

ThermaEco FRZ sheet

Safety Data Sheet

Issued on: 21.08.2025

Version: v.1.0

Section 1: Identification of the mixture and of the company

1.1. Product identifier

ThermaEco FRZ sheet

1.2. Relevant identified uses of the mixture and uses advised against

Thermal insulation product for building equipment and industrial installations.

1.3 . Details of the supplier of the safety data sheet

Thermaflex Izolacji sp. z o.o.

58-130 Żarów

ul. Przemysłowa 6, Poland

tel. +48 74 85-89-666

fax. +48 74 85-89-667

1.4. Emergency phone number

Call Thermaflex Izolacji Sp. z o.o.

+48 74 85 89 666 (line available 8 a.m. – 4 p.m.)

Section 2: Hazards identification

2.1. Classification of the mixture

This product is an article in the sense of Article 3 of Regulation (EC) 1907/2006 (REACH) and is not subject to labelling according to Article 1, Regulation (EC) 1272/2008 (CLP). Provision of a safety data sheet is not mandatory for articles according to Article 31 of Regulation (EC) 1907/2006 (REACH) and is done on a voluntary basis.

Fire hazard In the event of fire dangerous gases and smoke can be released. (see point 5.)

Electrostatic discharge During handling ThermaEco FRZ sheet foam could be electrostatically charged by friction. The static discharge may generate sparks.

2.2. Label elements

Not relevant.

Disclaimer

All recommendations and information provided on this data sheet are based on our knowledge and experience. Product specifications are intended as guidelines. Since conditions of service are beyond our control, users must satisfy themselves that products are suitable for the intended use. No guarantee or warranty is given or implied or that any use of the products will not infringe rights belonging to other parties. We reserve the right to change product design and properties without notification.



2.3. Other hazards

No data available.

Section 3: Composition/ information on ingredients

3.1. Substances

Not applicable. The product is not a substance.

3.2. Mixture

ThermaEco FRZ sheet products are articles in the meaning of REACH (1907/2006/ER) and are based on crosslinked polyolefins. According to our current knowledge (date of release of this document) they do not contain any ingredients which are harmful to human health and/or the environment according to Art. 57 of REACH regulation in a concentration of more than 0.1 % (w/w). The following two substances are listed and will be explained in detail:

Azodicarbonamide (ADCA), CAS-No. 123-77-3, is used as expansion agent. The conversion rate during the foaming step of >99,9% indicate that the amount of non-decomposed residues of ADCA is below 0,1%. Any traces of non-decomposed ADCA are embedded in the polymer matrix and can't be released during normal usage of the product.

Bis(α,α-dimethylbenzyl) peroxide (DCP), CAS-No. 80-43-3, is used as a crosslinking agent for chemical crosslinked foams. Due to the intended use, it reacts during the foaming process with a conversion rate of > 90%, which also indicates a negligible amount of unprocessed DCP below 0.1 %wt. which can remain as residue, that is furthermore embedded in the polymer matrix of the foam. It is not included in physical crosslinked foams. According to the 'Substance evaluation conclusion and evaluation report' EC-No.201-279-3 exposure to humans, more specifically to consumers, is considered as negligible. Actual existing information and test results indicate that the amount of non-decomposed ADCA and/or non-reacted DCP in the finished products is below the limit for notification. Once new data based on approved test standards are available Thermaflex will update the declarations and inform their customers accordingly.

Hazardous ingredients: the product contains antimony trioxide that is subject to EU Regulation no. 1907/2006 (REACH), annex II.

Antimony trioxide	Content (% w/w) 1,2% - 10%
CAS no. 1309-64-4	Carc. 2
EC no. 215-175-0	H351
Type	1

Type 1: substance classified with a health or environmental hazard.



Section 4: First aid measures

4.1. Description of first aid measures

General information: No special measures necessary.

After contact to skin or eyes: For hot product, immediately immerse in or flush the affected area with large amounts of cold water. Call for prompt medical attention. No attempt should be made to remove material from skin or to remove contaminated clothing.

After inhalation: In case of upper respiratory tract irritation due to breathing of decomposition products move concerned persons to fresh air. If symptoms persist, call a physician. Administer artificial respiration if breathing is stopped. Call for prompt medical attention.

After ingestion: If swallowed seek medical advice immediately and show the doctor the package or label.

4.2. Most important symptoms and effects, both acute and delayed

No data available.

4.3. Indication of any immediate attention and special treatment needed

No data available.

Section 5: Firefighting measures

5.1. Fire extinguishing media

Adapt fire extinguishing measures to surrounding areas.

5.2. Special hazards arising from the mixture

In the event of fire the following can be released:

Carbon monoxide (CO), Carbon dioxide (CO₂), Hydrogen bromide (HBr), under certain fire conditions traces of other toxic substances cannot be excluded.

5.3. Advice for firefighters

In case of combustion use suitable breathing apparatus with independent air supply.

