

Last revised date : 2022-07-14

PCN No. :

## Safety Data Sheet(SDS)

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

- 1) Product identifier : HDPE BE0400 PELLET HALF-FINISHED
- 2) Relevant identified uses of the substance or mixture and uses advised against
  - Relevant identified uses
    - 48.Others (Raw Material of Polyethylene Goods)
  - Uses advised against
- 3) Supplier information
  - Company name [Manufacture]
    - Company : LG Chem, Ltd.
    - Address : 58, Yeosusandan 4-ro, Yeosu-si, Jeollanam-do, Republic of Korea
    - Emergency number : 061-689-3470

### 2. HAZARD IDENTIFICATION

- 1) Hazard classification
  - No data available
- 2) Allocation label elements
  - Hazard pictograms
  - Signal word
    - NONE
  - Hazard statements
    - No data available

## Precautionary statements

No data available

### 3) Other hazards

#### ○ Product NFPA Level

Health	Flammability	Reactivity
2	1	0

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

## 3. Composition/Information on ingredients

Components	EU REACH No.	CAS No.	PCT(wt%)
Polyethylene		9002-88-4	>99
secret			0~1

## 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

- Get medical aid immediately.
- In case of contact with material, immediately flush skin with running water for at least 15 minutes.
- Launder contaminated clothing and shoes before re-use.
- Remove and isolate contaminated clothing and shoes.

### 3) Following inhalation

- Administer oxygen if breathing is difficult.
- Give artificial respiration if victim is not breathing.
- Move to fresh air.
- Seek immediate medical assistance.

### 4) Following ingestion

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

### 5) Advice to physician

- Do not apply drugs of the adrenaline ephedrine group.

- 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 (Unsuitable extinguishing media).

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

- Pyrolytic product
  - No data available
- 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.
  - Some may burn but none ignite readily.
- Other
  - May cause toxic effects if inhaled.

### 3) Special protective equipment for firefighters

- 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.
- Fire involving Tanks: Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- Move containers from fire area if you can do it without risk.
- Runoff may cause pollution.
- Substance may be transported hot.

## 6. ACCIDENTAL RELEASE MEASURES

1) Health considerations and protective equipment

- Do not touch or walk through spilled 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.
- Stop leak if you can do it without risk.
- Ventilate the contaminated area.

2) Environmental precautions

- Prevent entry into waterways, sewers, basements or confined areas.

3) For cleaning up

- Cover powder spill with plastic sheet or tarp to minimize spreading and keep powder dry.
- Small Spill: Flush area with flooding quantities of water.
- 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

- CAUTION: High temperature.
- Caution: Dangerous fire hazard when exposed to heat, or flame, sparks.
- 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.
- Drum Handling: Must work at safe place., Loading more than 3 stack is prohibited.
- Store containers: AVOID the place where can be damage and contamination.
- Store in a cool/low-temperature, well-ventilated {dry} place {away from heat and ignition sources}

## 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
secret	TWA : Not applicable STEL : Not applicable	TWA : Not applicable STEL : Not applicable	Not applicable

## 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.
- Eye protection
  - Provide emergency showers and eyewash.
  - Wear an appropriate security diameter.
- Hand protection
  - Wear safety gloves for chemicals.
- Body protection
  - Wear a protective gloves/protective clothes/security diameter/security surface/earplugs.
  - Wear suitable protective clothing.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Solid(Pellets)
Physical state	Solid
Colour	White
Odour	Oderless
Odour threshold	Not available
pH	No data available
Melting point/freezing point	50-150°C
Initial boiling point and boiling range	No data available
Flash point	400°C
Evaporation rate	Not available
Flammability(solid, gas)	>400°C(Ingition temperature)
Upper/lower flammability or explosive limits	30 g / m3 (lower explosive concentration with an average particle size of 61.6
Vapour pressure	Not available
Solubility(ies)	Insoluble
Vapour density	Not available
Relative density	0.9 -1.0
n-octanol/water partition coefficient	Insoluble

Auto ignition temperature	>300°C
Decomposition temperature	>250°C
Viscosity	No data available
Molecular weight(mass)	10,000 ~ 1,000,000

## 10. STABILITY AND REACTIVITY

- 1) Stability and hazardous reactivity
  - Containers may explode when heated.
  - Fire may produce irritating and/or toxic gases.
  - May cause toxic effects if inhaled.
  - Some may burn but none ignite readily.
  - 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
    - Not applicable
  - Skin Contact
    - Not applicable
  - Eye Contact
    - Not applicable
  - Ingestion
    - Not applicable
- 2) Health hazard information

- Acute toxicity
  - Acute toxicity(Oral) PRODUCT : Not classified
    - Polyethylene : LD50> 8000 mg / kg experimental species: Rat, Source: RTECS
    - secret : LD50> 10000 mg / kg experimental species: Rat
  - Acute toxicity(Dermal) PRODUCT : Not classified
    - Polyethylene : No data available
    - secret : No data available
  - Acute toxicity(Inhalation:Gases) PRODUCT : Not classified
    - Polyethylene : No data available
    - secret : No data available
  - Acute toxicity(Inhalation:Vapours) PRODUCT : Not classified
    - Polyethylene : No data available
    - secret : No data available
  - Acute toxicity(Inhalation:Dust/mist) PRODUCT : Not classified(ATEmix = 75.621mg/L)
    - Polyethylene : LC50 75.5 mg / l 30 min experimental species: Rat, Source: RTECS
    - secret : No data available
- Skin corrosion/irritation PRODUCT : Not classified
  - Polyethylene : No data available
  - secret : No data available
- Serious eye damage/eye irritation PRODUCT : Not classified
  - Polyethylene : No data available
  - secret : No data available
- Respiratory sensitization PRODUCT : Not classified
  - Polyethylene : No data available
  - secret : No data available
- Skin sensitization PRODUCT : Not classified
  - Polyethylene : No data available
  - secret : No data available
- Carcinogenicity PRODUCT : Not classified
  - Polyethylene : 2.44 (IARC), Source: IARC
  - secret : A4 Stearates (ACGHI), Source: ACGHI
- Germ cell mutagenicity PRODUCT : Not classified
  - Polyethylene : No data available
  - secret : No data available
- Reproductive toxicity PRODUCT : Not classified

