

SAFETY DATA SHEET

SABIC® LLDPE

1. Identification of the substance/preparation and company/undertaking

Product name : SABIC® LLDPE
Chemical product name : Polyethylene (linear low density)
Synonyms : PE-LLD, LLDPE.
Supplier : SABIC Europe B.V.
P.O. Box 5151
6130 PD Sittard
The Netherlands
Emergency telephone number : **The Netherlands: +31 (0)46 476 55 55**
Recommended use : Packaging materials

2. Composition/information on ingredients

Substance/preparation : Preparation

Within the present knowledge of the supplier, this product does not contain any hazardous ingredients in quantities requiring reporting in this section, in accordance with EU or national regulations.

Chemical name	CAS no.	%	EC no. *	Classification
1-hexene, polymer with ethene	25213-02-9	100		Not classified.
1-butene, polymer with ethene	25087-34-7	100		Not classified.
See section 16 for the full text of the R-phrases declared above				

* EC no. means EINECS or ELINCS number.

3. Hazards identification

Human health hazards : Dust may cause mechanical irritation. Heated material can cause thermal burns.
Environmental hazards : Based on the available data of this product no hazardous properties are known.
Physical/chemical hazards : Combustible.

4. First-aid measures

Effects and symptoms

Inhalation : Over-exposure by inhalation may cause respiratory irritation. (coughing)
Ingestion : There is no known acute effect after over-exposure to this product.
Skin contact : Heated material can cause thermal burns resulting in pain, redness, blistering.
Eye contact : May cause eye irritation. (redness).

First-aid measures

General : Move exposed person to fresh air.
Inhalation : If inhaled, remove to fresh air. Obtain medical attention if symptoms occur.
Ingestion : If swallowed, rinse mouth with water (only if the person is conscious). Obtain medical attention if symptoms occur.
Skin contact : Rinse with plenty of running water. Get medical attention.
Eye contact : Rinse with plenty of running water. Obtain medical attention if symptoms occur.

First aid facilities : No special recommendations.

5. Fire-fighting measures

Extinguishing media

Small fire

Suitable : Use dry chemical or CO₂.

Large fire

Suitable : Use dry chemical powder. alcohol-resistant foam

Unusual fire/explosion hazards	: No specific hazard.
Hazardous thermal decomposition products	: In case of fire, may produce hazardous decomposition products such as carbon monoxide, carbon dioxide, (dense) black smoke, aldehydes, Organic acids.
Special fire-fighting procedures	: Fight fire from protected location or maximum possible distance. Keep the area surrounding the fire cool. Avoid contact with heated material.
Protection of fire-fighters	: Wear suitable protective clothing. Self-contained breathing apparatus.
Remarks	: The material burns slowly with high smoke density and flaming drips. Fine powder forms flammable and explosive mixtures in air. Use water spray to keep fire-exposed containers cool.

6. Accidental release measures

Personal precautions	: Avoid creating dusty conditions and prevent wind dispersal. Use suitable protective equipment (section 8). Keep away from sources of ignition. Take precautionary measures against static discharges. Use explosion-proof electrical (ventilating, lighting and material handling) equipment.
Environmental precautions	: No special measures required.
Clean-up Methods	
Small spill and leak	: Vacuum or sweep up material and place in a designated labelled waste container. Clean up affected area with a large amount of water.
Large spill and leak	: Use explosion-proof electrical (ventilating, lighting and material handling) equipment.

Note: see section 8 for personal protective equipment and section 13 for waste disposal.

7. Handling and storage

Handling	: Use with adequate ventilation. Local exhaust ventilation should be provided. Avoid creating dusty conditions and prevent wind dispersal. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Take measures against static discharge. Keep away from sources of ignition.
Storage	: Store in a fireproof location. Keep away from incompatible materials and avoid specific conditions (See section 10). Containers should be grounded. Take precautionary measures against electrostatic discharges. Do not stack more than 2 pallets high in connection with risk of falling over. Do not stack pallets with grades containing slip or Anti-Block (AB) additives. Protect from (sun)light. Keep in a dry place.
Storage temperature	: Do not store above 80 °C.
Remarks	: Precautions should be taken to prevent the formation of dusts in concentrations above flammable, explosive or occupational exposure limits. Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame).

