

Last revised date : 2022-07-19

PCN No. :

Safety Data Sheet(SDS)

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

1) Product identifier : PP MH1850

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

○ Relevant identified uses

29.Polymer preparations and compounds

○ Uses advised against

Prohibited for use other than recommended

3) Supplier information

○ Company name [Manufacture]

Company : LG Chem, Ltd.

Address : 54, Dokgot 1-ro, Daesan-eup, Seosan-si, Chungcheongnam-do, Republic of Korea

Emergency number : 82-41-661-2626

2. HAZARD IDENTIFICATION

1) Hazard classification

Not applicable

2) Allocation label elements

Hazard pictograms

Signal word

- NONE

Hazard statements

No data available

Precautionary statements

Not applicable

3) Other hazards

○ Product NFPA Level

Health	Flammability	Reactivity
0	0	0

(※ 0 = Insufficient, 1 = Slightly, 2 = ordinary, 3 = Highness, 4 = Very high)

3. Composition/Information on ingredients

Components	EU REACH No.	CAS No.	PCT(wt%)
Polypropylene		9003-07-0	99-100

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

- 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
Polypropylene	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	No data available
Physical state	Solid
Colour	Colourless(Translucent)
Odour	Odourless
Odour threshold	No data available
pH	No data available
Melting point/freezing point	140~170°C
Initial boiling point and boiling range	No data available
Flash point	No data available
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)	Insoluble
Vapour density	No data available
Relative density	0.9(20°C)
n-octanol/water partition coefficient	No data available
Auto ignition temperature	375~400°C
Decomposition temperature	No data available
Viscosity	No data available
Molecular weight(mass)	>40000

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
- No data available
- 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) PRODUCT : Not classified
 - Polypropylene : LD50> 8000 mg / kg experimental species: Rat
 - Acute toxicity(Dermal) PRODUCT : Not classified
 - Polypropylene : No data available
 - Acute toxicity(Inhalation:Gases) PRODUCT : Not classified
 - Polypropylene : No data available
 - Acute toxicity(Inhalation:Vapours) PRODUCT : Not classified
 - Polypropylene : No data available
 - Acute toxicity(Inhalation:Dust/mist) PRODUCT : Not classified
 - Polypropylene : No data available
 - Skin corrosion/irritation PRODUCT : Not classified
 - Polypropylene : No data available
 - Serious eye damage/eye irritation PRODUCT : Not classified

- Polypropylene : No data available
- Respiratory sensitization PRODUCT : Not classified
 - Polypropylene : No data available
- Skin sensitization PRODUCT : Not classified
 - Polypropylene : No data available
- Carcinogenicity PRODUCT : Not classified
 - Polypropylene : 2.44 (IARC), Source: IARC
- Germ cell mutagenicity PRODUCT : Not classified
 - Polypropylene : No data available
- Reproductive toxicity PRODUCT : Not classified
 - Polypropylene : No data available
- Specific target organ toxicity single exposure PRODUCT : Not classified
 - Polypropylene : No data available
- Specific target organ toxicity repeated exposure PRODUCT : Not classified
 - Polypropylene : No data available
- Aspiration hazard PRODUCT : Not classified
 - Polypropylene : No data available

12. ECOLOGICAL INFORMATION

1) Aquatic toxicity

- Fish>PRODUCT : Not classified
 - Polypropylene : No data available
- Crustacea>PRODUCT : Not classified
 - Polypropylene : No data available
- Aquatic algae>PRODUCT : Not classified
 - Polypropylene : No data available

2) Persistence and degradation

- n-octanol water partition coefficient>PRODUCT : Not classified
 - Polypropylene : No data available
- Degradation>PRODUCT : Not classified
 - Polypropylene : No data available
- Biodegradation>PRODUCT : Not classified
 - Polypropylene : No data available

3) Bioaccumulative potential>PRODUCT : Not classified

- Polypropylene : No data available

4) Mobility in soil>PRODUCT : Not classified

- Polypropylene : No data available

5) Other adverse effects>PRODUCT : Not classified

- Polypropylene : 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)

Not applicable

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

Not applicable

- ETC regulation - EU. Directive 2010/75/EU on Industrial Emissions (IPPC), Annex II, L 334/17, 24 November 2010

Not applicable

- ETC regulation - EU. Regulation No 850/2004 prohibiting and restricting persistent organic pollutants (POPs), as last amended by Regulation No 51

Not applicable

- ETC regulation - EU. REACH, Annex XVII, Restrictions on manufacture, placing on the market and use of certain dangerous substances (Reg 1907/2006

Not applicable

- ETC regulation - EU. GHS Classification. CLP Reg. No 1272/2008 of 16 Dec 2008, Annex VI, Table 3.1, List of harmonized classification & labelling

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, as amended through Regulation No 895/2014 of 19 August 2014

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. Regulation EU No. 649/2012, Annex V, Chemicals and articles subject to export ban, OJ L 201, p. 60, 27 July 2012

Not applicable

- ETC regulation - EU. Annexes I, II (F-gases subject to emission limits/reporting), IV (GWPs for mixture calculations), Reg. 517/2014/EU on fluori

Not applicable

16. OTHER INFORMATION

1) Reference

- Corporate Solution From Thomson Micromedex(<http://csi.micromedex.com>)
- ECHA Registered substances
- ECHA 등록자료
- ECOSAR
- EU CLP
- IUCLID
- International Uniform Chemical Information Database(IUCLID)(<http://ecb.jrc.it/esis>)
- National Library of Medicine(NLM)(<http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgen?CHEM>), Corporate Solution From Thomson Micromedex(<http://csi.micromedex.com>)
- OECD Screening Information Data Set(<http://cs3-hq.oecd.org/scripts/hpv/>)
- QSAR
- Quantitative Structure Activity Relation(QSAR)
- SIDS

2) Print date : 2022-03-24

3) Revision date

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- Last revised history : no changes

4) Other