

Safety Data Sheet

1. IDENTIFICATION OF THE PREPARATION AND OF THE COMPANY / UNDERTAKING

1.1. Identification of the preparation

Chemical name : Polyethylene homopolymer

Designation or trade name :

POLYETHYLENE MATERIAL LISKI – TYPE 008, 002, 0030, 051, 070, 001, 004

1.2. Use of the preparation

Production of various plastic final applications.

1.3. Identification of the company / undertaking

Responsible for placing on the EU market:

LISKI SRL

VIA VENETO 8

I-24041 BREMBATE (BG)

TEL: +39 035 4826195

E-mail address of the competent person responsible for the SDS:

info@liski.it

2. HAZARDS IDENTIFICATION

- Classification

The preparation is not classified as dangerous according to Directive 1999/45/EC and subsequent amendments.

- Critical hazards to man

The preparation is not hazardous in the form in which it is placed on the market and under the normal and recommended conditions of storage and use. The preparation is not dangerous according to the criteria set by the European Union. See also sections 4 and 11.

- Critical hazards to the environment

The preparation is stable under normal conditions of storage and use. It is not hazardous to the environment in its normal state.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Technical name : Low Density Polyethylene, LDPE

CAS Number : 9002-88-4 (Homopolymer)

Symbol of the basic polymer : PE - LD
against standard ISO 1043-1

4. FIRST-AID MEASURES**- Symptoms, effects, indication for immediate action****• Inhalation**

Symptoms : (dust or gas/vapours released by heat) irritation of the respiratory organs.
Expected delayed effects : Not applicable.
First aid actions : move the affected person away from the contaminated area into fresh air; seek medical assistance.

• Contact with skin

Symptoms : dust can irritate skin. No effect expected by contact with the polymer at room temperature. Molten product causes burns.
Expected delayed effects : Not applicable.
First aid actions : wash with plenty of water. In case of contact with melted material, cool down with cold water and seek medical assistance. Do not remove the product that solidified on skin. Treat as a burn.

• Contact with eyes

Symptoms : (dust or gas/vapours released by heat) dust can redden eyes.
Expected delayed effects : Not applicable.
First aid actions : wash with plenty of water. If irritation persists, seek medical assistance.

• Ingestion

Symptoms : abdominal pain.
Expected delayed effects : Not applicable.
First aid actions : no specific measure requested in case of ingestion. If needed seek medical assistance.

- **Specific and immediate treatment means to be available at the workplace:** eye wash fountains.

5. FIRE-FIGHTING MEASURES

- Suitable extinguishing media:

Water, water spray, foam, dry chemicals, carbon dioxide.
Cool down the containers using water spray.

- **Extinguishing media which must not be used for safety reasons:** Not applicable.

- Special exposure hazards arising from preparation itself, combustion products, resulting gases:

The preparation is combustible.

The preparation, when involved in a fire, burns with a sooty flame and release fumes made up of water, carbon dioxide, carbon monoxide (when starved of oxygen) and other combustion products.

Overheating/pyrolysis evolves vapours made up of monomers, low molecular weight polymers and their oxidation products.

Powders have specific fire risks.

- Special protective equipment for fire-fighters:

Wear suitable protective clothing (helmet, goggles, fire resistant gloves, boots) and protect respiratory organs (self contained breathing apparatus).

6. ACCIDENTAL RELEASE MEASURES

- **Personal precautions:** Do not walk on granules to avoid slipping.

- **Environmental precautions:** Keep away from drains.

- **Methods for cleaning:** Collect mechanically. Reuse if possible or dispose of as required by national and local regulations (see section 13).

7. HANDLING AND STORAGE

7.1 – Handling

- Safety precautions

During the processing of the preparation, avoid inhalation of fumes or powders, by providing good ventilation of the workroom and, if necessary, they have to be trapped by intake in an effective manner.

Avoid dispersion of dust in air to reduce potential for ignition or explosion.

Powder formation by abrasion must be avoided during handling and transportation, especially when unloading; if such formation occurs, the powder must be eliminated immediately.

7.2 – Storage

- Safety conditions

Store out of direct sun, in well ventilated, cool and dry place.

Keep away from sources of ignition, heat and sparks and from flammable products.

In storage and working areas avoid pellets spilling as a possible cause of slipping.

Equipment must be earthed, to avoid static electric charges.

Preparations should be stored in a safe manner, to avoid danger from unstable or damaged packaging units (octabins/bags/boxes on pallet). In particular, stacking of packaged units can be dangerous to warehouse personnel.