Note: See section 10 for stability and reactivity

8. Exposure controls/personal protection

Engineering measures	: Use only with adequate ventilation. Local exhaust ventilation should be provided. Use explosion-proof electrical (ventilating, lighting and material handling) equipment.
Hygiene measures	: When using do not eat, drink or smoke. Wash hands after handling compounds and before eating, smoking, using lavatory, and at the end of day.
Personal protective equipment - Production scale	
Respiratory system	: Wear dust protection mask P2.
Skin and body	: Working clothes.
Eyes	: Safety glasses with side shields.
Hands	: When handling hot material, wear heat-resistant protective gloves that are able to withstand the temperature of molten product.
Remarks	: A face shield must be worn in work involving spattering if a full mask is not required. In this case, other recommended use of eye protection is not required.

Advice on personal protection is applicable for high exposure levels. Select proper personal protection based on a risk assesment of the actual exposure situation.

9. Physical and chemical properties

Physical state	: Solid. (Granular solid. Powder.)
Colour	: Off-white.
Odour	: Sweetish.
Boiling point	: Decomposes. >300 °C
Melting point	: 115 to 132 °C
Flash point	: >345 °C
Lower explosion limit	: Not available.
Upper explosion limit	: Not available.
Auto-ignition temperature	: > 330 °C
Density (g/cm ³)	: 0.91 to 0.95 g/cm ³
Bulk density	: 300 to 650 kg/m ³
Solubility	: Insoluble in cold water
Minimum ignition temperature	: 400 °C

10. Stability and reactivity

Stability	: Stable under recommended storage and handling conditions (see section 7).
Conditions to avoid	: Keep away from heat, sparks and flame. Exposure to (sun)light. Prevent formation of dust clouds. Take measures against static discharge.
Materials to avoid	: oxidising agents
Hazardous decomposition products	: Highly dependent on temperature and environmental conditions, a variety of decomposition products may be formed, such as low molecular weight hydrocarbons and hydrocarbon oxidation products (acids, ketons, aldehydes).
Remarks	: At processing temperatures some degree of thermal degradation may occur.

11. Toxicological information

Acute toxicity

Ingredient name	Test	Species	Route	Result
Polyethylene (linear low density)	LD ₅₀	Rat	Oral	>5000 mg/kg

Chronic toxicity

Remarks	: During heating and processing of the material small amounts of free monomer may evaporate resulting in airborne concentration that may cause irritating effects of the respiratory tract and nausea.
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Note: See section 4 for effects and symptoms

In this heading, only relevant information is presented.

12. Ecological information

Ecotoxicity data	: Not available.
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Ingredient name	Aquatic half-life	Photolysis	Biodegradability
Polyethylene (linear low density)	-	-	Not readily

Mobility	: For data on physical state and solubility see section 9.
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In this heading, only relevant information is presented.

13. Disposal considerations

Methods of disposal (waste of residues; contaminated packaging) : Waste must be disposed of in accordance with national and local environmental regulations.

14. Transport information

General information

Not established

15. Regulatory information

EU regulations

Risk phrases : This product is not classified according to the EU regulations.

16. Other information

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None of the materials referenced herein should be used and/or applied in any product, device or material used or for use as human body implant or otherwise within the human body.

Training advice : Before handling this substance/preparation, the personnel involved should be instructed by means of this safety data sheet.

Sources of key data : Literature data and/or investigation reports are available at the manufacturer.

Alterations compared to the previous version : Alterations compared to the previous version are marked with a little (blue) triangle.