

INSULATION FOR THE OIL AND GAS INDUSTRY

ArmaFlex[®] LTD

FEF installation for cryogenic and
low temperature applications

- // Improved flexibility at low temperatures over traditional insulation materials
- // Mitigates the risk of corrosion under insulation (CUI)
- // Protects against mechanical impact and shock
- // Low thermal conductivity
- // Low glass transition temperature
- // Easy installation even to complex shapes
- // Less wastage compared to rigid / pre-fabricated pieces

www.armacell.com/energy



 **armacell**[®]
ArmaFlex[®]

▼
Mechanical properties

Compression deflection	≥ 10 kPa	≥ 1.5 psi	at 25% deflection	Tested according to ISO 6916-1 (equivalent method ASTM D1056)
Corrosion mitigation				
Leachable (water-soluble) chlorides	≤ 80 ppm (mg/kg or µg/g)			Tested according to EN 13468 and ASTM C871
pH-value	7 to 9			Tested according to ISO 10523
Stress corrosion cracking	No cracks under magnifying glass on test coupons after evening, cleaning and rebending. ³			Tested according to ASTM C692
Other technical features				
Dimensional tolerances	According to EN 14304, for detailed values please refer to product range tables.			Tested according to EN 822, EN 823 and EN 13467
Weather resistance	In all industrial applications the outer layer of the material must be protected with an adequate covering like Arma-Chek R, metal jacketing or preformed UV-cured GRP (Glass-Reinforced Plastic) cladding. For further information please consult Technical Services.			
Health aspects	Neutral, MSDS available on request.			
Water absorption ³	≤ 0.1% by volume (total submersion for 2 hours) ⁴			Tested according to ASTM C209
Closed cell content	≥ 90 %	declared on the basis of the water absorption test		
Glass transition temperature ³	Below -70 °C	Below -94 °F		
Application conditions ⁵	Application temperature: ⁶	+5 °C to +35 °C	+41 °F to +95 °F	
	Max. relative humidity:	80%		
Sealing and adhesion	ArmaFlex Adhesive 520 or Adhesive HT625 shall be used for reliable adhesion of joints and seams.			
Storage	Material shall be stored indoors, in clean and dry conditions, away from direct sunlight.			
Shelf (storage) life ⁷	Max. 3 years.			

- For temperatures below or above those published please contact Technical Services to request for the corresponding technical information.
- Specimen preparation in accordance with EN 13486: neither cut, ground nor blended. Test temperature +100 °C, leaching time 0.5 hours as specified in the standard for product maximum service temperature.
- Based on single test results. Can be used for information / reference only.
- The coupons from type 304 stainless steel sheet, 1.5 mm thick. 28 days drip test using deionized or distilled water at around +100 °C.
- For environmental conditions outside the given range please contact Technical Services.
- Application temperature (temperature of installation) refers to the ambient temperature during application and the surface temperature of the substrate to which the product is installed.
- Shelf life (maximum storage time) is limited in order to make sure that only currently manufactured products are applied 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.

▼
Sheets

Item	Nominal Thickness [mm]	Nominal Width x Length [m]	m ² /carton
LTD-25-99/E	25	1x4	4
Tolerances for sheets According to EN 14304	Thickness tolerances	25 mm nominal thickness	± 2 mm
	Width tolerances		± 2 %
	Length tolerances		± 1.5 %

Tubes

STEEL PIPES*			Pipe max. Outside Diameter	Inner Diameter of Insulation Tube min/max	Nominal Insulation Thickness:	
Nominal Pipe Size NPS	Nominal Diameter DN	Outside Diameter OD*			25mm	
[inch]		[mm]	[mm]	[mm]	Item	m/ carton
3/8	10	17.2	18	19.5 - 21.0	LTD-25X018	36
1/2	15	21.3	22	23.5 - 25.0	LTD-25X022	32
3/4	20	26.9	28	29.5 - 31.5	LTD-25X028	24
1	25	33.7	35	36.5 - 38.5	LTD-25X035	24
1 1/4	32	42.4	42.4	44.0 - 46.0	LTD-25X042	20
1 1/2	40	48.3	48.3	50.0 - 52.0	LTD-25X048	18
2	50	60.3	60.3	62.0 - 64.0	LTD-25X060	12
2 1/2	65	76.1	76.1	78.0 - 80.0	LTD-25X076	10
3	80	88.9	89	91.0 - 94.0	LTD-25X089	8
Tolerances for tubes According to EN 14304		Thickness tolerances		25 mm nominal thickness		± 2.5 mm
		Inner diameter tolerances				see ID min/max in the table above
		Length tolerances				± 1.5 %

* In accordance with European standards for steel pipes. For further dimensions please contact Technical Services.

Accessories

Item	Article description	Units/Carton
ADH520/2,5E	2.5 litre tin	20 litre
ADH520/1,0E	1 litre tin	12 litre
ADH-HT625/1,0	1 litre tin	12 litre

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 regulations and project specification 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, 2019. ArmaFlex is a trademark of the Armacell Group. © and ™ are trademarks of the Armacell Group and is registered in the European Union, United States of America, and other countries.
00051 | ArmaFlex | ArmaFlex LTD | TDS | 122019 | Global | EN Master

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/energy

