Last revised date : 2023-01-27

Safety Data Sheet(SDS)

According to Regulation (EU) No. 2020/878

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

1.1 Product identifier : ASA LI901

Other means of identification :

UFI Code :

1.2. Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses : 48.Others (Manufacture of plastics products)

Uses advised against : Used only recommended uses

1.3 Details of the supplier of the safety data sheet

Name : LG Chem, Ltd.

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

Telephone number : 82-23773-3324

Fax number :

Email :

1.4 Emergency telephone number

Emergency telephone number : +49-69-710-455-138 Customer Solution Center Europe

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

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

SECTION 2: Hazards identification

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

2.2 Label elements

Hazard pictogram

Signal word

- NONE

Hazard statements

Precautionary statements

2.3 Other hazards

- According to Annex XIII, 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

The criteria for vPvB and PBT according to Regulation (EC) No 1907/2006, Annex XIII

Substance identified as having endocrine disrupting properties according to Regulation (EU) 2017/2100

SECTION 3. Composition/information on ingredients

3.1. Substances

Not applicable

3.2 . Mixtures

Substance name	CAS No. EC No. EU REACH No.	Classification	SCL M-Factor	ATE	PCT(wt %)
2-Methyl-2-propenoic acid methyl ester polymer with butyl 2-propenoate, ethenylbenzene and 2-propenenitrile	25852-38-4				95 ~ 100

※ Classification : Classification according Regulation(EC) No. 1272[CLP]
SCL : Specific concentration limit
M-factor : The multiplication factor
ATE : The acute toxicity estimate

SECTION 4: First aid measures

4.1 Description of first aid measures

○4.1.1 Following eye contact
- Get medical aid immediately.

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

○4.1.2 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.

○4.1.3 Following inhalation
- Administer oxygen if breathing is difficult.

- Give artificial respiration if victim is not breathing.

- Move to fresh air.

- Seek immediate medial assistance.

○4.1.4 Following ingestion
- Get medical aid immediately.

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

4.2 Most important symptoms and effects, both acute and delayed
- No data available

4.3 Indication of any immediate medical attention and special treatment needed
- 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.

SECTION 5: Firefighting measures

5.1 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).

5.2 Special hazards arising from the substance or mixture(Hazardous combustion products)
- No data available

5.3 Advice 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.

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

6.1.2 For emergency responders
- No data available

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
- Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.

6.3.2 For cleaning up
- Clear spills immediately.

- Don't use a brush or compressed air for cleaning surfaces or clothing.

6.3.3 Other information
- No data available

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

- 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.)

7.2 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}

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
2-Methyl-2-propenoic acid methyl ester polymer with butyl 2-propenoate, ethenylbenzene and 2-propenenitrile	TWA : Not applicable	TWA : Not applicable		Not applicable	Not applicable
	STEL : Not applicable	STEL : Not applicable			

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
- No data available

○ Respiratory protection
- No data available

○ Skin protection
(i) Hand protection
- No data available

(ii) Other
- No data available

○ Thermal hazards
- Wear a protective gloves/protective clothes/security diameter/security surface/earplugs.

8.2.3 Environmental exposure controls
- Ensure not to cause envirionmental pollution by discharging into rivers or other waterways.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Solid	
Relative Vapour density		
Density/Relative density		
Kinematic viscosity		
Decomposition temperature		
Auto ignition temperature		
Partition coefficient(n-octanol/water)		
Solubility		
Vapour pressure		
Upper/lower flammability or explosive limits		
Flammability(solid, gas)		
Flash point		
Initial boiling point and boiling range		

Melting point/freezing point		
pH		
Odour		
Colour		
Particle characteristics		

9.2 Other information

9.2.1 Information with regard to physical hazard classes

No data available

9.2.2 Other safety characteristics

No data available

SECTION 10: Stability and reactivity

10.1 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.

10.2 Chemical stability

- No data available

10.3 Possibility of hazardous reactions

- No data available

10.4 Conditions to avoid

- No data available

10.5 Incompatible materials

- No data available

10.6 Hazardous decomposition products

- No data available

SECTION 11: Toxicological information

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

○Acute toxicity

●Acute toxicity(Oral) > PRODUCT : Not classified

- 2-Methyl-2-propenoic acid methyl ester polymer with butyl 2-propenoate, ethenylbenzene

and 2-propenenitrile : No data available

●Acute toxicity(Dermal) > PRODUCT : Not classified

- 2-Methyl-2-propenoic acid methyl ester polymer with butyl 2-propenoate, ethenylbenzene and 2-propenenitrile : No data available

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

- 2-Methyl-2-propenoic acid methyl ester polymer with butyl 2-propenoate, ethenylbenzene and 2-propenenitrile : No data available

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

- 2-Methyl-2-propenoic acid methyl ester polymer with butyl 2-propenoate, ethenylbenzene and 2-propenenitrile : No data available

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

- 2-Methyl-2-propenoic acid methyl ester polymer with butyl 2-propenoate, ethenylbenzene and 2-propenenitrile : No data available

○Skin corrosion/ irritation > PRODUCT : Not classified

- 2-Methyl-2-propenoic acid methyl ester polymer with butyl 2-propenoate, ethenylbenzene and 2-propenenitrile : No data available

○Serious eye damage/ irritation > PRODUCT : Not classified

- 2-Methyl-2-propenoic acid methyl ester polymer with butyl 2-propenoate, ethenylbenzene and 2-propenenitrile : No data available

