

SAFETY DATA SHEET

(EG-Guideline 91/155)

1) PRODUCT AND MANUFACTURER IDENTIFICATION

- 1.1. Trade name: **THERMOFILM**
1.2. Composition: Blend LDPE-LLDPE (CAS Nr. 9002-88-4)
Gross formula (CH₂-CH₂)

2) POSSIBLE DANGERS

According to EG standards this product is not dangerous; there are no special dangers neither for human beings nor for the environment; this does not only apply to storage but also to processing of the product as solid substance in granulate or as final product.

3) FIRST AID MEASURES

- 3.1. When inhaling: There are no negative effects known.
3.2. Skin contact: In case of melting substance rinse or wash immediately with sufficient water, do not try to remove the melting substance or solidified substance from the skin. Consult doctor immediately.
3.3 With eye contact: Immediately rinse with water for at least five minutes.
Mechanical irritations only.
3.4. When swallowing by accident: This is unlikely, as it is a foil.

4) FIRE PROTECTION

- 4.1. Dangerous combustion gases: Dense smoke arises in case of combustion without sufficient oxygen. This smoke may contain different compositions of combustion gases in connection with carbon dioxide or carbon monoxide.
4.2. Recommended extinguishing agents: Water, carbon dioxide, chemical extinguishing agents, synthetic foam.
4.3. Recommended preservatives: Protection clothing, fresh air respirator with positive pressure.
4.4. Specific fire protection measures: Wet with water completely until cooling down and avoid re-inflammation.

5) MEASURES IN CASE OF ACCIDENTAL EMISSION

If possible collect or dispose of in accordance with legal regulations.

6) PROCESSING AND STORAGE

- Processing: Generally good ventilation should mainly be sufficient.
Avoid contact with the hot fabric during thermowelding and/or retraction. Wear common working clothes.
Storage: Store **THERMOFILM** in a cool and dry place without direct insolation.
Store **THERMOFILM** in places where there is no danger of fire and

where no static loads may be produced.
Furthermore, these places must be equipped with safe electrical equipment. It is important to assure sufficient ventilation in order to control possible dust formation which is however most unlikely in specific cases when considering the type of product (foil).

7) LOAD CONTROL – PERSONAL PROTECTION

- 7.1. Technical devices: Good ventilation should be sufficient for most of the working processes such as e.g. thermowelding and/or retraction so that people are exposed to vapours as shortly as possible.
- 7.2. Personal protection:
- 7.2.1. Protection of the respiratory system:
As this product is a foil, there is no risk of inhalation.
- 7.2.2. Skin protection:
As the material is relatively inert it can be assumed that there is no risk of particular irritations if repeated skin contact occurs; therefore it is not necessary to take any further precaution except for wearing clean clothes which cover the body.
- 7.2.3. Eye and face protection:
No particular protective measures have been provided; in case of special processes where irritations occasionally occur, wear safety goggles.

8) CHEMICAL AND PHYSICAL PROPERTIES:

- 8.1. Appearance:
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| Physical appearance: | solid, granulate; |
| Form, colour: | foil; |
| Odour: | none or little due to the paraffins. |
- 8.2. Essential data to ensure safe processing:
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|--------------------------------|---------------------|
| - Melting point/Melting range: | 90°-120°C; |
| - Ignition point: | > 350°C; |
| - Decomposition temperature: | > 300°C; |
| - Auto-ignition point: | > 400°C; |
| - Explosion hazard: | none; |
| - Water solubility: | not soluble; |
| - Vapour pressure: | vapour impermeable; |
| - Specific weight: | 0.918-0.923; |
| - Inflammability: | not inflammable; |

9) RESISTANCE AND REACTIVITY

- 9.1. Chemical resistance: > 300°C
Stable at normal processing and storage conditions.
- 9.2. Avoidable conditions: Avoid too high temperatures. See decomposition temperature (8.2.). If **THERMOFILM** is processed at high temperatures, the material might reach vapour levels which cause irritations of the eyes and respiratory tracts.
- 9.3. Dangerous products from decomposition: The smoke being produced during the processes may contain traces of carbon hydroxide.

10) TOXICOLOGICAL INFORMATION

- Consumption: One single dose is hardly hazardous. Swallowing may lead to occlusion. It is considered as physiologically inert.
- Skin irritation: When considering the physical properties, it is very unlikely that **THERMOFILM** penetrates into the skin; therefore there is generally no risk of irritation.
- Contact with eyes: Due to mechanical effects traces of dust or the solid product may cause irritations or damage of the cornea.
- Inhalation: Due to its physical properties this is rather unlikely at ambient temperature; higher temperatures may reach vapour values causing irritations or having other effects.

11) EFFECT ON THE ENVIRONMENT

This product should be no problem for waters as it is hardly soluble. It is hardly degradable in the ground.

12) DISPOSAL

Polyethylene conversion or recycling. Those products which are clean and not polluted may be taken over by recycling companies. The waste products may be disposed of at authorised landfills or by proper combustion.

13) TRANSPORT REGULATIONS

For this product there are no special transport regulations to be observed.

14) REFERENCE REGULATION

Classification: EU-Guideline 90/128/EWG
Ministerial decree 21/3/73 including subsequent alterations applies to Italy.

15) LABELLING

The data and information indicated on this safety data sheet comply with the Ministry of Health's Ministerial Decree from 28 January 1992 and the current law concerning classification, packaging, and labelling of hazardous materials and substances. The user is at any rate required to check and observe any national, regional, and local regulations in regard to hazardous activities as well as environmental protection (e.g. liquid, solid, and gaseous emissions).

16) OTHER INFORMATION

This safety data sheet contains technical and scientific information which have been worked out to the best of our knowledge. However we recommend at any rate to verify

any national and regional regulations for the respective branch, too, as well as the applicable hygiene regulations, occupational health and accident prevention and environmental protection regulations.

The information included herein is correct and has been worked out to the best of our knowledge. It does however not include any obligation, guarantee, and freedom of use of property rights or licences. The characteristics mentioned in these documents do not make up any contractual conditions.

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