

Last revised date : 2023-12-07  
MSDS No. :

## Safety Data Sheet(SDS)

### 1. Identification of the substance/mixture and of the company/undertaking

- 1) Product identifier : LDPE(LB7000)
- 2) Relevant identified uses of the substance or mixture and uses advised against
  - Relevant identified uses  
29.Polymer preparations and compounds
  - Uses advised against  
Any use of the product other than for its identified uses is prohibited.
- 3) Supplier information
  - Company name [Manufacture]  
Company : LG Chem, Ltd.  
Address : 55, Yeosusandan 2-ro, Yeosu-si, Jeollanam-do, Republic of Korea  
Emergency number : +82-2-3773-1114 (08:30~18:00, KST)

### 2. HAZARD IDENTIFICATION

- 1) Hazard classification
  - Not applicable
- 2) Allocation label elements
  - Hazard pictograms
  - Signal word
    - NONE
  - Hazard statements
    - No data available
  - Precautionary statements

No data available

### 3) Other hazards

- No data available

○ Product NFPA Level

Health	Flammability	Reactivity
1	1	0

( ※ 0 = Stable , 1 = Low , 2 = Medium , 3 = High , 4 = Very High)

## 3. Composition/Information on ingredients

Components	Common name	CAS No.	PCT(wt%)
Polyethylene	Polyethylene	9002-88-4	100

## 4. FIRST AID MEASURES

### 1) Following eye contact

- Get medical aid immediately.
- In case of contact with material, immediately flush eyes with running water for at least 15 minutes.

### 2) Following skin contact

- In case of burns, immediately cool the affected area with cold water for as long as possible, and do not remove clothing adhering to the skin.
- In case of contact with material, flush skin with running water

### 3) Following inhalation

- Administer oxygen if breathing is difficult.
- Give artificial respiration if victim is not breathing.
- If exposed to excessive amounts of dust or fumes, remove to fresh air and seek medical attention if cough or other symptoms develop.
- Move to fresh air.
- Seek immediate medial assistance.

### 4) Following ingestion

- Get medical aid immediately.
- If unconscious but breathing, never give anything by mouth.

### 5) Advice to physician

- Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

## 5. FIRE FIGHTING MEASURES

### 1) Suitable (and unsuitable) extinguishing media

- Suitable extinguishing media
  - Large fire: Water spray/fog, regular foam (Suitable extinguishing media).
  - Small fire: Dry sand, dry chemical, alcohol-resistant foam, water spray, regular foam, CO2 (Suitable extinguishing media).
- Unsuitable extinguishing media
  - High-pressure water (risk of fire spread).

### 2) Special hazards arising from the substance or mixture

- Pyrolytic product
  - In case of fire, carbon monoxide and/or carbon dioxide and other harmful substances may be formed.
  - During burning, irritating and highly toxic gases may be produced by thermal decomposition or combustion.
- Risk of fire and explosion
  - Containers may explode when heated.
  - Fire may produce irritating and/or toxic gases.
  - May ignited from heat, friction or contamination.
  - Possible explosion due to dust
  - Some may burn, but not rapidly.
- Other
  - May cause toxic effects if inhaled.

### 3) Special protective equipment for firefighters

- Contact may cause burns to skin and eyes.
- Dike fire-control water for later disposal; do not scatter the material.
- Fire involving Tanks: ALWAYS stay away from tanks engulfed in fire.
- Fire involving Tanks: Cool containers with flooding quantities of water until well after fire is out.
- Move containers from fire area if you can do it without risk.
- Only properly trained personnel should engage in firefighting.
- Runoff may cause pollution.

## 6. ACCIDENTAL RELEASE MEASURES

### 1) Health considerations and protective equipment

- Do not enter areas which have less than 18% oxygen in the atmosphere, without respirator or air supplied mask.
- Do not touch or go near exposed material.
- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).

- Please note that materials and conditions to be avoided.
- Prevent dust cloud.
- Risk of slipping in case of material spillage.
- Stop leak if you can do it without risk.
- Ventilate the contaminated area.

