

Last revised date : 2021 - 06 - 15

Safety Data Sheet(SDS)

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

1) Product identifier : HDPE CE2080 POWDER HALF - FINISHED

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

Relevant identified uses

48.Others/Polyethylene plastics - for industry as a raw material to produce goods

Uses advised against

Use for recommended use.

3) Supplier information

Manufacturer

Company : LG Chem

Address : 451, Sandanjungang - ro, Yeosu - si, Jeollanam - do, Republic of Korea/ 501, Sandanjungang - ro, Yeosu - si, Jeollanam - do, Republic of Korea/ 460, Sandanjungang - ro, Yeosu - si, Jeollanam - do, Republic of

Emergency number : +82 - 061 - 689 - 3470

2. HAZARD IDENTIFICATION

1) Hazard classification

- Specific target organ toxicity single exposure Category 3(Respiratory tract irritation)

2) Allocation label elements

Hazard pictograms



Signal word

- WARNING

Hazard statements

H335 May cause respiratory irritation

Precautionary statements

- Prevention

P233 Keep container tightly closed.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P271 Use only outdoors or in a wellventilated area.

- Response

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

- Storage

P403+P233 Store in a wellventilated place. Keep container tightly closed.

P405 Store locked up.

- Disposal

P501 Dispose of contents/container to ...

3) Other hazards

Product NFPA Level : Health = 1, Flamm ability = 1, Reactivity = 0

(0 = Insufficient , 1 = Slightly , 2 = ordinary , 3 = Highness , 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

- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Seek immediate medial assistance.

2) Following skin contact

- For minor skin contact, avoid spreading material on unaffected skin.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Remove and isolate contaminated clothing and shoes.
- Seek immediate medial assistance.

3) Following inhalation

- Administer oxygen if breathing is difficult.

- Give artificial respiration if victim is not breathing.
- If exposed to excessive levels of dusts or fumes, remove to fresh air and get medical attention if cough or other symptoms develop.
- Keep victim warm and quiet.
- Move to fresh air.

4) Following ingestion

- Seek immediate medical assistance.

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

- CO₂.
- Dry chemical.
- Use alcohol foam, carbon dioxide, or water spray when fighting fires involving this material.
- Use dry sand or earth to smother fire.
- Water spray.

Unsuitable extinguishing media

- Direct water.

3) Special protective equipment for firefighters

- Dike fire - control water for later disposal; do not scatter the material.
- Evacuate area and fight fire from a safe distance.
- 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: Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Fire involving Tanks: For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.
- 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.
- Substance may be transported in a molten form.

6. ACCIDENTAL RELEASE MEASURES

1) Health considerations and protective equipment

- Clean up spills immediately, observing precautions in Protective Equipment section.
- Cover with plastic sheet to prevent spreading.

- Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- 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.

2) Environmental precautions

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

3) For cleaning up

- Absorb or cover with dry earth, sand or other non - combustible material and transfer to containers.
- Absorb spill with inert material (e.g., dry sand or earth), then place in a chemical waste container.
- Absorb the liquid and scrub the area with detergent and water.

7. HANDLING AND STORAGE

1) Precautions for safe handling

- Avoid breathing vapors from heated material.
- Do not enter storage area unless adequately ventilated.
- Follow all MSDS/label precautions even after container is emptied because they may retain product residues.
- Handling refer to engineering control/personal protection section.
- Loosen closure cautiously before opening.
- Please note that materials and conditions to be avoided.
- Use care in handling/storage.
- Use only in a well - ventilated area.

2) Conditions for safe storage (including any incompatibilities)

- Empty drums should be completely drained, properly bunged, and promptly returned to a drum reconditioner, or properly disposed of.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

1) Chemical exposure limits, Biological exposure standard

Components	Occupational exposure	ACGIH	Biological standard
Polyethylene	Not applicable	Not applicable	Not applicable

2) Appropriate engineering controls

- If user operations generate dust, fume, or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

3) Personal protection equipment

Respiratory protection

- If high frequency of use or exposure, wear air respirator.
- Wear breathing protection, which needs a confirmation from the Korea Occupational Safety and Health Agency.

Eye protection

- Wear suitable protective goggles and face shields.

Hand protection

- Wear suitable protective gloves.

Body protection

- Wear suitable protective clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Solid(Powder)
Physical state	solid
Colour	White
Odour	Odorless
Odour threshold	Not available
pH	Not available
Melting point/freezing point	50 - 150
Initial boiling point and boiling range	No data available
Flash point	400
Evaporation rate	Not available
Flammability(solid, gas)	>400 (Ignition temperature)
Upper/lower flammability or explosive limits	30 g / m ³ (lower explosive concentration with an average particle size of 61.6 μm)
Vapour pressure	Not available
Solubility(ies)	Insoluble
Vapour density	Not available
Relative density	0.94~1.0
n - octanol/water partition coefficient	Insoluble
Auto ignition temperature	>300
Decomposition temperature	>250
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, corrosive and/or toxic gases.

- Non - combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes.
- Some may burn but none ignite readily.

2) Conditions to avoid

- Ignition source(heat, spark, flame, etc.).

3) Incompatible materials

- Combustibles, reducing material.

4) Hazardous decomposition products

- Corrosive/toxic fume.
- Irritating, corrosive and/or toxic gas.

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)

LC50 75.5 mg / 30 min experimental species: Rat, Source: RTECS

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 ()

Germ cell mutagenicity

No data available

Reproductive toxicity

No data available

Specific target organ toxicity single exposure

If breathing dust causes inflammation of the lungs in laboratory animals (rats)., Source:
Kochetkova, 1971

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

- 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)

- Do not allow spill material to enter sewers, storm water drains, soil, etc.

14. TRANSPORT INFORMATION

1) UN No. : No data available

2) Proper shipping name : No data available

3) Class or division : No data available

4) Packing group : No data available

5) Marine pollutant : No data available

6) Special safety response for transportation or transportation measure :

Emergency measures in case of fire : No data available

Emergency measures in the effluent : No data available

- ADR

- Tunnel restriction code : No data available

- IMDG

- Marine pollutant : No data available

- Air transport(IATA)

- UN No. : No data available
- Proper shipping name : No data available
- Class or division : No data available
- Packing group : No data available

15. REGULATORY INFORMATION

Hazardous Chemicals Act - China. List of Dangerous Goods

Not established

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

- Polyethylene

Other regulations - China. National Catalogue of Hazardous Waste (Joint Decree of Ministry of Environmental Protection and Natl. Development & Reform)

Not established

Other regulations - China. SAWS GHS classification list (mandatory) (SAWS No. 2015 - 80, August 19, 2015)

Not established

16. OTHER INFORMATION

1) Reference

- China National Standard(GB30000)
- HSDB
- ICSC
- Kochetkova, 1971
- RTECS

2) Print date : 2021 - 06 - 15

3) Revision date

Revised date count : 0

Last revised date : 2021 - 06 - 15

Last revised history :

4) Other