LG Chem

Last revised date : 2024-08-13
MSDS No. : AA00566-2100000656

Safety Data Sheet(SDS)

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

1) Product identifier : LG SAP

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

○ Relevant identified uses

48.Others (sanitary agent)

○ Uses advised against

high temperature and humid environment

3) Supplier information

○ Company name [Manufacture]

Company : LGC Gimcheon / Yeosu
Address : 152-26, Gongdan-ro, Gimcheon-si, Gyeongsangbuk-do, Republic of Korea

Emergency number : +82-2-3773-1114 (08:30~18:00, KST)

○ Company name [Distributor]

Company : Not applicable
Address : Not applicable

Emergency number : Not applicable

2. HAZARD IDENTIFICATION

1) Hazard classification

- Serious eye damage/eye irritation Category 2

2) Allocation label elements

Hazard pictograms

- WARNING

Hazard statements

H319 Causes serious eye irritation

Precautionary statements

- Prevention

P264 Wash eye thoroughly after handling.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

- Response

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313 If eye irritation persists: Get medical advice/attention.

3) Other hazards

- No data available

○ 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	Common name	CAS No.	PCT(wt%)
Sodium polyacrylate	Sodium polyacrylate	9003-04-7	96~100
Water	Water	7732-18-5	0~4

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

- Give artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- If exposed to excessive amounts of dust or fumes, remove to fresh air and seek medical attention if cough or other symptoms develop.

4) Following ingestion

- If unconscious but breathing, never give anything by mouth.
- 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

- Small fire: Dry sand, dry chemical, alcohol-resistant foam, water spray, regular foam, CO2 (Suitable extinguishing media).
- Large fire: Water spray/fog, regular foam (Suitable extinguishing media).

○ Unsuitable extinguishing media

- High-pressure water (risk of fire spread).

2) Special hazards arising from the substance or mixture

○ Pyrolytic product

- During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

○ Risk of fire and explosion

- May ignited from heat, friction or contamination.
- Fire may produce irritating and/or toxic gases.
- Containers may explode when heated.
- Possible explosion due to dust

○ Other

- No data available

3) Special protective equipment for firefighters

- Rescuers should put on appropriate protective gear.
- Evacuate area and fight fire from a safe distance.
- Dike fire-control water for later disposal; do not scatter the material.
- Move containers from fire area if you can do it without risk.
- Fire involving Tanks: Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Fire involving Tanks: Cool containers with flooding quantities of water until well after fire is out.
- Fire involving Tanks: ALWAYS stay away from tanks engulfed in fire.
- Fire involving Tanks: For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

6. ACCIDENTAL RELEASE MEASURES

1) Health considerations and protective equipment

- Ventilate the contaminated area.
- Prevent dust cloud.
- Do not enter areas which have less than 18% oxygen in the atmosphere, without respirator or air supplied mask.
- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).

- Stop leak if you can do it without risk.
- Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- Please note that materials and conditions to be avoided.
- Risk of slipping in case of material spillage.

2) Environmental precautions

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

3) For cleaning up

- With clean shovel place material into clean, dry container and cover loosely; move containers from spill area.
- Cover powder spill with plastic sheet or tarp to minimize spreading and keep powder dry.

7. HANDLING AND STORAGE

1) Precautions for safe handling

- Follow all MSDS/label precautions even after container is emptied because they may retain product residues.
- Wash thoroughly after handling.
- CAUTION: High temperature.
- Please note that materials and conditions to be avoided.
- Handling refer to engineering control/personal protection section.
- Be careful as dust generation or friction may cause an explosion.
- Avoid any skin and eye contact when insert undiluted solution. Wash ... thoroughly after handling.
- Caution: Dangerous fire hazard when exposed to heat, or flame, sparks.
- Wear an appropriate Personal protection. (See Exposure Controls/Personal Protection section.)