## 2) Environmental precautions

- Prevent entry into waterways, sewers, ground water, soil and confined spaces.

## 3) For cleaning up

- Cover powder spill with plastic sheet or tarp to minimize spreading and keep powder dry.
- Large spill: Collect and dispose of with appropriate tools.
- SMALL SPILL : Wash with plenty of water or Collect with appropriate tools, and placed in suitable containers for disposal.
- With clean shovel place material into clean, dry container and cover loosely; move containers from spill area.

# 7. HANDLING AND STORAGE

## 1) Precautions for safe handling

- Be careful as dust generation or friction may cause an explosion.
- CAUTION: High temperature.
- Caution: Dangerous fire hazard when exposed to heat, or flame, sparks.
- Check oxygen content before entering area.
- Handling refer to engineering control/personal protection section.
- Please note that materials and conditions to be avoided.
- Use adequate machine for prevention when package handling.
- Wash thoroughly after handling.
- Wear an appropriate Personal protection. (See Exposure Controls/Personal Protection section.)

## 2) Conditions for safe storage (including any incompatibilities)

- Choose a place that can be protected from strong oxidizers and acid.
- Please note that materials and conditions to be avoided.
- Store containers: AVOID the place where can be damage and contamination.
- Store in a closed container.
- Store in a cool/low-temperature, well-ventilated dry place away from heat and ignition sources
- Store in a dry place. Store in a closed container.

# 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

## 1) Chemical exposure limits, Biological exposure standard

Components	Occupational exposure limits	ACGIH	Biological standard
Polyethylene	TWA : Not applicable STEL : Not applicable	TWA : Not applicable STEL : Not applicable	Not applicable

\* The exposure standard for other dusts according to Ministry of Employment and Labor Notice No. 2020-48 is TWA: 10mg/m³.

## 2) Appropriate engineering controls

- Make sure you have the right exhaust and ventilation in the workplace.
- Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

## 3) Personal protection equipment

### ○ Respiratory protection

- If there is a direct contact or exposure, wear a certified appropriate respiratory protection.
- In case of insufficient oxygen (<19.6%), wear a supplied air mask or self-contained respirator.
- In the case of particulate matter, the following respiratory protection is recommended: - Facepiece filtering dust mask or air filtering dust mask (high-efficiency particulate filter material) or electric fan attached dust mask (filter material for dust, mist, fume)
- Wear breathing protection, which needs a confirmation from the Korea Occupational Safety and Health Agency.

### ○ Eye protection

- Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.
- Provide emergency showers and eyewash.
- Wear an appropriate eye protection.
- Wear suitable protective goggles and face shields.

### ○ Hand protection

- Wear Non-moisture permeable chemical resistance protective gloves(latex, nitrile rubber, PVC) for prevent skin contact.
- Wear protective gloves made of appropriate material considering the physical and chemical properties of chemicals.
- Wear suitable protective gloves.

### ○ Body protection

- Wear appropriate protective clothing considering the physical and chemical properties of chemicals.
- Wear suitable protective clothing.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	No data available
Physical state	solid
Colour	White or Milky White
Odour	Odorless
Odour threshold	No data available
pH	No data available
Melting point/freezing point	85 ~ 140 °C
Initial boiling point and boiling range	No data available

Flash point	341 °C
Evaporation rate	No data available
Flammability(solid, gas)	No data available
Upper/lower flammability or explosive limits	No data available
Vapour pressure	No data available
Solubility(ies)	Insolubility
Vapour density	No data available
Relative density	0.910~0.925
n-octanol/water partition coefficient	No data available
Auto ignition temperature	330-410 °C
Decomposition temperature	No data available
Viscosity	No data available
Molecular weight(mass)	(-CH <sub>2</sub> -CH <sub>2</sub> -)1,100~3,500 / 31,000-100,000g/mol

## 10. STABILITY AND REACTIVITY

- 1) Stability and hazardous reactivity
  - Fire may produce irritating and/or toxic gases.
  - Some may burn, but not rapidly.
  - Stable under normal temperatures and pressures.
- 2) Conditions to avoid
  - Ignition source(heat, spark, flame, etc.).
- 3) Incompatible materials
  - Combustibles.
  - Irritating and/or toxic gas.
- 4) Hazardous decomposition products
  - No data available

