

Last revised date : 2024-07-31
MSDS No. :

Safety Data Sheet(SDS)

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

- 1) Product identifier : SAN 80HFICELLHK-NP BULK
- 2) Relevant identified uses of the substance or mixture and uses advised against
 - Relevant identified uses
 - 29.Polymer preparations and compounds
 - Uses advised against
 - Any use of the product other than for its identified uses is prohibited.
- 3) Supplier information
 - Company name [Manufacture]
 - Company : LG Chem. Ltd
 - Address : 55, Yeosusandan 2-ro, Yeosu-si, Jeollanam-do, Republic of Korea
 - Emergency number : +82-2-3773-1114 (08:30~18:00, KST)

2. HAZARD IDENTIFICATION

- 1) Hazard classification
 - Not applicable
- 2) Allocation label elements
 - Hazard pictograms

 - Signal word
 - NONE
 - Hazard statements
 - No data available
 - Precautionary statements

No data available

3) Other hazards

- No data available

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%)
Acrylonitrile-styrene copolymer	Acrylonitrile-styrene copolymer	9003-54-7	100

4. FIRST AID MEASURES

1) Following eye contact

- In case of contact with material, immediately flush eyes with running water for at least 15 minutes.
- Get medical aid immediately.

2) Following skin contact

- In case of burns, immediately cool affected skin for as long as possible with cold water. Do not remove clothing if adhering to skin.

3) Following inhalation

- Give artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- Seek immediate medical assistance.
- 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.
- Get medical aid immediately.

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
 - 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 (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.
 - In case of fire, carbon monoxide and/or carbon dioxide and other harmful substances may be formed.
- Risk of fire and explosion
 - May ignited from heat, friction or contamination.
 - Fire may produce irritating and/or toxic gases.
 - Possible explosion due to dust
- Other
 - May cause toxic effects if inhaled.

3) Special protective equipment for firefighters

- Move containers from fire area if you can do it without risk.
- Runoff may cause pollution.
- Contact may cause burns to skin and eyes.
- Dike fire-control water for later disposal; do not scatter the material.
- 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.
- Only properly trained personnel should engage in firefighting.

6. ACCIDENTAL RELEASE MEASURES

1) Health considerations and protective equipment

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- Stop leak if you can do it without risk.
- Ventilate the contaminated area.
- Do not touch or go near exposed material.
- Prevent dust cloud.
- Do not enter areas which have less than 18% oxygen in the atmosphere, without respirator or air supplied mask.
- Risk of slipping in case of material spillage.

2) Environmental precautions

- Prevent entry into waterways, sewers, ground water, soil and confined spaces.

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

- Please note that materials and conditions to be avoided.
- Wash thoroughly after handling.
- Handling refer to engineering control/personal protection section.
- CAUTION: High temperature.
- May explode when dust cloud creation or friction.
- 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 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
- 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
Acrylonitrile-styrene copolymer	TWA : Not applicable STEL : Not applicable	TWA : Not applicable STEL : Not applicable	Not applicable

2) Appropriate engineering controls

- Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.
- Make sure you have the right exhaust and ventilation in the workplace.

3) Personal protection equipment

- o Respiratory protection
 - In case of insufficient oxygen (<19.6%), wear a supplied air mask or self-contained respirator.
 - 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)
 - If there is a direct contact or exposure, wear a certified appropriate respiratory protection.
 - Wear breathing protection, which needs a confirmation from the Korea Occupational Safety and Health Agency.

- Eye protection
 - Wear suitable protective goggles and face shields.
 - Provide emergency showers and eyewash.
 - Wear an appropriate eye protection.
- Hand protection
 - Wear suitable protective gloves.
 - 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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	No data available
Physical state	solid
Colour	Colorless solid
Odour	Odorless
Odour threshold	No data available
pH	No data available
Melting point/freezing point	120 °C
Initial boiling point and boiling range	No data available
Flash point	366 °C
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	1.05
n-octanol/water partition coefficient	No data available
Auto ignition temperature	454-500 °C
Decomposition temperature	No data available
Viscosity	No data available
Molecular weight(mass)	No data available

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
 - 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)
No data available
 - 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)
No data available
 - 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
 - No data available
- Germ cell mutagenicity
 - No data available
- Reproductive toxicity
 - No data available
- Specific target organ toxicity single exposure
 - No data available
- 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

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

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

- Wear an appropriate Personal protection. (See Exposure Controls/Personal Protection section.)
- Avoid direct spillage to rivers, lakes, soil and drains.
- Discuss it according to waste regulation.
- Use a certified waste disposal company.

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 : Not applicable

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 : Not applicable

- 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

1) Occupational Safety and Health Act in Korea

- Not applicable

2) Toxic Chemical Control Act in Korea

- Not applicable

3) Safety Control of Dangerous Substances Act in Korea

- Not applicable

4) Wastes Control Act in Korea

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
 - Not applicable
 - Not applicable
- Act on the registration and evaluation of chemicals
Existing Commercial Chemical Substances

16. OTHER INFORMATION

1) Reference

- Ministry of Employment and Labor
- Ministry of Environment
- National Library of Medicine(NLM)(<http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgen?CHEM>)

2) Print date : 2022-07-13

3) Revision date

- Revised date count : 3
- Last revised date : 2024-07-31
- Last revised history : Regular Revision

4) Other