

Safety Data Sheet(SDS)

According to Regulation (EC) No. 2020/878

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

1.1 Product identifier

Product identifier : SAN 82TR-NP BULK

Other means of identification : N/A

UFI Code. : N/A

1.2. 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.

1.3 Details of the supplier of the safety data sheet

1) Manufacturer in Korea

Name : LG Chem, Ltd.

Address : 55, Yeosusandan 2-ro, Yeosu-si, Jeollanam-do, Republic of Korea

Telephone number : +82-2-3773-1114, 08:30~18:00 (KST, Korea Standard Time)

2) Customer Solution Center in Europe

Name : LG Chem Europe GmbH

Address : Adolph-Prior-Straße 16, 65936 Frankfurt am Main, Germany

Telephone number : +49-69-710-455-199, 09:00~17:00 (CET, Central European Time)

Fax number : N/A

Email : lgcegmsds@lgchem.com

1.4 Emergency telephone number

Emergency telephone number : +49-69-710-455-199 Customer Solution Center Europe

Opening hours : 09:00~17:00 (CET, Central European Time)

Other comments(e.g. language(s) of the phone service) : English, Deutsch, Korean available.

SECTION 2. Hazards identification

2.1 Classification of the substance or mixture according to Regulation (EC) No 1272/2008

- Acute toxicity(Oral) Category 4

2.2 Label elements

Hazard pictogram



Labelling according to Regulation (EC) No 1272/2008 [CLP]

Signal word

- WARNING

Hazard statements

H302 Harmful if swallowed

Precautionary statements

- Prevention

P264 Wash mouse thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

- Response

P301+P312 If you swallow: If you feel uncomfortable, get medical institutions and doctor's consultation.

P330 Rinse mouth.

- Disposal

P501 Dispose of contents and containers according to the legislation of the waste

2.3 Other hazards

- According to Annex XIII of (EC) No 1907/2006, the substance does not meet PBT or vPvB criteria.
- According to Regulation(EU) 2017/2100 and 2018/605, the substance does not affect to endocrine system.
- The substance is not listed in Article 59
- No other hazards have been identified

SECTION 3. Composition/information on ingredients

3.1. Substances

Not applicable

3.2 . Mixtures

Substance name	CAS No.	Classification	SCL	ATE	PCT(wt%)
	EC No.		M-Factor		
	EU REACH No.				

Acrylonitrile-styrene copolymer	9003-54-7	Acute toxicity(Oral) Category 4	No data available	Acute toxicity(Oral) : 1800mg/kg	100
	404-370-8				
	No data available		No data available		

※ Classification according Regulation(EC) No. 1272/2008 [EU CLP]

SCL : Specific concentration limit

M-Factor : The Multiplying factor

ATE : the acute toxicity estimate

SECTION 4. First aid measures

4.1 Description of first aid measures

○4.1.1 Following eye contact

- Not applicable

○4.1.2 Following skin contact

- Not applicable

○4.1.3 Following inhalation

- Not applicable

○4.1.4 Following ingestion

- Seek immediate medical assistance.

- Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

4.2 Most important symptoms and effects, both acute and delayed

- Harmful if swallowed

4.3 Indication of any immediate medical attention and special treatment needed

- Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

SECTION 5. Firefighting measures

5.1 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.

5.2 Special hazards arising from the substance or mixture(Hazardous combustion products)

- Containers may explode when heated.

- Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes.

- Some may burn, but not rapidly.

5.3 Advice 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.

SECTION 6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personnel

○Emergency procedures

- Removal of ignition sources, provision of sufficient ventilation.

○Protective equipment

- Wear suitable protective equipment to prevent any contamination of skin, eyes and personal clothing.

6.1.2 For emergency responders

- 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.

6.2 Environmental precautions

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

6.3 Methods and material for containment and cleaning up

6.3.1 For containment

- No data available

6.3.2 For cleaning up

- No data available

6.3.3 Other information

- 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.

6.4 Reference to other sections

- Section 8 (protective equipment), section 13 (disposal instructions)

SECTION 7. Handling and storage

7.1 Precautions for safe handling

- Follow all MSDS/label precautions even after container is emptied because they may retain product residues.
- Handling refer to engineering control/personal protection section.
- Please note that materials and conditions to be avoided.

7.2 Conditions for safe storage, including any incompatibilities

- Keep away from food and drinking water.
- Store in a cool/low-temperature, well-ventilated dry place away from heat and ignition sources.

7.3 Specific end uses

- See section 1 for recommended use.