Section 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

No data available. Personal protective equipment – see Section 8.

6.2 Environmental precautions

No special measures necessary.

6.3 Methods and material for containment and cleaning up

Collect mechanically.

6.4 Reference to other sections

No data available.



Section 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling: no special measures necessary if used correctly. Avoid dust formation.

General protective and hygiene measures: no special measures necessary.

Advice on protection against fire and explosion: The product is combustible. During handling foam could generate an electrostatic charge which could give rise to an explosion if adjacent to ignitable material such as solvent vapors or dust laden air. Therefore, note the presence of grounding measures.

7.2. Conditions for safe storage, including any incompatibilities

Recommended storage temperature and conditions: -20° - +50°C, for details see manufacturer's storage instruction. Protect against humidity.

7.3. Specific end use(s)

No further relevant information available.

Section 8: Exposure controls/ personal protection

8.1. Control parameters

No parameters available for monitoring.

8.2. Exposure controls

Personal protective equipment: no special measures required.

Respiratory protection: no special measures required. For processing above the melting point of the polymer please take care for very well ventilated rooms. Hand protection: no special measures required.

Eye/face protection: no special measures required.

Other: no special measures required.

Environmental exposure control: no data available.

Avoid contact of molten material with skin.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance:	Grey, flexible, closed cell tubes
Odour:	odourless
Autoflammability foam:	>420-440 °C
Explosive properties:	none
Apparent density foam:	25-30 [kg/m ³]
Sollubility in:	water: insoluble



	organic solvents : insoluble, partly soluble
Boiling point	Not applicable
Melting point	Above 100°C
Decomposition temperature	No data available
Flash point	No data available
Ignition point	No data available
Vapour pressure	No data available
Lower explosion limit	No data available
Upper explosion limit	No data available

9.2. Other information

No data available.

Section 10: Stability and reactivity

10.1. Reactivity

Dangerous reactions are not expected if the product is handled according to its intended use. Avoid any temperature >160 °C over a period >10 minutes. Avoid any contact with strong oxidizing chemicals.

10.2. Chemical stability

Product is chemically stable.

10.3. Possibility of hazardous reaction

None if used as directed.

10.4. Conditions to avoid

Avoid any contact with strong oxidizing chemicals and open flames.

Avoid storage in direct sunlight.

10.5. Incompatible materials

No further relevant information available.

10.6 Hazardous decomposition products

See point 5. concerning hazardous combustion products in case of fire.



Section 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No. 1272/2008

Hazard classification	Information/comments
Acute oral toxicity	No data available
Acute dermal toxicity	No data available
Acute inhalation toxicity	No data available
Skin corrosion/irritation	No data available
Serious eye damage/irritation	No data available
Respiratory or skin sensitization	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

Information on: antimony trioxide

Assessment of carcinogenicity: Indication of possible carcinogenic effect in animal tests.

IARC (International Agency for Research on Cancer) has classified this substance as group 2B (The agent is possibly carcinogenic to humans).

11.2. Information on hazard classes

Endocrine disrupting properties: No data available

Other information: No data available

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

Because of insolubility in water details are impossible to determinate.

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. Endocrine disrupting properties

No data available.

12.7. Other adverse effects

Adsorbable organically-bound halogen (AOX): The product contains according to the formulation, organically bound halogen. It can increase the AOX-value in the water purification plants overflow or if it reaches waters. Other ecotoxicological advice: The product is a polymeric compound.

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 disposal company.

Packaging: residues 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/AND regulations.

14.2. Transport IMDG

The product is not subject to IMDG regulations.

14.3. Transport ICAO-TI/IATA regulations

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

14.4. Other information

No data available.

14.5. Environmental hazards

If relevant, see 14.-14.3.

14.6 Special precautions for user

No data available.

14.7 Maritime transport in bulk according to IMO instruments

Not relevant.

Section 15: Regulatory information



15.1. Safety, health and environmental regulations/ legislation specific for the substance or mixture

Prohibitions, Restrictions and Authorizations

Restrictions of Regulation (EC) No 1907/2006, Annex XVII, Annex XIV do not apply for the intended use(s) of the product given in this SDS.

Directive 2012/18/EU - Control of Major Accident Hazards involving dangerous substances (EU):

Listed in above regulation: no

15.2. Chemical safety assessment

Chemical Safety Assessment not required.

Product is not classified as hazardous.

Section 16: Other information

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification: Carc. 2, H351

Justification: Calculation method

Full text of classifications [CLP/GHS]

H351 Suspected of causing cancer.

Carc. 2 CARCINOGENICITY - Category 2

For additional product information contact Thermaflex Izolacji Sp. z o.o.

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.

Directives 2000/39/EC, 2006/15/EC, 2009/161/EU, (EU) 2017/164.

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 are ecotoxic data, are indicated directly in the corresponding section.