

Last revised date: 2023-05-31

# Safety Data Sheet(SDS)

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

- 1) Product identifier: HDPE SPECIAL XLPIPE SL188 550KG FLECON
- 2) Relevant identified uses of the substance or mixture and uses advised against
  - o Relevant identified uses
    - 1.Raw material, Intermediates
  - Uses advised against
- 3) Supplier information
  - O Company name [Manufacture]

Company: LG Chem, Ltd.

Address: 58, Yeosusandan 4-ro, Yeosu-si, Jeollanam-do, Republic of Korea

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/vapours.

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 and containers according to the legislation of the waste

#### 3) Other hazards

- 자료없음

# o 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
  - In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
  - Seek immediate medical 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 medical 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.
- 2) Special hazards arising from the substance or mixture
  - o Pyrolytic product
    - Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes.
  - O Risk of fire and explosion
    - Containers may explode when heated.
    - Some may burn but none ignite readily.
  - o Other
    - No data available
- 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 limits	ACGIH	Biological standard
Polyethylene	TWA : mg/m3mg/m3 STEL : Not applicable	TWA : Not applicable STEL : 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

- o Respiratory protection
  - In case of insufficient oxygen (<19.6%), wear a supplied air mask or self-contained 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	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 um)
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, 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
  - o Inhalation
    - May cause respiratory irritation
  - o Skin Contact
    - Not applicable
  - o Eye Contact
    - Not applicable
  - o Ingestion
    - Not applicable
- 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 /  $\ell$  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

O Skin sensitization

No data available

Carcinogenicity

2.44 (IARC), Source: IARC

o Germ cell mutagenicity

No data available

o Reproductive toxicity

No data available

o Specific target organ toxicity single exposure

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

 $\circ$  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, storn water drains, soil, etc.

#### 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

• Hazardous Chemicals Act - China. List of Dangerous Goods

Not applicable

- Hazardous Chemicals Act China. Inventory of Existing Chemical Substances (IECSC)
- Polyethylene
- 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)
  - HSDB
  - ICSC
  - Kochetkova, 1971
  - RTECS



2) Print date: 2023-05-31

3) Revision date

o Revised date count: 0

o Last revised date: 2023-05-31

o Last revised history :

4) Other