SECTION 8. Exposure controls/personal protection

8.1 Control parameters

Components	Occupational exposure	ACGIH regulations	Biological limit values	DNEL/DMEL	PNEC-Values
Acrylonitrile-styrene copolymer	TWA : No data available	TWA : No data available	No data available	No data available	No data available
	STEL : No data available	STEL : No data available			

* The ACGIH has a TLV-TWA of 10 mg/m³ (as total dust) for particulates having a quartz content of less than 1 percent.

8.2 Exposure controls

8.2.1 Appropriate engineering controls

- No data available

8.2.2 Individual protection measures, such as personal protective equipment

- Eye/face protection
 - Not applicable
- Respiratory protection
 - Atmospheric levels should be maintained below the exposure guideline. For most conditions, no respiratory protection should be needed; however, if material is heated or sprayed, use an approved air-purifying respirator. Use the following CE approved air-purifying respirator: Organic vapor cartridge with a particulate pre-filter, type AP2.
- Skin protection
 - (i) Hand protection
 - Not applicable
 - (ii) Other
 - No data available
- Thermal hazards
 - No data available

8.2.3 Environmental exposure controls

- Ensure not to cause environmental pollution by discharging into rivers or other waterways.
- See section 6

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	solid	No data available
Relative Vapour density	No data available	No data available
Density/Relative density	1.05	No data available
Kinematic viscosity	Not applicable	No data available
Decomposition temperature	No data available	No data available
Auto ignition temperature	No data available	No data available
Partition coefficient(n-octanol/water)	No data available	No data available
Solubility	(Insoluble)	No data available
Vapour pressure	No data available	No data available
Upper/lower flammability or explosive limits	No data available	No data available
Flammability(solid, gas)	No data available	No data available
Flash point	Not applicable	Flash Point : 366 °C
Initial boiling point and boiling range	Not applicable	No data available
Melting point/freezing point	120 °C	No data available
pH	Not applicable	No data available
Odour	Odorless	No data available
Colour	White	No data available
Particle characteristics	No data available	No data available

9.2 Other information

9.2.1 Information with regard to physical hazard classes

Flammable liquids	Initial boiling point and boiling range:Not applicable, Flash point:Not applicable	No data available
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9.2.2 Other safety characteristics

No data available

SECTION 10. Stability and reactivity

10.1 Reactivity

- Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes.
- Some may burn, but not rapidly.

10.2 Chemical stability

- No data available

10.3 Possibility of hazardous reactions

- Containers may explode when heated.
- Fire may produce irritating, corrosive and/or toxic gases.

10.4 Conditions to avoid

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

10.5 Incompatible materials

- Combustibles, reducing material.

10.6 Hazardous decomposition products

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

SECTION 11. Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

○Acute toxicity

●Acute toxicity(Oral) > PRODUCT : Category 4(ATEmix = 1800mg/kg)

- Acrylonitrile-styrene copolymer : LD50 1800 mg/kg Test species: Rat, Source: National Library of Medicine(NLM)(<http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgenCHEM>)

●Acute toxicity(Dermal) > PRODUCT : Not classified

- Acrylonitrile-styrene copolymer : No data available

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

- Acrylonitrile-styrene copolymer : No data available

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

- Acrylonitrile-styrene copolymer : No data available

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

- Acrylonitrile-styrene copolymer : No data available

○Skin corrosion/ irritation > PRODUCT : Not classified

- Acrylonitrile-styrene copolymer : No data available

○Serious eye damage/ irritation > PRODUCT : Not classified

- Acrylonitrile-styrene copolymer : No data available

○Respiratory or skin sensitisation > PRODUCT : Not classified

- Acrylonitrile-styrene copolymer : No data available

○Skin sensitization > PRODUCT : Not classified

- Acrylonitrile-styrene copolymer : No data available

○Carcinogenicity > PRODUCT : Not classified

- Acrylonitrile-styrene copolymer : 3 (IARC), Source: IARC

○Germ cell mutagenicity > PRODUCT : Not classified

- Acrylonitrile-styrene copolymer : No data available

○Reproductive toxicity > PRODUCT : Not classified

- Acrylonitrile-styrene copolymer : No data available

○ Specific target organ toxicity (single exposure) > PRODUCT : Not classified

- Acrylonitrile-styrene copolymer : No data available

○ Specific target organ toxicity (repeated exposure) > PRODUCT : Not classified

- Acrylonitrile-styrene copolymer : No data available

○ Aspiration hazard > PRODUCT : Not classified

- Acrylonitrile-styrene copolymer : No data available

11.2. Information on other hazards

○ 11.2.1. Endocrine disrupting properties

- Acrylonitrile-styrene copolymer : According to Regulation(EU) 2017/2100 and 2018/605, the substance not affects to endocrine system.