## 11. TOXICOLOGICAL INFORMATION

- 1) Exposure route information
  - Inhalation
    - After inhalation: No data
  - Skin Contact
    - Following skin contact: No data
  - Eye Contact

- After eye contact: No data

- Ingestion

- After ingestion: No data

## 2) Health hazard information

- Acute toxicity

- Acute toxicity(Oral)

- LD50> 8000 mg / kg experimental species: Rat, Source: RTECS

- Acute toxicity(Dermal)

- No data available

- Acute toxicity(Inhalation:Gases)

- No data available

- Acute toxicity(Inhalation:Vapours)

- No data available

- Acute toxicity(Inhalation:Dust/mist)

- No data available

- Skin corrosion/irritation

- No data available

- Serious eye damage/eye irritation

- No data available

- Respiratory sensitization

- No data available

- Skin sensitization

- No data available

- Carcinogenicity

- 3 (IARC), Source: IARC

- Germ cell mutagenicity

- No data available

- Reproductive toxicity

- No data available

- Specific target organ toxicity single exposure

- No data available

- Specific target organ toxicity repeated exposure

- No data available

- Aspiration hazard

No data available

## 12. ECOLOGICAL INFORMATION

### 1) Aquatic toxicity

- Fish

No data available

- Crustacea

No data available

- Aquatic Algae

No data available

### 2) Persistence and degradation

- n-octanol water partition coefficient

No data available

- Degradation

No data available

- Biodegradation

No data available

### 3) Bioaccumulative potential

No data available

### 4) Mobility in soil

No data available

### 5) Other adverse effects

No data available

## 13. DISPOSAL CONSIDERATIONS

### 1) Disposal methods

- Recyclables must be collected in portable bins and disposed of legally according to national regulations.

### 2) Precautions (including disposal of contaminated container of package)

- Avoid direct spillage to rivers, lakes, soil and drains.
- Discuss it according to waste regulation.
- Empty containers may explode and residues can be ignited when pressured, cut, weld, heated.
- Empty containers may rupture when pressured.



- Empty containers recycled under environmental laws.
- Use a certified waste disposal company.
- Wear an appropriate Personal protection. (See Exposure Controls/Personal Protection section.)

#### 14. TRANSPORT INFORMATION

- 1) UN No. : Not applicable
  - 2) Proper shipping name : Not applicable
  - 3) Class or division : Not applicable
  - 4) Packing group : Not applicable
  - 5) Marine pollutant : Not applicable
  - 6) Special safety response for transportation or transportation measure :
    - Emergency measures in case of fire : Not applicable
    - Emergency measures in the effluent : Not applicable
- ADR
    - Tunnel restriction code : Not applicable
  - IMDG
    - Marine pollutant : Not applicable
  - Air transport(IATA)
    - UN No. : Not applicable
    - Proper shipping name : Not applicable
    - Class or division : Not applicable
    - Packing group : Not applicable

#### 15. REGULATORY INFORMATION

- 1) Occupational Safety and Health Act in Korea
  - Not applicable
- 2) Toxic Chemical Control Act in Korea
  - Not applicable
- 3) Safety Control of Dangerous Substances Act in Korea
  - Not applicable
- 4) Wastes Control Act in Korea

Ordinary Industrial Waste

-In case of disposal, it must be disposed of in accordance with Article 13 of the Waste Management Act.

5) Other regulations in KOREA and Abroad regulations

- ETC regulation
  - Not applicable
  - Not applicable
- Act on the registration and evaluation of chemicals  
Existing Commercial Chemical Substances

## 16. OTHER INFORMATION

1) Reference

- HSDB
- ICSC
- Kochetkova, 1971
- Ministry of Employment and Labor
- Ministry of Environment
- RTECS

2) Print date : 2022-06-23

3) Revision date

- Revised date count : 2
- Last revised date : 2023-12-07
- Last revised history :

4) Other