. By mitigating the fire and smoke risk, it improves visibility and respiration, thus extending the time for evacuating a building safely in the event of a fire.

### // Antimicrobial protection

AF/ArmaFlex Evo is equipped with Microban<sup>®</sup>. These antimicrobial additives provide 'proactive' protection against harmful bacteria, mould and mildew. Armacell is the only manufacturer of flexible technical insulation materials to offer built-in antimicrobial protection.

### // Nominal wall thicknesses

Our signature product AF/ArmaFlex Evo is now also available with nominal wall thicknesses. This allows you to quickly identify which insulation thickness is required for a specific application. Our new product dimensions provide you with a wide range of inner tube diameters for a perfect fit on the various pipe dimensions providing maximum reliability to prevent condensation and energy losses.

B/B<sub>L</sub>-s2,d0

## Experience AF/ArmaFlex Evo

# The evolution of an innovation

When tradition meets the future, new products and technologies evolve. AF/ArmaFlex is our heritage product. The highly flexible insulation material with an in-built vapour barrier revolutionised the insulation industry. Today, we provide a complete range of solutions based on this innovation.



Armacell has developed the new ArmaFlex 525 adhesive to be used with AF/ArmaFlex Evo.



### // System reliability

AF/ArmaFlex Evo is more than a black tube or sheet. Armacell provides solutions where individual components fit flawlessly together and are tested as a system. Our ArmaFlex Protect passive fire protection solution, flexible cladded Arma-Chek® 2-in-1 products and ArmaFlex adhesives complement and strengthen the system to guarantee long-term functionality.

### Udo Dohlen

#### Owner and managing director of Dohlen Isoliertechnik, Stolberg (Germany)

*"AF/ArmaFlex isn't just any black tube or sheet. When we insulate our customers' mechanical equipment we make sure to use the best product in the market: AF/ArmaFlex. An investment that pays off. For us and for our customers. Now we can help to make people's homes even safer. AF/ArmaFlex Evo releases 50 percent less smoke in case of fire."*

## TECHNICAL DATA - AF/ARMAFLEX EVO

Brief description	Flexible elastomeric foam with improved fire-retardant properties, low smoke generation, closed-cell insulation material structure and built-in Microban antimicrobial protection. For use in HVAC, refrigeration and process equipment application.
Material type	Elastomeric foam based on synthetic rubber. Factory-made flexible elastomeric foam (FEF), according to EN 14304.
Additional material 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.
Product colour range	Black
Special features	This product is infused with Microban antimicrobial protection to provide additional assurance against mould and mildew growth in the insulation.
Applications	Insulation/protection for pipes, air ducts, vessels (including elbows, fittings, flanges, etc.) of air-conditioning/refrigeration and process equipment to prevent condensation and save energy.
Installation	Please refer to the ArmaFlex application manual for advice.
Declaration of performance	Declaration of Performance in accordance with Article 7(3) of Regulation [EU] No 305/2011 is available at <a href="http://www.armacell.com/DoP">www.armacell.com/DoP</a> .

Property	Value / Assessment		Standard / Test method
<b>Temperature range</b>			
Service temperature	Min. °C <sup>1</sup>	Max. °C <sup>2</sup>	EN 14706, EN 14707, EN 14304
	-50	110	
	Remarks	+85 °C if sheet or tape is glued to the object with its whole surface +85 °C for tapes	
<b>Thermal conductivity</b>			
Declared thermal conductivity	Øm	0 °C	EN ISO 13787, EN ISO 8497
	$\lambda d \leq [W/(m \cdot K)]$	0.033	
	Range	Tubes (6 - 19 mm)	
	Formula	$\lambda d = [33 + 0,1 \cdot \vartheta m + 0,0008 \cdot \vartheta m^2]/1000$	
Declared thermal conductivity	Øm	0 °C	EN ISO 13787, EN 12667, EN ISO 8497
	$\lambda d \leq [W/(m \cdot K)]$	0.036	
	Range	Tubes (>25 mm) as well as sheets and tapes (3 - 32mm)	
	Formula	$\lambda d = [36 + 0,1 \cdot \vartheta m + 0,0008 \cdot \vartheta m^2]/1000$	
Declared thermal conductivity	Øm	0°C	EN ISO 13787, EN 12667
	$\lambda d \leq [W/(m \cdot K)]$	0.037	
	Range	Sheets (> 32 mm - 50 mm)	
	Formula	$\lambda d = [37 + 0,1 \cdot \vartheta m + 0,0008 \cdot \vartheta m^2]/1000$	
<b>Fire Performance and Approvals</b>			
Reaction to fire	Tubes: B(L)-s2, d0 Sheets, Tapes: B-s2,d0 Tubes with ArmaFix AF: B(L)-s2,d0 Class 0		EN 13823, EN 13501-1, EN ISO 11925-2, BS 476 Part 6
Surface flammability <sup>3</sup>	low-flammable - 2010 FTP-Code (MED 96/98/EC, Module D)		IMO 2010 FTP Code, Part 5
FM approved	4924 - Pipe and duct insulation		UBC26-3
<b>Passive fire protection</b>			
Fire resistance of elements of construction	EI 30 - EI 90		EN 13501-2, EN 1366-3

Property	Value / Assessment	Standard / Test method
<b>UL standards</b>		
UL 94 5VA <sup>4</sup>	Pass (tubes $\geq$ 3.0 mm)	UL 94, IEC 60695-11-10, UL 746B, UL 746 A
<b>Fire performance</b>		
Practical fire behaviour	Self-extinguishing, does not drip, does not spread flames, low smoke development	
<b>Resistance to water vapour</b>		
Water vapour diffusion resistance factor	Tubes (6 - 19 mm): $\mu \geq 10.000$ Tubes (>25mm); Sheets (3 - 50mm) and Tape: $\mu \geq 7.000$	EN 12086, EN 13469
<b>Physical attributes</b>		
Dimensions and tolerances	in accordance with EN 14304, table 1	EN 822, EN 823, EN 13467
<b>Weather and UV resistance</b>		
UV resistance <sup>5</sup>	Protection against UV-radiation is necessary (see Technical Bulletin no. 142).	
<b>Health and environment</b>		
Antimicrobial behaviour	In-built Microban active antimicrobial protection: No fungal growth observed	EN ISO 846, VDI 6022
Environmental Product Declaration (EPD)	Type III Environmental Product Declaration (EPD): Declaration number "EPD-ARM-20220038-IBB1-EN", Institut Bauen und Umwelt e.V. (IBU)	ISO 14025, EN 15804+A2
<b>Other technical features</b>		
Adhesion and sealing	ArmaFlex 525 is the certified adhesive for this product. However, ArmaFlex 520 adhesive can be used for tubes.	
Shelf life	Self-adhesive tapes, self-adhesive sheets, self-adhesive tubes: 1 year	
Storage	Can be stored in dry, clean rooms at normal relative humidity (50% to 70%) and ambient temperature (0 °C – 35 °C).	

<sup>1</sup> For use in temperatures beyond the maximum and minimum service temperature range indicated in the technical data table, please contact our Customer Service Centre.

<sup>2</sup> +85 °C, for products with a self-adhesive layer.

<sup>3</sup> According to IMO 2010 FTP Code annex 2, clause 2.2 a fire technical test for smoke density and toxicity is not necessary.

<sup>4</sup> Only for products without self-adhesive-layer.

<sup>5</sup> If ArmaFlex is used outdoors or in applications under UV radiation, it should be protected with a covering such as ArmaClad Arma-Chek within 3 days of installation.

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## ABOUT ARMACELL

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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](http://www.armacell.com)