

INSULATION JUST GOT BETTER

ArmaGel HT

Your safety datasheet (SDS) for our flexible aerogel blanket for high-temperature applications.

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 **armacell**[®]
ArmaGel

SECTION 1: Identification of the substance/mixture and of the company/undertaking

- 1.1 Product identifier**
Trade name
ArmaGel HT
- 1.2 Relevant identified uses of the substance or mixture and uses advised against**
Relevant identified uses of the substance or mixture
Thermal insulation for pipe-work, vessels and related installation
Uses advised against
No data available
- 1.3 Details of the supplier of the safety data sheet**
Address
Armacell LLC
55 Vilcom Center Drive, Suite 200
Chapel Hill, NC 27214
Telephone no: (919) 913-0555
e-mail: info.us@armacell.com

Information provided by / telephone
Dr. Heribert Quante, Tel.: +49 (0) 251 - 7603-227

Advice on Safety Data Sheet
heribert.quante@armacell.com
- 1.4 Emergency telephone number**
CHEM-TEL: 1-800-255-3924 OR 1-813-248-0585 (call collect)

SECTION 2: Hazards identification

- 2.1 Classification of the substance or mixture**
Classification information
This product is in the sense of article 3 of the Regulation (EC) 1907/2006 (REACH) an article and not subject to the labelling obligations according to: Art. 1, Regulation (EC) 1272/2008 (CLP).
To provide a safety data sheet is not mandatory for articles according to art. 31 of the Regulation (EC) 1907/2006 (REACH) and is done on a voluntary basis.
- 2.2 Label elements**
Not relevant
- 2.3 Other hazards**
Handling and/or processing of this material may generate a dust which can cause mechanical irritation of the eyes, skin, nose and throat

SECTION 3: Composition/information on ingredients

- 3.1 Substances**
Not applicable. The product is not a substance.
- 3.2 Mixtures**
Hazardous ingredients
This product does not contain substances to be mentioned according to EU Regulation No 1907/2006 (REACH), annex II

SECTION 4: First aid measures

- 4.1 Description of first aid measures**
General information
In case of persisting adverse effects, consult a physician. Remove contaminated clothing and shoes and launder thoroughly before reusing.
After inhalation
Ensure supply of fresh air
After skin contact
When in contact with the skin, clean with soap and water. Consult a doctor if skin irritation persists.
After eye contact
Remove contact lenses. Rinse eye thoroughly under running water keeping eyelids wide open and protecting the unaffected eye (at least 10 to 15 minutes).
After ingestion
Rinse mouth thoroughly with water
- 4.2 Most important symptoms and effects, both acute and delayed**
No data available
- 4.3 Indication of any immediate medical attention and special treatment needed**
No data available

SECTION 5: Firefighting measures

- 5.1 Extinguishing media**
Suitable extinguishing media
Extinguishing measures to suit surroundings
Unsuitable extinguishing media
High power water jet

5.2 Special hazards arising from the substance or mixture
In case of ambient fire possible release of: Oxides of silica; Aluminium oxide; Iron oxide.

5.3 Advice for firefighters
Use self-contained breathing apparatus. Wear protective clothing.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
For non-emergency personnel
Refer to protective measures listed in sections 7 and 8. avoid dust development
For emergency responders
No data available. Personal protective equipment (PPE) - see Section 8.

6.2 Environmental precautions
Do not discharge into the drains/surface waters/groundwater

6.3 Methods and material for containment and cleaning up
Take up mechanically. When picked up, treat material as prescribed under heading "Disposal considerations".

6.4 Reference to other sections
No data available

SECTION 7: Handling and storage

7.1 Precautions for safe handling
Advice on safe handling
Avoid the formation and deposition of dust
General protective and hygiene measures
Keep away from food, drink and animal feeding stuffs. Do not eat, drink or smoke during work time. Remove soiled or soaked clothing immediately.
Avoid contact with eyes and skin. Do not inhale vapours or dust.
Advice on protection against fire and explosion
Keep away from sources of heat and ignition

7.2 Conditions for safe storage, including any incompatibilities
Technical measures and storage conditions
Store in a dry place. Protect from heat and direct sunlight.
Advice on storage assembly
Protect against humidity

7.3 Specific end use(s)
No data available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters
No parameters available for monitoring

8.2 Exposure controls
Appropriate engineering controls
No data available
Personal protective equipment
Respiratory protection
Dust mask
Eye / face protection
Safety glasses [EN 166]
Hand protection
Sufficient protection is given wearing suitable protective gloves checked according to i.e. EN 374, in the event of risk of skin contact with the product
Appropriate Material
Leather
Other
Chemical-resistant work clothes
Environmental exposure controls
No data available

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form/Colour
solid; blanket
grey

