



Safety Data Sheet / MSDS

Product: Low Density Polyethylene

Abbreviation: LDPE

CAS No.: 9002-88-4

Revision date: 17 June 2026

1. Identification

Product identifier: Low Density Polyethylene / LDPE

Recommended use: Industrial plastic raw material for film, packaging, extrusion coating, molding, bags, sheets, liners, caps, closures.

Supplier: Basekim — use company address/phone from purchase documents.

Emergency phone: Add local emergency contact.

2. Hazard Identification

GHS classification: Not classified as hazardous under normal handling as solid pellets/granules.

Label elements: No pictogram required.

Signal word: Not required.

Hazards not otherwise classified:

Pellets may cause slipping. Dust may irritate eyes/respiratory tract and may form combustible dust clouds. Molten polymer can cause thermal burns. Overheating may release irritating fumes.

3. Composition / Information on Ingredients

Component	CAS No.	Concentration
Polyethylene, low density	9002-88-4	95–100%

May contain minor additives such as antioxidants, stabilizers, slip agents, or processing aids depending on grade.

4. First Aid Measures

Inhalation: Move person to fresh air if fumes or dust are inhaled. Get medical attention if symptoms continue.

Skin contact: Wash with soap and water. For molten material, cool affected area with clean water. Do not pull solidified polymer from skin. Get medical attention.

Eye contact: Rinse carefully with water for several minutes. Remove contact lenses if easy.



Ingestion: Rinse mouth. Do not induce vomiting. Get medical attention if discomfort occurs.
Most important symptoms: Irritation from dust/fumes; thermal burns from molten polymer.

5. Fire-Fighting Measures

Suitable extinguishing media: Water spray, foam, dry chemical, carbon dioxide.

Unsuitable media: Strong direct water jet may spread molten material.

Specific hazards: Product can burn in fire. Combustion may produce carbon monoxide, carbon dioxide, smoke, hydrocarbons, aldehydes, and other irritating decomposition products.

Firefighter protection: Wear self-contained breathing apparatus and full protective gear.

6. Accidental Release Measures

Personal precautions: Avoid slipping on spilled pellets. Avoid dust generation.

Environmental precautions: Prevent pellets from entering drains, waterways, and soil.

Cleanup methods: Sweep, vacuum, or shovel into suitable containers for reuse or disposal.

7. Handling and Storage

Handling: Avoid dust generation. Avoid contact with molten material. Use good ventilation during thermal processing. Ground equipment where static may build up.

Storage: Store in a cool, dry, well-ventilated area away from heat, flame, oxidizers, and direct sunlight. Keep bags/containers closed.

8. Exposure Controls / Personal Protection

Occupational exposure limits: No specific limit established for LDPE polymer. Follow nuisance/particulate dust limits where applicable.

Engineering controls: Use local exhaust ventilation during melting, extrusion, cutting, grinding, or dusty operations.

Eye protection: Safety glasses or goggles.

Hand protection: Work gloves; heat-resistant gloves for hot or molten material.

Respiratory protection: Dust mask or approved respirator if dust/fumes exceed workplace limits.

Body protection: Standard industrial work clothing.

9. Physical and Chemical Properties

Appearance: White/translucent pellets or granules

Odor: Odorless or slight waxy odor

Physical state: Solid

Melting range: Approximately 105–115°C

Density: Approx. 0.918–0.930 g/cm³ depending on grade



Solubility in water: Insoluble
Flash point: Not applicable as solid polymer
Auto-ignition temperature: Not readily available
Decomposition temperature: May decompose if overheated
pH: Not applicable
Vapor pressure: Negligible

10. Stability and Reactivity

Reactivity: Stable under normal conditions.
Chemical stability: Stable.
Hazardous reactions: None expected under normal use.
Conditions to avoid: Excessive heat, flames, sparks, static discharge, overheating during processing.
Incompatible materials: Strong oxidizing agents.
Hazardous decomposition products: Carbon monoxide, carbon dioxide, smoke, hydrocarbons, aldehydes, irritating fumes.

11. Toxicological Information

Likely routes of exposure: Inhalation of dust/fumes, eye contact, skin contact.
Acute toxicity: Low toxicity expected for solid polymer.
Skin irritation: Not expected under normal conditions; molten material causes burns.
Eye irritation: Dust may cause mechanical irritation.
Respiratory effects: Dust or processing fumes may irritate respiratory tract.
Carcinogenicity: Not expected to be carcinogenic as supplied.

12. Ecological Information

Ecotoxicity: Not expected to be acutely toxic, but pellets may harm wildlife if released.
Persistence/degradability: Persistent polymer; not readily biodegradable.
Bioaccumulation: Not expected.
Mobility in soil: Low; solid, insoluble material.
Other adverse effects: Prevent plastic pellet release into the environment.

13. Disposal Considerations

Reuse or recycle where possible. Dispose of waste according to local, regional, and national regulations. Do not discharge pellets into drains or waterways.

14. Transport Information

UN number: Not regulated
Proper shipping name: Not regulated



Transport hazard class: Not regulated

Packing group: Not regulated

Marine pollutant: Not classified

Special precautions: Prevent bag damage and pellet spillage.

15. Regulatory Information

LDPE is generally not classified as hazardous in solid pellet form. Regulations may vary by country and grade additives. User must confirm compliance with local REACH, CLP, GHS, OSHA, TSCA, or other applicable rules.

16. Other Information

Prepared for: General LDPE product page reference

Disclaimer: This draft is for informational use only. For import, customs, workplace compliance, or customer submission, request the official SDS from Basekim or the actual manufacturer for the exact LDPE grade.