2) Conditions for safe storage (including any incompatibilities)

- Store in a closed container.
- Store in a dry place. Store in a closed container.
- Store containers: AVOID the place where can be damage and contamination.
- Choose a place that can be protected from strong oxidizers and acid.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

1) Chemical exposure limits, Biological exposure standard

Components	Occupational exposure limits	ACGIH	Biological standard
Sodium polyacrylate	TWA : Not applicable STEL : Not applicable	TWA : Not applicable STEL : Not applicable	Not applicable
Water	TWA : Not applicable STEL : Not applicable	TWA : Not applicable STEL : Not applicable	Not applicable

2) Appropriate engineering controls

- Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

3) Personal protection equipment

○ Respiratory protection

- Wear breathing protection, which needs a confirmation from the Korea Occupational Safety and Health Agency.
- In case of insufficient oxygen (<19.6%), wear a supplied air mask or self-contained respirator.

○ 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	powder
Physical state	solid
Colour	white
Odour	odorless
Odour threshold	no data
pH	5.5~6.5(at 5.0g/L, 0.9% NaCl Solution)
Melting point/freezing point	no data
Initial boiling point and boiling range	No data available
Flash point	No data available
Evaporation rate	no data
Flammability(solid, gas)	no data
Upper/lower flammability or explosive limits	LEL 1,250g/m³, Kst(12.4bar m/sec), Pmax(6.0bar), MIE(>1000mJ)(median particle diameter 127㎛ dust)
Vapour pressure	no data
Solubility(ies)	no data
Vapour density	no data
Relative density	0.6~0.8g/cm³(bulk density)
n-octanol/water partition coefficient	no data
Auto ignition temperature	no data
Decomposition temperature	upper 200℃
Viscosity	No data available
Molecular weight(mass)	no data

10. STABILITY AND REACTIVITY

1) Stability and hazardous reactivity

- Fire may produce irritating and/or toxic gases.

2) Conditions to avoid

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

3) Incompatible materials

- Irritating and/or toxic gas.
- Combustibles, reducing material.

4) Hazardous decomposition products

- Corrosive/toxic fume.
- During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

- Irritating, corrosive and/or toxic gas.

11. TOXICOLOGICAL INFORMATION

1) Exposure route information

○ Inhalation

- Not applicable

○ Skin Contact

- Not applicable

○ Eye Contact

- Causes serious eye irritation

○ Ingestion

- Not applicable

2) Health hazard information

○ Acute toxicity

● Acute toxicity(Oral) PRODUCT : Not classified(ATEmix = 2250000mg/kg)

- Sodium polyacrylate : LD50 >2000 ㎎/㎏ Rat, MPI Research test result
- Water : LD50 90000 ㎎ / ㎏ experimental species: Rat (LD50> 90 ml / kg (Rat))

● Acute toxicity(Dermal) PRODUCT : Not classified

- Sodium polyacrylate : LD50>2,000mg/kg Rat, MPI Research test result
- Water : No data available

● Acute toxicity(Inhalation:Gases) PRODUCT : Not classified

- Sodium polyacrylate : No data available
- Water : No data available

● Acute toxicity(Inhalation:Vapours) PRODUCT : Not classified

- Sodium polyacrylate : No data available
- Water : No data available

● Acute toxicity(Inhalation:Dust/mist) PRODUCT : Not classified

- Sodium polyacrylate : No data available
- Water : No data available

○ Skin corrosion/irritation PRODUCT : Not classified

- Sodium polyacrylate : Iritating was not observed on rabbit(MPI Reserch test result)
- Water : Not applicable

○ Serious eye damage/eye irritation PRODUCT : Category 2

- Sodium polyacrylate : Conjunctival stimulation on rabbits was most severe in 24 hours after administration, appeared up to 72 hours, and was fully resolved within 7 days(MPI Reserch test results)