Odour
No data available

Odour threshold
No data available

pH value
No data available

Boiling point / boiling range

No data available

Melting point / melting range

No data available

Decomposition point / decomposition range

No data available

Flash point

No data available

Auto-ignition temperature

No data available

Oxidising properties

No data available

Explosive properties

No data available

Flammability (solid, gas)

No data available

Lower flammability or explosive limits

No data available

Upper flammability or explosive limits

No data available

Vapour pressure

No data available

Vapour density

No data available

Evaporation rate

No data available

Relative density

No data available

DensityDensity 0.160 - 0.240 g/cm³**Solubility in water**

No data available

Solubility(ies)

No data available

Partition coefficient: n-octanol/water

No data available

Viscosity

No data available

9.2 Other information**Other information**

No data available

SECTION 10: Stability and reactivity**10.1 Reactivity**

No data available

10.2 Chemical stability

Stable under recommended storage and handling conditions (See section 7).

10.3 Possibility of hazardous reactions

None, if handled according to order

10.4 Conditions to avoid

Heat, naked flames and other ignition sources. Moisture.

10.5 Incompatible materials

No data available

10.6 Hazardous decomposition products

No data available

SECTION 11: Toxicological information**11.1 Information on toxicological effects**

Acute oral toxicity
No data available

Acute dermal toxicity
No data available

Acute inhalational toxicity
No data available

Skin corrosion/irritation
No data available

Serious eye damage / irritation
No data available

Respiratory or skin sensitisation
No data available

Germ cell mutagenicity
No data available

Reproduction toxicity
No data available

Carcinogenicity
No data available

STOT - single exposure
No data available

STOT - repeated exposure
No data available

Aspiration hazard
No data available

Delayed and immediate effects as well as chronic effects from short and long-term exposure
Repeated and prolonged exposure to high dust concentrations may lead to irritation of the respiratory tract

SECTION 12: Ecological information**12.1 Toxicity**

Toxicity to fish (acute)
No data available

Toxicity to fish (chronic)
No data available

Toxicity to Daphnia (acute)
No data available

Toxicity to Daphnia (chronic)
No data available

Toxicity to algae (acute)
No data available

Toxicity to algae (chronic)
No data available

Bacteria toxicity
No data available

12.2 Persistence and degradability
No data available

12.3 Bioaccumulative potential
No data available

12.4 Mobility in soil
No data available

12.5 Results of PBT and vPvB assessment
No data available

12.6 Other adverse effects
No data available

SECTION 13: Disposal considerations**13.1 Waste treatment methods****Product**

Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company

Packaging

Residuals must be removed from packaging and when emptied completely disposed of in accordance with the regulations for waste removal. Incompletely emptied packaging must be disposed of in the form of disposal specified by the regional disposer.

SECTION 14: Transport information**14.1 Transport ADR/RID/ADN**

The product is not subject to ADR/RID/ADN regulations

14.2 Transport IMDG

The product is not subject to IMDG regulations

14.3 Transport ICAO-TI / IATA

The product is not subject to ICAO-TI / IATA regulations

14.4 Other information

No data available

14.5 Environmental hazards

Information on environmental hazards, if relevant, please see 14.1 - 14.3

14.6 Special precautions for user

No data available

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not relevant

SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
EU regulation****Regulation (EC) No 1907/2006 (REACH) Annex XIV (List of substances subject to authorisation)**

According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substances considered as substances requiring authorisation as listed on Annex XIV of the REACH regulation (EC) 1907/2006

REACH candidate list of substances of very high concern (SVHC) for authorisation

According to available data and the information provided by preliminary suppliers, the article does not contain substances that are considered substances meeting the criteria for inclusion in annex XIV (List of Substances Subject to Authorisation) as laid down in Article 57 and article 59 of REACH (EC) 1907/2006

Regulation (EC) No 1907/2006 (REACH) Annex XVII: RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, PREPARATIONS AND ARTICLES

According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substances requiring authorisation as listed on Annex XIV of the REACH regulation (EC) 1907/2006

Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances

This product is not subject to Part 1 or 2 of Annex I

15.2 Chemical safety assessment

No data available

SECTION 16: Other information**Further information**

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The information is based on our current knowledge however it does not represent a guarantee of product properties nor does it create any legal obligation.

Sources of key data used to compile the data sheet:

Regulation (EC) No 1907/2006 (REACH), 1272/2008 (CLP) as amended in each case. EC Directives 2000/39/EC, 2006/15/EC, 2009/161/EU

National Threshold Limit Values of the corresponding countries as amended in each case. Transport regulations according to ADR, RID, IMDG, IATA as amended in each case.

The data sources used to determine physical, toxic and ecotoxic data, are indicated directly in the corresponding chapter.

Alterations/supplements:

Alterations to the previous edition are marked in the left-hand margin.

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Prod-ID 731873



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 building regulations 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.

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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 3,000 employees and 25 production plants in 17 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.

For product information, please visit:
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