7.3 – Specific uses

Recommendations: not applicable.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Exposure limit values

Occupational:

Threshold Limit Values ACGIH (Tab. 2007)(*):

		TWA	STEL	Notations	Critical effects
Particulate not otherwise classified (inhalable)	:	10 mg/m³	- - -	- - -	- - -

(*): Or statutory limit values in the country concerned.

- **Recommended monitoring procedures:** As required by the rules and regulations of each country.

8.2 Exposure control

- Occupational exposure control:

Traces of monomers and other volatile substances may be given off during processing, particularly at unusually high processing temperatures.

Work rooms must be provided with adequate ventilation and exhaust equipment to collect dust and gas/vapours that may be evolved during the conversion.

- Equipment to provide adequate and personal protection:

Respiratory protection: In normal conditions masks with antidust filters should be available for use when requested.

Hand protection: chemical substance resistant gloves. Breakthrough time of the glove material: see producer's data.

Eye protection: not necessary when no powders or vapours are present. Where present, wear suitable protective glasses.

Skin protection: standard work clothes.

9. PHYSICAL AND CHEMICAL PROPERTIES

- | | |
|--|-------------------------------|
| - Appearance (physical state at 23 °C) | : solid (pellets or powder) |
| - Density | : 910 - 940 kg/m ³ |
| - Bulk density | : 450 - 600 kg/m ³ |
| - Melting range | : 100 - 125 °C |
| - Solubility in water | : insoluble |
| - Heat of combustion | : ca. 44 MJ/kg |
| - Autoignition temperature | : ca. 340 °C |

10. STABILITY AND REACTIVITY

The preparation is stable and inert in the recommended storage and handling conditions (see section 7).

- Conditions / Materials to avoid:

Exposure to sunlight and/or heat. Accumulation of electrostatic charges. Oxidising substances.

- Hazardous decomposition products: See section 5.

Prolonged exposure to temperatures above 250 °C may cause resin degradation.

11. TOXICOLOGICAL INFORMATION

Specific information on the preparation is not available in the literature. Residual monomers may be present in the product at trace levels, hindered in the polymer matrix and therefore not available in normal conditions.

- Dangerous effects from exposure to the preparation:

The possible dusts may cause irritation to the eyes and/or respiratory organs.

Avoid exposure to fumes, eventually developed during the process, by suitable exhaust system and / or efficient ventilation of the working places.

The preparation does not present any intrinsic health hazard when processed according to correct working procedures.

- Delayed and immediate effects from short and long term exposure:

Carcinogenicity, mutagenicity, reproductive toxicity: no evidence of these effects has been reported for the preparation.

12. ECOLOGICAL INFORMATION

- Ecotoxicity

The preparation is essentially a high molecular weight polymer, not regarded as ecotoxic.

- Mobility

Use according to good working practice, and avoid releasing the product into the environment.

- Persistence and degradability

The preparation is not a biodegradable polymer.

13. DISPOSAL CONSIDERATIONS

- Description and handling of residues: The same safety consideration apply to scraps/waste as apply to the preparation.

- Appropriate methods of disposal of preparation: Residues should be disposed of as required by national and local regulations.

- **Incineration**

Must be done under approved conditions, possibly with energy recovery and only at suitable facilities equipped with a scrubber for the treatment of fumes before their release into the atmosphere.

- **Recycling**

After suitable treatment (cleaning, grinding, etc.), the preparation can be safely re-used, as is or mixed with fresh material, when this is compatible with the intended final application.

- **Landfilling**

Should be avoided as far as possible. If unavoidable, use approved landfill sites.

- National and Community provisions relating to waste: Directive 91/156/EEC of 18 March 1991 and subsequent amendments; Directive 91/689/EEC of 12 December 1991 and subsequent amendments; Directive 94/62/EC of 20 December 1994 and subsequent amendments.

14. TRANSPORT INFORMATION

The preparation is not classified as dangerous for transportation according to the following regulations: ADR/RID, IMO, IATA.

15. REGULATORY INFORMATION

Information on classification and labelling:

The preparation is not dangerous according to the Directive 1999/45/EC. Label not required.

16. OTHER INFORMATION

This safety data sheet has been drawn up according to the requirements of Regulation 1907/2006/EC.

Data and information contained in this Safety Data Sheet are based on our available knowledge at the last revision date. No guarantee can be given as to the sufficiency of any safety measures contained in this Safety Data Sheet, nor can it be assumed that other or additional measures may not be required under particular or exceptional circumstances. The user must make sure of the fitness and completeness of the information, according to the specific use he wants to do.