- Water : Not applicable

○ Respiratory sensitization PRODUCT : Not classified

- Sodium polyacrylate : No data available
- Water : Not applicable

○ Skin sensitization PRODUCT : Not classified

- Sodium polyacrylate : No data available
- Water : Not applicable

○ Carcinogenicity PRODUCT : Not classified

- Sodium polyacrylate : No data available
- Water : No data available

○ Germ cell mutagenicity PRODUCT : Not classified

- Sodium polyacrylate : No data available
- Water : Not applicable

○ Reproductive toxicity PRODUCT : Not classified

- Sodium polyacrylate : No data available
- Water : Not applicable

○ Specific target organ toxicity single exposure PRODUCT : Not classified

- Sodium polyacrylate : No data available
- Water : Not applicable

○ Specific target organ toxicity repeated exposure PRODUCT : Not classified

- Sodium polyacrylate : No data available
- Water : Not applicable

○ Aspiration hazard PRODUCT : Not classified

- Sodium polyacrylate : No data available
- Water : Not applicable

12. ECOLOGICAL INFORMATION

1) Aquatic toxicity > PRODUCT : Not classified

● Fish

- Sodium polyacrylate : LC50 (96 h)> 1,000 mg/L, Lepomis macrochirus(OECD Guideline 203)
- Water : No data available

● Crustacea

- Sodium polyacrylate : LC50 (48 h)> 200 mg/L, Daphnia magna(OECD Guideline 202)
- Water : No data available

● Aquatic Algae

- Sodium polyacrylate : No data available
- Water : No data available

2) Persistence and degradation

● n-octanol water partition coefficient

- Sodium polyacrylate : No data available
- Water : -1.38 log Kow ()

● Degradation

- Sodium polyacrylate : No data available
- Water : No data available

● Biodegradation

- Sodium polyacrylate : No data available
- Water : No data available

3) Bioaccumulative potential

- Sodium polyacrylate : No data available
- Water : No data available

4) Mobility in soil

- Sodium polyacrylate : No data available
- Water : No data available

5) Other adverse effects > PRODUCT : Not classified

- Sodium polyacrylate : No data available
- Water : No data available

13. DISPOSAL CONSIDERATIONS

1) Disposal methods

- Recyclables must be collected in portable bins and disposed of legally according to national regulations.

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

- Avoid direct spillage to rivers, lakes, soil and drains.

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

1) Occupational Safety and Health Act in Korea
PRODUCT : Not applicable

2) Toxic Chemical Control Act in Korea
PRODUCT : Not applicable

3) Safety Control of Dangerous Substances Act in Korea
PRODUCT : Not applicable

4) Wastes Control Act in Korea
PRODUCT : Ordinary Industrial Waste

-In case of disposal, it must be disposed of in accordance with Article 13 of the Waste Management Act.

5) Other regulations in KOREA and Abroad regulations

- ETC regulation
- Act on the registration and evaluation of chemicals
  - Sodium polyacrylate : Existing Commercial Chemical Substances
  - Water : Exemption from Registration or Reporting of Chemical Substances, Existing Commercial Chemical Substances

16. OTHER INFORMATION

1) Reference

- HERA Polycarboxylates used in detergents (Part I) Version 3.0
- GESTIS
- Ministry of Employment and Labor
- Ministry of Environment

2) Print date : 2016-01-21

3) Revision date

○ Revised date count : 32

○ Last revised date : 2024-08-13

○ Last revised history : Revised 12. ECOLOGICAL INFORMATION

4) Other

Certain types of processing of SAP Product may result in the production of airborne particulates which could be unsafe for human inhalation or consumption. Caution should be exercised by appropriate professionals to ensure that the quantity (if any) of airborne particulates are safe for human inhalation or consumption both in the manufacturing process and to the extent final products are exposed to any such particulates. Further, caution should be exercised and appropriate steps taken during the manufacturing process to ensure any final products (including that all such finished products, including without limitation, food storage products) are safe for their intended use and comply with all applicable laws and regulations relating thereto.