

## **MATERIAL SAFETY DATA SHEET**

### **Thermobreak<sup>®</sup> Thermaloc**

#### **Introduction**

This Safety Data Sheet contains the following information and advice.

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## 1. Identification of:

- 1.1 Product** Thermobreak<sup>®</sup> Thermaloc
- 1.2 Company** Thai Sekisui Foam  
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## 2. Product Description

Thermobreak<sup>®</sup> Thermaloc crosslinked polyolefin foam insulation material produced in a batch process. Thermobreak<sup>®</sup> Thermaloc is based on PE homo and copolymers/calcium carbonate and foamed with an organic foaming agent by chemical decomposition. The two following gases are mainly produced:

- Nitrogen (N<sub>2</sub>)
- Carbon dioxide (CO<sub>2</sub>)

Both are known as non-depleting substances to the ozone layer.

## 3. Hazards Identification

Polyolefin 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.

## 4. First Aid Measures

After contact with skin:	No special measures with usage at normal temperatures.
After contact with eyes:	Flush thoroughly with flowing water.
After inhalation:	No special measures with usage at normal temperatures.
After swallowing:	If ingested, induce vomiting by drinking a large volume of water or salt water. Seek medical attention.

In case of fire:

If smoke gases are inhaled, which contain mainly carbon dioxide (CO<sub>2</sub>) and carbon monoxide (CO), fresh air and possible artificial respiration (seek medical attention immediately) are the recommended measures.

If body skin is burned through contact with molten material, cool burned parts with water but do not remove from the skin. If skin burn degree 2 or 3 is reached, seek medical attention immediately.

## 5. Fire Fighting Measures

Fire extinguishing mediums are:

- Dry chemical
- Water spray

- Extinguishing foam
- CO<sub>2</sub> extinguisher

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.

## 6. Accidental Release Measures

Not applicable.

## 7. Handling and Storage

Handling:

Practice reasonable care as a normal safety precaution. The working environment should be kept clean and free of dust.

Storage:

Practice reasonable care and cleanliness; provide adequate distance between stacks as a safety precaution. Store inside with adequate ventilation and keep dry, away from direct sunlight. Keep in original packing until required. Do not expose to any source of flame, ignition or heat.

## 8. Exposure Controls/Personal Protection

Breathing protection:

When sawing Thermobreak<sup>®</sup> Thermaloc, wear a dust mask with minimum P1 rating.

Hand protection:

Use safety gloves when cutting product with a knife.

Eye protection:

When sawing Thermobreak<sup>®</sup> Thermaloc, wear safety glasses or goggles.

Body protection:

No special requirements.

## 9. Physical and Chemical Properties

Appearance:

Semi rigid closed cell, crosslinked polyolefin foam.

Odour:

Odourless

Softening range:

≥100 – 130°C

Autoflammability:

≥300°C

Thermal decomposition:

>160 – 180°C

Explosive properties:

None

Solubility in water:

Insoluble

organic solvents:

Insoluble, partly soluble, swelling;  
depending on solvent type

## 10. Stability and Reactivity

Avoid:

Any temperature (over period >10 minutes) >160 – 180°C  
Any contact with strong oxidising chemicals

## 11. Toxicological Information

No known toxicological effects.

## 12. Ecological Information

No known ecotoxicological effects.

Ozone layer depleting substances:

Thermobreak<sup>®</sup> Thermaloc does not contain and is not produced with any of the substances mentioned in the “Montreal Protocol” of ozone depleting substances and in the corresponding EC Regulation 2009/1005:

- Chlorofluorocarbons (CFCs)
- Hydrochlorofluorocarbons (HCFCs)
- Carbon Tetrachloride
- 1,1,1-Trichloroethane
- Methyl Bromide
- Hydrobromofluorocarbons (HBFCs)

## 13. Recycling & Disposal Considerations

When disposing of any waste, observe all applicable national and local regulations.

## 14. Transport information

No restrictions and non-hazardous material in relation to transportation regulations.

## 15. Regulatory information

No regulations apply in relation to classification, packaging and identification, also applicable to health and environmental care.

## 16. Other information

This information is based on our current level of knowledge and relates to the product in the state in which it is delivered. It is intended to describe the product from the point of view of safety requirements, and is not intended to guarantee any particular properties.



This information on Sekisui Foam International products is presented to the best of our knowledge. All product data is based on average values and is for guidance only. As these products are subject to constant research and development, we reserve the right to update the contents without notice.



Recommendations as to methods of post fabrication, application and use of Sekisui Foam International products are based on our experience and knowledge of the characteristics of our products and are given in good faith. As producer of the material we have no control over the application of Sekisui Foam International products and no legal responsibility is accepted for such recommendations. In particular, no responsibility is accepted by us for any system in which Sekisui Foam International products are utilised or for any application.



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