○ 11.2.2. Other information

- Acrylonitrile-styrene copolymer : No other hazards have been identified

SECTION 12. Ecological information

12.1 Toxicity > PRODUCT : Not classified

● Fish

- Acrylonitrile-styrene copolymer : No data available

● Crustaceans

- Acrylonitrile-styrene copolymer : No data available

● Aquatic Algae

- Acrylonitrile-styrene copolymer : No data available

12.2 Persistence and degradability

● Persistence

- Acrylonitrile-styrene copolymer : No data available

● Degradability

- Acrylonitrile-styrene copolymer : No data available

● Biodegradation

- Acrylonitrile-styrene copolymer : No data available

12.3 Bioaccumulative potential

- Acrylonitrile-styrene copolymer : No data available

12.4 Mobility in soil

- Acrylonitrile-styrene copolymer : No data available

12.5 Results of PBT and vPvB assessment

- Acrylonitrile-styrene copolymer : Not applicable

12.6 Endocrine disrupting properties

- Acrylonitrile-styrene copolymer : According to Regulation(EU) 2017/2100 and 2018/605, the substance not affects to endocrine system.

12.7 Other adverse effects > PRODUCT : Not classified

- Acrylonitrile-styrene copolymer : No data available

SECTION 13. Disposal considerations

13.1 Waste treatment methods

13.1.1 Product / Packaging disposal

- Empty containers should be taken to an approved waste handling site for recycling or disposal.

Waste codes / waste designations according to LoW

- 02-01-04 waste plastics (except packaging)

13.1.2 Waste treatment-relevant information

- Disposal according to local regulations.

13.1.3 Sewage disposal-relevant information

- Disposal according to local regulations and avoid release to the environment.

13.1.4 Other disposal recommendations

- No data available.

SECTION 14. Transport information

14.1 UN number or ID number : Not applicable

14.2 UN proper shipping name : Not applicable

14.3 Transport hazard class(es) : Not applicable

14.4 Packing group : Not applicable

14.5 Environmental hazards : Not applicable

14.6 Special precaution for user

Emergency measures in case of fire : Not applicable

Emergency measures in the effluent : Not applicable

14.7 Maritime transport in bulk according to IMO instruments

- 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

SECTION 15. Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

- ETC regulation - EU. Chemicals & Articles Subject to Export Ban: Annex V (Art. 15), Regulation 649/2012/EU, as amended by Regulation 2022/643, OJ L 118, 20 April 2022
 - 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. F-Gases Subject to Emission Limits/Reporting (Annexes I, II), Regulation 517/2014/EU on FGGs, 20 May 2014
 - Not applicable
- ETC regulation - EU. GHS Classification. CLP Regulation (EC) No 1272/2008, Annex VI, Table 3, Harmonized List of Hazardous Substances, as amended by Regulation (EU) 2022/692, OJ L 129, 3 May 2022
 - Not applicable
- ETC regulation - EU. Polluting Substances: Annex II, Directive 2010/75/EU on Industrial Emissions (IPPC), 17 December 2010
 - Not applicable
- ETC regulation - EU. REACH, Annex XIV, Substances Subject to Authorization (Authorization List), as amended through Regulation (EU) 2022/586, 11 April 2022
 - Not applicable
- ETC regulation - EU. REACH, Annex XVII, Restrictions on manufacture, placing on the market and use of certain dangerous substances, 1907/2006/EC, as amended by Reg 2021/2030/EU, 22 Nov 2021
 - Not applicable
- ETC regulation - EU. Regulation 1005/2009/EC on substances that deplete the ozone layer, Annex I, Controlled Substances (L286, Vol. 52, 31 October 2009)
 - 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. Regulation 2019/1021/EU on persistent organic pollutants (POPs) (recast), 25 June 2019, as amended by Regulation 2021/277, 23 February 2021
 - Not applicable
- Global Inventory - EU. European Inventory of Existing Commercial Chemical Substances (EINECS)
 - Not applicable

15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

SECTION 16. Other information

16.1 Key literature references and sources for data

- EU CLP
- National Library of Medicine(NLM)(<http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgenCHEM>)

16.2 Issuing date : 2024-03-05

16.3 Indication of changes

Revision number : 0
Revision date : 2024-03-05
Revision history :

16.4 Abbreviations and acronyms