○Respiratory or skin sensitisation > PRODUCT : Not classified

- 2-Methyl-2-propenoic acid methyl ester polymer with butyl 2-propenoate, ethenylbenzene and 2-propenenitrile : No data available

○Skin sensitization > PRODUCT : Not classified

- 2-Methyl-2-propenoic acid methyl ester polymer with butyl 2-propenoate, ethenylbenzene and 2-propenenitrile : No data available

○Carcinogenicity > PRODUCT : Not classified

- 2-Methyl-2-propenoic acid methyl ester polymer with butyl 2-propenoate, ethenylbenzene and 2-propenenitrile : No data available

○Germ cell mutagenicity > PRODUCT : Not classified

- 2-Methyl-2-propenoic acid methyl ester polymer with butyl 2-propenoate, ethenylbenzene and 2-propenenitrile : No data available

○Reproductive toxicity > PRODUCT : Not classified

- 2-Methyl-2-propenoic acid methyl ester polymer with butyl 2-propenoate, ethenylbenzene and 2-propenenitrile : No data available

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

- 2-Methyl-2-propenoic acid methyl ester polymer with butyl 2-propenoate, ethenylbenzene and 2-propenenitrile : No data available

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

- 2-Methyl-2-propenoic acid methyl ester polymer with butyl 2-propenoate, ethenylbenzene and 2-propenenitrile : No data available

○Aspiration hazard > PRODUCT : Not classified

- 2-Methyl-2-propenoic acid methyl ester polymer with butyl 2-propenoate, ethenylbenzene and 2-propenenitrile : No data available

11.2. Information on other hazards

○11.2.1. Endocrine disrupting properties

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

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

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

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

- 2-Methyl-2-propenoic acid methyl ester polymer with butyl 2-propenoate, ethenylbenzene and 2-propenenitrile : According to Regulation(EU) 2017/2100 and 2018/605, the substance not affects to endocrine system.

○11.2.2. Other information

- : No other hazards have been identified

- : No other hazards have been identified

- : No other hazards have been identified

- : No other hazards have been identified

- 2-Methyl-2-propenoic acid methyl ester polymer with butyl 2-propenoate, ethenylbenzene and 2-propenenitrile : No other hazards have been identified

SECTION 12: Ecological information

12.1 Toxicity

●Fish > PRODUCT : Not classified
- 2-Methyl-2-propenoic acid methyl ester polymer with butyl 2-propenoate, ethenylbenzene and 2-propenenitrile : No data available

●Crustaceans > PRODUCT : Not classified
- 2-Methyl-2-propenoic acid methyl ester polymer with butyl 2-propenoate, ethenylbenzene and 2-propenenitrile : No data available

●Aquiatic Algae > PRODUCT : Not classified
- 2-Methyl-2-propenoic acid methyl ester polymer with butyl 2-propenoate, ethenylbenzene and 2-propenenitrile : No data available

12.2 Persistence and degradability

●Persistence > PRODUCT : Not classified
- 2-Methyl-2-propenoic acid methyl ester polymer with butyl 2-propenoate, ethenylbenzene and 2-propenenitrile : No data available

●Degradability > PRODUCT : Not classified

- 2-Methyl-2-propenoic acid methyl ester polymer with butyl 2-propenoate, ethenylbenzene and 2-propenenitrile : No data available

●Biodegradation > PRODUCT : Not classified
- 2-Methyl-2-propenoic acid methyl ester polymer with butyl 2-propenoate, ethenylbenzene and 2-propenenitrile : No data available

12.3 Bioaccumulative potential > PRODUCT : Not classified
- 2-Methyl-2-propenoic acid methyl ester polymer with butyl 2-propenoate, ethenylbenzene and 2-propenenitrile : No data available

12.4 Mobility in soil > PRODUCT : Not classified
- 2-Methyl-2-propenoic acid methyl ester polymer with butyl 2-propenoate, ethenylbenzene and 2-propenenitrile : No data available

12.5 Results of PBT and vPvB assessment
- 2-Methyl-2-propenoic acid methyl ester polymer with butyl 2-propenoate, ethenylbenzene and 2-propenenitrile : NOT_APPLICABLE

12.6 Endocrine disrupting properties
- 2-Methyl-2-propenoic acid methyl ester polymer with butyl 2-propenoate, ethenylbenzene and 2-propenenitrile : According to Regulation(EU) 2017/2100 and 2018/605, the substance not affects to endocrine system.

12.7 Other adverse effects > PRODUCT : Not classified
- 2-Methyl-2-propenoic acid methyl ester polymer with butyl 2-propenoate, ethenylbenzene and 2-propenenitrile : 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
- No data available

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

A Chemical Safety Assessment has been carried out.

SECTION 16: Other information

16.1 Key literature references and sources for data

- ECHA
- Quantitative Structure Activity Relation(QSAR)
- ECHA Registered substances
- ECHA registration data
- ECOSAR
- EU CLP
- IUCLID
- International Uniform ChemicaL Information Database(IUCLID)(http://ecb.jrc.it/esis)
- National Library of Medicine(NLM)
- OECD Screening Information Data Set(http://cs3-hq.oecd.org/scripts/hpv/)

16.2 Issuing date : 2022-11-22

16.3 Indication of changes

Revision number : 1

Revision date : 2023-01-27

Revision history : Updated in accordance with 'COMMISSION REGULATION (EU) 2020/878'

16.4 Abbreviations and acronyms