



Safety Data Sheet

ThermaEco FRZ

Ver. 3/2017 issued on 23.05.2017

Section 1: Identification of the mixture and of the company

1.1 Product identifier

ThermaEco FRZ

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
Safety responsible: Jakub Sobieszek

1.4 Emergency phone number

Do call ThermoFlex Izolacji Sp. z o.o.
+48 661 303 306 to Rafał Kuśmierczyk

Section 2: Hazards identification

2.1 Classification of the mixture

Not classified as dangerous according to DIRECTIVE 1999/45/EC

2.2 Label elements

Not applicable in relation to DIRECTIVE 1999/45/EC

2.3 Other hazards

ThermaEco FRZ foam will burn when provided with an adequate amount of heat and oxygen; therefore do not expose the material to any flame or other source of ignition or heat. Subject to reasonable care and cleanliness there are no obvious problems associated with the handling of polyolefin foams. When using do not eat, drink or smoke. Wash hands before breaks and at the end of work.



Section 3: Composition/ information on ingredients

3.1 Substances

n/a

3.2 Mixtures

ThermaEco FRZ is a thermoplastic polyolefin foam, which is produced in a continuous extrusion process. ThermaEco FRZ is based on polyolefin polymers and physically foamed with an organic foaming agent. The foaming agent is known as non depleting substance to the ozone layer.

Section 4: First aid measures

4.1 Description of first aid measures

After contact to skin or eyes: No special measures. See 11 Toxicological information
 If headache, nausea or vomiting occur, contact a doctor.

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

4.3 Indication of any immediate attention and special treatment needed

No further relevant information available.

Section 5: Firefighting measures

5.1 Fire extinguishing media

Water spray, extinguishing foam, CO₂-extinguisher.

5.2 Special hazards arising from the mixture

In case of fire: if smoke gases are inhaled, which contain mainly carbon dioxide (CO₂) and carbon monoxide (CO): fresh air, coffee and possibly artificial respiration (call immediately a doctor) are the recommended measures.

If body skin is burned through contact with molten foam: cool burned parts with water, but do not remove the foam from the skin. If skin burn grad 2 or 3 is reached: call immediately a doctor.

5.3 Advice for firefighters

Use respirator/oxygen masks in enclosed areas.



Avoid dense smoke and do not inhale the smoke gases from combustion.
Use safety glasses and protect skin/body with protective clothing against molten ThermaEco FRZ.

Section 6: Accidental release measures

Not applicable

Section 7: Handling and storage

7.1 Precautions for safe handling

Practice reasonable care as a normal safety precaution. Fabrication areas should be well ventilated to carry away fumes, vapours and dust. Operatives should be assured of a supply of fresh air. The working environment should be kept clean and free of dust.

7.2 Conditions for safe storage, including any incompatibilities

Practice reasonable care and cleanliness; provide adequate distance between stacks as a safety precaution. Do not expose to any source of flame, ignition or heat. Recommended storage is inside due to UV light and heat sensitivity.

7.3 Specific end use(s)

No further relevant information available.

Section 8: Exposure controls/ personal protection

8.1 Control parameters

Not applicable

8.2 Exposure controls

Breathing protection: Use special personal breathing respirator/mask or filter, in special fabrication areas (see 7.1 Handling) that are not well ventilated, in order to protect from fumes, vapours and dust.

Hand protection:

Wear gloves (cotton, wool or leather), when working in fabrication areas utilizing heat processes, to prevent from possible thermal injury from hot foam.



Eye protection:

Use goggles or face masks, when working in fabrication areas utilizing heat processes, to prevent possible contact with hot foam and thermal injury.

Body protection:

Wear clothes and shoes, to protect the full body skin, especially when working in fabrication areas utilizing heat processes, to prevent possible thermal injury (burns).

Section 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance:	Grey, flexible closed cell, foam web, available in a wide variety of types.
Odour:	odourless
Softening range:	>75 °C
Autoflammability:	>300 °C
Thermal decomposition:	>160 °C
Explosive properties:	none
Apparent density:	25-36 kg/m ³
Sollubility in:	water: insoluble organic solv.: insoluble, partly soluble, swelling; depending on solvent type.

9.2 Other information

The physical properties presented above are typical values and should not be construed as a specification.

Section 10: Stability and reactivity

10.1 Reactivity

Avoid any temperature >160 °C over a period >10 min.
Avoid any contact with strong oxidizing chemicals.

10.2 Chemical stability

Product is chemically stable.

**10.3 Possibility of hazardous reaction**

No further relevant information available.

10.4 Conditions to avoid

Avoid any contact with strong oxidizing chemicals.

Avoid storage in direct sunlight.

10.5 Incompatible materials

No further relevant information available.

10.6 Hazardous decomposition products

Dangerous decomposition gases/vapours in heat fabrication processes, combustion gases in case of fire.

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

Toxicologically harmless. Polyolefin foams are among the most inert polymer foams and constitute no hazards in terms of normal handling and skin contact.

Section 12: Ecological information**12.1 Toxicity**

Environmentally harmless:

- insoluble in water: no contamination

- insoluble in most solvents

- degradable only by UV light

ThermaEco FRZ is produced (H)CFC free.

12.2 Persistence and degradability

No further relevant information available.

12.3 Bioaccumulative potential

No further relevant information available.

12.4 Mobility in soil

Not applicable



12.5 Results of PBT and vPvB assessment

PBT: Not applicable

vPvB: Not applicable

12.6 Other adverse effects

No further relevant information available.

Section 13: Disposal considerations

13.1 Waste treatment methods

Recycling: 100% recyclable to be used in own products.

Disposal: When disposing of any wastes, observe all applicable national and local regulations.

Section 14: Transport information

14.1 UN number Not applicable

14.2 UN proper shipping name Not applicable

14.3 Transport hazard class(es)

No restriction and no dangerous material in relation to transportation regulations according to regulations ADR/RID, IMO and IATA

14.4 Packing group Not applicable

14.5 Environmental hazards Not applicable

14.6 Special precautions for user Not applicable

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable

Section 15: Regulatory information

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

Regulation (EC) No 1907/2006 (REACH) Annex XIV: List of substances subject to



authorization – none of the ingredients are listed.

15.2 Chemical safety assessment

Chemical Safety Assessment isn't available

Section 16: Other information

No further relevant information available.

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

Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IATA: International Air Transport Association

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative