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Last revised date : 2023-09-13

Safety Data Sheet(SDS)

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

1) Product identifier : HDPE ME8000J PELLET HALF-FINISHED

2) Relevant identified uses of the substance or mixture and uses advised against

○ Relevant identified uses

1.Raw material, Intermediates

○ 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 :

2. HAZARD IDENTIFICATION

1) Hazard classification

- Not applicable

2) Allocation label elements

Hazard pictograms

Signal word

- NONE

Hazard statements

Not applicable

Precautionary statements

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Not applicable

3) Other hazards

- No data available

○ Product NFPA Level

Health	Flammability	Reactivity
2		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	>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 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.

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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.
- Some liquids produce vapors that may cause dizziness or suffocation.

3) Special protective equipment for firefighters

- 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 enter areas which have more than 23.5% oxygen in the atmosphere, without respirator or air supplied mask.
- 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.
- 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: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.

- 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.
- Please note that materials and conditions to be avoided.
- 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 : mg/m3mg/m3 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.

- 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)

○ Eye protection

- Provide emergency showers and eyewash.
- Wear an appropriate eye protection.

○ Hand protection

- Wear protective gloves made of appropriate material considering the physical and chemical properties of chemicals.

○ Body protection

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

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Solid(Pellets)
Physical state	Solid
Colour	White
Odour	Oderless
Odour threshold	Not available
pH	Not applicable
Melting point/freezing point	50-150℃
Initial boiling point and boiling range	Not applicable
Flash point	Not applicable
Evaporation rate	Not available
Flammability(solid, gas)	>400℃(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℃
Decomposition temperature	>250℃
Viscosity	Not applicable

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 liquids produce vapors that may cause dizziness or suffocation.
- Some may burn, but not ignite easily.
- 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 Test species: Rat, Source: RTECS

- Secret : LD50 >10000 mg/kg Test species: Rat

• Acute toxicity(Dermal) PRODUCT : Not classified

- Polyethylene : No data available

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- 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 = 75.629mg/L)

- Polyethylene : LC50 75.5 ㎎/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 : 3 (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 > PRODUCT : Not classified

- Fish
  - Polyethylene : No data available
  - Secret : LC50 0.00000000113 mg/L 96 hr, Source: ECOSAR
- Crustacea
  - Polyethylene : No data available
  - Secret : LC50 0.00000000284 ㎎/ℓ 48 hr Other (Daphinid), Source: ECOSAR
- Aquatic algae
  - 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
  - Polyethylene : No data available
  - Secret : 14.34 log Kow ((estimate))
- Degradation
  - Polyethylene : No data available
  - Secret : No data available
- Biodegradation
  - Polyethylene : No data available
  - Secret : No data available

3) Bioaccumulative potential

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

4) Mobility in soil

- 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.
- 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

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● Hazardous Chemicals Act - China. List of Dangerous Goods

Not applicable

● Hazardous Chemicals Act - China. Inventory of Existing Chemical Substances (IECSC)

- Polyethylene

- Secret

● ETC regulation - China. National Catalogue of Hazardous Waste (Joint Decree of Ministry of Environmental Protection and Natl. Development & Refor

Not applicable

● ETC regulation - China. SAWS GHS classification list (mandatory) (SAWS No. 2015-80, August 19, 2015)

Not applicable

16. OTHER INFORMATION

1) Reference

- China National Standard(GB30000)
- ECHA Registered substances
- ECHA 등록자료
- ECOSAR
- IUCLID
- International Uniform ChemicaL Information Database(IUCLID)(http://ecb.jrc.it/esis)
- OECD Screening Information Data Set(http://cs3-hq.oecd.org/scripts/hpv/)
- QSAR
- Quantitative Structure Activity Relation(QSAR)
- RTECS
- SIDS

2) Print date : 2023-09-13

3) Revision date

○ Revised date count : 0

○ Last revised date : 2023-09-13

○ Last revised history :

4) Other

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