



INSULATION
JUST GOT BETTER

ArmaGel[®] HTL

Flexible aerogel blanket for
high-temperature applications

- // Excellent protection against corrosion under insulation (CUI)
- // Hydrophobic and breathable
- // Non-combustible
- // More choice: 5, 10 and 20 mm thicknesses

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 **armacell**[®]
ArmaGel[®]

TECHNICAL DATA – ARMAGEL HTL

Brief description	ArmaGel HTL is a flexible aerogel insulation blanket suitable for high-temperature insulation applications up to 650 °C (1200°F).
Material type	Aerogel blanket
Colour	Light grey
Special features	ArmaGel HTL is a highly flexible aerogel insulation blanket. It is hydrophobic and breathable providing the best-in-class corrosion under insulation (CUI) protection.
Product range	Sheets in rolls, 5, 10 and 20 mm (0.2, 0.4 and 0.8 in) thickness and width of 1.5 m (59 in). For further details, please refer to the product range tables at the end of this document.
Applications	Thermal insulation/protection of pipes, vessels, equipment, fittings and etc. in industrial and process facilities.
Installation	For industrial applications, it is recommended to consult the relevant Armacell application manual(s). Please consult our Technical Services for further information and support.

Property	Value/Assessment					Standard/Test method
Temperature						
Max. service temperature ¹	+650 °C			+1200 °F		Tested according to ASTM C411/C447
Thermal conductivity						
Thermal conductivity (metric units)	θm	+24	+100	+200	+300	[°C]
	λd ≤	0.029	0.039	0.049	0.061	[W/(m·K)]
Thermal conductivity (imperial units)	θm	+75	+212	+392	+572	[°F]
	λd ≤	0.20	0.27	0.34	0.42	[Btu·in/(h·ft ² ·°F)]
Fire performance						
Surface burning characteristics ²	Flame spread = 0 Smoke developed index = 0					Tested according to ASTM E84
Reaction to fire	Non-combustible					Tested according to ISO 1182
Toxicity	Passed					Tested according to KS F 2271
Corrosion mitigation						
Stress corrosion cracking	Passed					Tested according to ASTM C692
Water resistance						
Water absorption	≤ 8%					Tested according to ASTM C1763
Density						
Density	120 to 180 kg/m ³		7.5 to 11.2 lb/ft ³			Tested according to KS L 9102



▼
Other technical features

Weather resistance	In all industrial applications the outer layer of the material must be protected with an adequate covering like metal jacketing or preformed UV-cured GRP (Glass-Reinforced Plastic) cladding. Please contact Technical Services for guidance on the temperature limitations and specific construction considerations which need to be made for each jacketing system.	
Health aspects	Neutral	
Hydrophobic	Yes	
Fungal resistance	Rating 0	Tested according to ASTM G21
Storage	Material shall be stored indoors, in clean and dry conditions, away from direct sunlight.	
Shelf (storage) life ^{1,3}	Max. 3 years	

1. For temperatures above the published value, please contact Technical Services to request the corresponding technical information.
2. Based on single test results. Can be used for information / reference only.
3. 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

		Metric sizes				Imperial sizes			
		Nominal thickness	Width	Length	Content per roll	Nominal thickness	Width	Length	Content per roll
		[mm]	[m]	[m]	[sqm]	[in]	[in]	[ft]	[sq ft]
Standard Rolls	AGL-05-00/150S	5	1.5	16	24	0.2	59	52.5	258.3
	AGL-10-00/150S	10	1.5	8	12	0.4	59	26.2	129.2
	AGL-20-00/150S	20	1.5	4	6	0.8	59	13.1	64.6
Jumbo Rolls	AGL-05-00/150P	5	1.5	65	97.5	0.2	59	213.3	1049.5
	AGL-10-00/150J	10	1.5	48	72	0.4	59	157.5	775.0
	AGL-20-00/150J	20	1.5	24	36	0.8	59	78.7	387.5
Tolerances	Thickness tolerances	5 mm (0.2 in) nominal thickness				± 1 mm			
		10 mm (0.4 in) nominal thickness				± 2.5 mm			
		20 mm (0.8 in) nominal thickness				± 4 mm			
	Width tolerances								± 3%
	Length tolerances								± 5%

All data and technical information are based on results achieved under the specific conditions defined according to the testing standards referenced. Despite taking every precaution to ensure that said data and technical information are up to date, Armacell does not make any representation or warranty, express or implied, as to the accuracy, content or completeness of said data and technical information. Armacell also does not assume any liability towards any person resulting from the use of said data or technical information. Armacell reserves the right to revoke, modify or amend this document at any moment. 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. This document does not constitute nor is part of a legal offer to sell or to contract.

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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 3,200 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:
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