

Safety Data Sheet

ThermaSmart PRO sheet and tube

1. Identification

1.1 Product

ThermaSmart PRO sheet and tube

1.2 Company

Thermaflex Isolatie B.V.
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We are Thermaflex, Taking care of energy and the environment

2. Product description ThermaSmart PRO is a thermoplastic elastomer (TPE) polyolefin foam, containing flame-retardant additives and is produced in an extrusion process. ThermaSmart PRO comprises of polyolefin thermoplastic elastomeric polymers and foamed with a blowing agent. The blowing agent is recognized as a non-depleting substance to the ozone layer.

3. Hazard identification TPE foam will burn when provided with an adequate amount of heat and oxygen; therefore, do not expose the material to any flame, or other sources of ignition or heat. AC-formulations will not prevent the foam from burning, but will show improved fire retardant properties with regards to reduction of fire ignition and fire spread. This was trialed and tested in well-defined burn tests.

Avoid direct contact with body skin, as AC-additives may in certain cases cause skin irritation in sensitive persons; we recommend to wear gloves. Subject to reasonable care and cleanliness there are no obvious problems associated with the handling of TPE foams.

4. First aid measures After contact to skin or eyes, no special measures are needed. See 11. Toxicological information.

In case of fire: if smoke gasses are inhaled, which mainly contain Carbon dioxide (CO₂) and carbon monoxide (CO); please seek fresh air.
If headache, nausea, or vomiting occur, please seek medical advice.
If body skin is burned through contact with melted material; run cool water over the burned skin, but do not remove any material from the skin. If skin burn grade 2 or 3 is reached, immediately seek medical assistance.

5. Firefighting measures Fire extinguishing mediums include: water spray, extinguishing foam, and CO₂-extinguisher.
Use respirator/oxygen masks in enclosed areas.
Avoid dense smoke and do not inhale the smoke gasses from combustion.
Use safety glasses and protect skin/body with protective clothing against melting of ThermaSmart PRO.

6. Accidental release measures Not applicable

7. Handling and storage

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

7.2 Storage Practice reasonable care and cleanliness; provide adequate distance between stacks as a safety precaution. Do not expose to any source of ignition, flames, or heat. Storage is recommended indoors due to heat sensitivity and avoidance of UV exposure.

8. Exposure controls / personal protection

8.1 Breathing precautions

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

8.2 Hand protection

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

8.3 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.

8.4 Body protection

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

9. Physical and chemical properties

Appearance:
Semi rigid closed cell polyolefin TPE foam, available in a wide variety of types.

Odor:
Odorless

Softening range:
>70°C

Auto flammability
>300°C

Thermal decomposition:
>160°C

Explosive properties:
None

Apparent density:
30-35 kg/m³

Solubility:
Water – insoluble
Organic solvent – insoluble, partly soluble, swelling (depending on solvent type)

10. Stability and reactivity

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

11. Toxicological information

Toxicologically harmless.
Polyolefin foams are among the most inert polymer foams and constitute of no hazards with regards to standard handling and skin contact.

12. Ecological information

Environmentally harmless:

- Insoluble in water; no contamination
- Insoluble in most solvents
- Degradable only by UV light (Stabilizers added)
- ThermaSmart PRO sheet and tubes are produced (H)CFC free

13. Recycling & Disposal considerations

Recycling:

ThermaSmart PRO sheet and tubes are 100% recyclable. Thermaflex reclaims all assembly and end-of-life insulation waste to be recycled back into the manufacturing process while maintaining optimal material quality.

Disposal:

When disposing any waste, adhere to all applicable national and local regulations.

14. Transport information

No restrictions or dangerous material risks in relation to transportation regulations according to ADR/RID, IMO and IATA regulations.

15. Other information

For additional product information contact Thermaflex Isolatie B.V.