



AMAGEL[®] A2

NEW NANOTECH THERMAL INSULATION



Oil&Gas

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AMAGEL A2®

Within the oil & gas, petrochemical and chemical industry AMAGEL A2 offers both safety & corrosion inhibition improvements whilst reducing the combination of space with energy savings. The nanoporous structure combined with its hydrophobic nature creates the mitigation of corrosion under insulation for both mechanical equipment and metallic structures, preserving the integrity and functionality over time.

Automotive

Thanks to the flexible structure of the **AMAGEL A2®** blankets it is possible to thermally insulate even the most complex shape, especially in challenging limited spaces.

Temperature

Medium industrial applications

With **AMAGEL A2®** it is possible to create components directly from a technical drawing due to its ease of CNC cutting with traditional equipment. Particularly suitable for electro-mechanical, thermal-electrical and thermal-mechanical insulation of climate rooms, autoclaves, drying facilities.

Temperature

Hight industrial applications

With **AMAGEL A2®** has a wide range of thermal stability making it suitable for a variety of high temperature applications such as: industrial electrical furnaces, blast furnaces, brickworks, aluminium foundry, furnaces for thermal treatments in, metallurgy and steel industry, etc.

Naval & Railway

AMAGEL A2®

is ideal for the thermal insulation of the equipment and components within the naval and railway industry for applications such as air conditioning, refrigeration, distribution lines of fluid & hydraulic hoses.

AMAGEL A2® is certified according to **EN 45545 STANDARD, LEVEL H3**, for use in the railway sector.

Industry of Cold

With its combination of mechanical strength and excellent thermal stability down to cryogenic temperatures, **AMAGEL A2®** is the ideal thermal insulation material for the cold industrial applications. Its nanoporous and hydrophobic nature, allows for an optimum balance in the insulation, mitigation of corrosion and resistance to vapour penetration.

Military & Aero Space

AMAGEL A2®

is classified as non combustible (both at very high and very low temperatures), with extremely high fire resistance, making it an excellent material solution for passive fire both in the military and aerospace sector.

Electronical

AMAGEL A2®

offers high performance insulation in limited space and offers a non combustible solution for energy storage and battery insulation, ideal for the e vehicle transportation industry.

Building

AMAGEL A2®

allows to optimize both the internal & external spaces in the construction applications for commercial and residential buildings, guaranteeing the highest values of thermal resistance in the minimum space thickness when compared with conventional insulating materials.

AMAGEL^{A2}

NEW NANOTECH THERMAL INSULATION

The unique formulation allows for a next generation Aerogel insulation blanket with ultra low dust generation and excellent handling.

guaranteeing an effective increasement of the total energy efficiency with optimal results of thermal improvement.

The permeability to vapour added to the hydrophobicity of the product AMAGEL A2, guarantees over time the maintenance of the performances of the product. Unlike rigid and preformed insulants AMAGEL A2 adapts perfectly to any shape or design: the mattress is soft and flexible, physically sturdy but with an excellent recovery of the shape and the performances of project even after eventual events of compression under load. AMAGEL A2 specific composition offers an excellent fire resistance performances (Euroclass A2) allowing its use in both passive fire resistance and fire safety applications.

TYPES AND FORMATS

AMAGEL A2[®] is available in 3 different thicknesses depending on the applicative needs and the requested performances, and 2 different formats; where it's requested an extremely low level of dustiness, typical of the products made of Aerogel.

- **AMAGEL A2[®] roll** available in the thicknesses of 3, 6 and 10 mm

- **AMAGEL A2[®] panel** available in the thickness of 10 mm

AMAGEL A2[®], represents a new & important step in the development of nanoporous insulation materials based on silica Aerogel.

The combination of a flexible matrix of glass fibres with a nanoporous Aerogel. offers the best thermal insulation performance in a wide variety of applications.

The new formulation offers a significant reduction in the generation of dust & allows a better workability during the handling and manufacturing stages.

The general properties of AMAGEL A2 are determined as thermal conductivity extremely low –from 0,015 to 0,019– higher flexibility, pressure resistance, hydrophobicity and ease to use. AMAGEL A2 has a temperature range of -200°C and +650°C.

AMAGEL A2 allows to optimize the spaces guaranteeing the highest values of thermal resistance to parity of thickness with the conventional insulating materials.

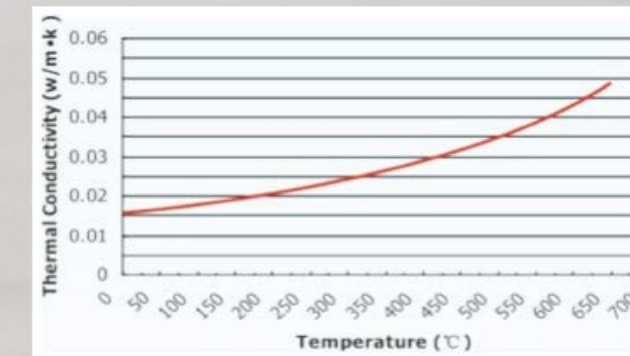
Its employment allows to obtain important results in complex situations

RANGE OF APPLICATION

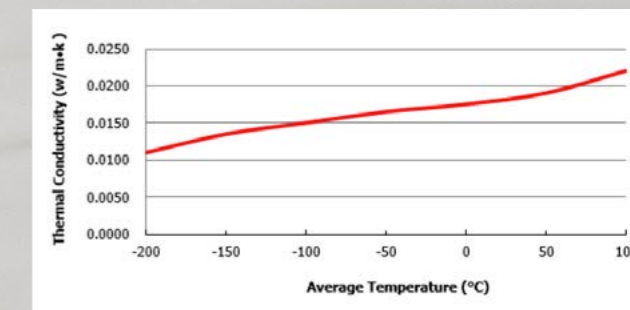
- Insulation of pipes and tanks
- Insulation of motors
- Insulation of refrigerators, furnaces
- Insulation of elevator shafts
- Insulation of bulkheads and thermal shields
- Insulation of metallic elements
- Insulation of bonnets, bodies and interiors of vehicles in general
- Insulation and protection of alimentation batteries
- Insulation and protection of tail pipes
- Dry insulation of cavities, attics and coverages of residential and commercial buildings

TABLE CONDUCTIVITY / TEMPERATURE

AMAGEL A2[®] - 650



AMAGEL A2[®] - ALU



TECHNICAL CHARACTERISTICS

TECHNICAL DATA	AMAGEL A2 450	AMAGEL A2 650	AMAGEL A2 ALU	TEST METHOD
Roll wideness in mm	1500	1500	1500	
Thickness in mm	3-6-10	3-6-10	10	
Thermal conductivity at 10°C	0,015 W/mK	0,019 W/mK	0,019 W/mK	UNIEN 12667:2002
Steam permeability	0,07 m	0,07 m	0,07 m	
Limit temperatures of employment	-50/+450 °C	-50/+650 °C	-200/+125 °C	
Nominal density	200 ± 30 kg/m ³	200 ± 30 kg/m ³	160 ± 20 kg/m ³	
Fire reaction class	A2	A2	A2	EN 13501-1
Colour	White	White	White	

AEROPAN
NANOTECH THERMAL INSULATION

AEROGIPS
NANOTECH INSULATION BOARD

AKTIVEPAN
NANOTECH THERMAL INSULATION

AEROPROOF
ROOF THERMAL NANOTECH INSULATION

THERMOGEL
NANOTECH THERMAL PAINT



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