- Polyethylene : No data available
- secret : No data available
- Specific target organ toxicity single exposure PRODUCT : Not classified
  - Polyethylene : No data available
  - secret : No data available
- Specific target organ toxicity repeated exposure PRODUCT : Not classified
  - Polyethylene : No data available
  - secret : No data available
- Aspiration hazard PRODUCT : Not classified
  - Polyethylene : No data available
  - secret : No data available

## 12. ECOLOGICAL INFORMATION

### 1) Aquatic toxicity

- Fish>PRODUCT : Not classified
  - Polyethylene : No data available
  - secret : LC50 0.00000000113 mg / ℓ 96 hr, Source: ECOSAR
- Crustacea>PRODUCT : Not classified
  - Polyethylene : No data available
  - secret : LC50 0.00000000284 mg / ℓ 48 hr Other (Daphnid), Source: ECOSAR
- Aquatic algae>PRODUCT : Not classified
  - Polyethylene : No data available
  - secret : EC50 0.00000000362 mg / ℓ 96 hr other (Green algae), Source: ECOSAR

### 2) Persistence and degradation

- n-octanol water partition coefficient>PRODUCT : Not classified
  - Polyethylene : No data available
  - secret : 14.34 log Kow ((estimated))
- Degradation>PRODUCT : Not classified
  - Polyethylene : No data available
  - secret : No data available
- Biodegradation>PRODUCT : Not classified
  - Polyethylene : No data available
  - secret : No data available

### 3) Bioaccumulative potential>PRODUCT : Not classified

- Polyethylene : No data available
- secret : 3.162, Source: QSAR

### 4) Mobility in soil>PRODUCT : Not classified

- Polyethylene : No data available



- secret : No data available

5) Other adverse effects>PRODUCT : Not classified

- Polyethylene : No data available

- secret : No data available

### 13. DISPOSAL CONSIDERATIONS

1) Disposal methods

- Every commercial waste producer shall either treat wastes generated from his/her place of business by him/herself or commission the treatment of such wastes to a person who has license for a waste treatment business under Article 26(3), a person who recycles of such wastes under Article 44(2), a person who has installed and operates a waste disposal facility under Article 4 or 5, a person who has completed the registration of a business of discharging wastes into the sea under Article 18 of the Marine Environment Management Act.

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

- Discuss it according to waste regulation.
- Do not allow spill material to enter sewers, storm water drains, soil, etc.
- 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

- Global Inventory - EU. European Inventory of Existing Commercial Chemical Substances (EINECS)

- secret

- ETC regulation - EU. Regulation 1005/2009/EC on substances that deplete the ozone layer, Annex I, Controlled Substances (L286, Vol. 52, 31 October 2009)

Not applicable

- ETC regulation - EU. Polluting Substances: Annex II, Directive 2010/75/EU on Industrial Emissions (IPPC), 17 December 2010

Not applicable

- ETC regulation - EU. Regulation 2019/1021/EU on persistent organic pollutants (POPs) (recast), 25 June 2019, as amended by Regulation 2021/277, 23 February 2021

Not applicable

- ETC regulation - EU. REACH, Annex XVII, Restrictions on manufacture, placing on the market and use of certain dangerous substances, 1907/2006/EC, as amended by Reg 2021/2030/EU, 22 Nov 2021

Not applicable

- ETC regulation - EU. GHS Classification. CLP Regulation (EC) No 1272/2008, Annex VI, Table 3, Harmonized List of Hazardous Substances, as amended by Regulation (EU) 2022/692, OJ L 129, 3 May 2022

Not applicable

- ETC regulation - EU. Regulation 1005/2009/EC on substances that deplete the ozone layer, Annex II, New Substances (L286, Vol. 52, 31 October 2009)

Not applicable

- ETC regulation - EU. REACH, Annex XIV, Substances Subject to Authorization (Authorization List), as amended through Regulation (EU) 2022/586, 11 April 2022

Not applicable

- ETC regulation - EU. Directive 2012/18/EU on major accident hazards involving dangerous substances, Annex I, OJ (L 197)1, 24 July 2012

Not applicable

- ETC regulation - EU. Chemicals & Articles Subject to Export Ban: Annex V (Art. 15), Regulation 649/2012/EU, as amended by Regulation 2022/643, OJ L 118, 20 April 2022

Not applicable

- ETC regulation - EU. F-Gases Subject to Emission Limits/Reporting (Annexes I, II), Regulation 517/2014/EU on FGGs, 20 May 2014

Not applicable

## 16. OTHER INFORMATION

### 1) Reference

- ECHA Registered substances
- ECHA registration data
- ECOSAR
- EU CLP
- IUCLID
- International Uniform Chemical Information Database(IUCLID)(<http://ecb.jrc.it/esis>)
- Kochetkova, 1971
- OECD Screening Information Data Set(<http://cs3-hq.oecd.org/scripts/hpv/>)
- QSAR
- Quantitative Structure Activity Relation(QSAR)
- RTECS
- SIDS

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- o Last revised history :

### 4) Other