

	<b>MATERIAL SAFETY DATA SHEET</b>	Version: R0001.0001
		Date of issue: 1996-06-20
	<b>ASA LI911</b>	Revision date: 2014-03-07
		Change List:

## 1. IDENTIFICATION

### A. Product name

- ASA LI911

### B. Recommended use and restriction on use

- General use : Manufacture of plastics products
- Restriction on use : Used only recommended uses

### C. Manufacturer / Supplier / Distributor information

#### o Manufacturer information

- Company name : LG Chem, Ltd.
- Address : LG Twin Towers 128, Yeoui-daero, Yeongdeungpo-gu, Seoul, 150-721, Korea
- Dept. : ABS / EP Division
- Telephone number : +82-2-3773-3324
- Emergency telephone number : +82-2-3773-3216
- Fax number : +82-2-3733-3395
- E-mail address : webmaster@lgchem.com

#### o Supplier/Distributor information

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## 2. HAZARD IDENTIFICATION

### A. GHS Classification

- Not applicable

### B. GHS label elements

- o Hazard symbols
  - Not applicable
- o Signal words
  - Not applicable
- o Hazard statements
  - Not applicable
- o Precautionary statements
  - 1) Prevention
    - Not applicable
  - 2) Response
    - Not applicable
  - 3) Storage
    - Not applicable
  - 4) Disposal
    - Not applicable

### C. Other hazards which do not result in classification : (NFPA Classification)

- o NFPA grade (0 ~ 4 level)

- Health : 1, Flammability : 1, Reactivity : 0

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	Trade names and Synonyms	CAS No.	Content(%)
2-Propenoic acid butyl ester polymer with ethenylbenzene and 2-propenenitrile	ASA	26299-47-8	97~100
typical stabilizers and lubricants	typical stabilizers and lubricants	-	0~3

### 4. FIRST AID MEASURES

#### A. Eye contact

- Solid or dust may cause irritation or corneal injury due to mechanical action
- Immediately flush eyes with plenty of water for at least 15minutes and call a doctor/physician.

#### B. Skin contact

- Essentially nonirritating to skin but rinse with copious water
- Mechanical injury only

#### C. Inhalation contact

- Dust may cause irritation to respiratory.
- In case of breathing, fumes released from heated material may cause respiratory irritation.
  - In case of inhaling dense smoke, immediately remove a person to fresh air.
  - If necessary, apply artificial respiration and seek medical attention immediately.

#### D. Ingestion contact

- Unlikely due to physical state
- Rinse your mouth with water immediately.
- If vomiting occurs, lower the head to ease vomiting and seek for medical Advice.

#### E. Delayed and immediate effects and also chronic effects from short and long term exposure

- Not available

#### F. Notes to physician

- Not available

### 5. FIREFIGHTING MEASURES

#### A. Suitable (Unsuitable) extinguishing media

- Suitable extinguishing media: water, dry extinguishing media, foam, carbon dioxide
- Usually use water and use extinguishing media appropriate to surrounding conditions.

#### B. Specific hazards arising from the chemical

- Pyrolysate : carbon dioxide, carbon monoxide, hydrogen cyanide and a variety of chemical substances
- The substances/groups of substances mentioned can be released in case of fire.
- Irritating gases and dense smoke
- Dust can form an explosive mixture with air.

#### C. Special protective actions for firefighters

- Cool containers with water until well after fire is out.
- Keep unauthorized personnel out.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- Notify your local firestation and inform the location of the fire and characteristics hazard.
- Wear appropriate protective equipment.
- Keep containers cool with water spray.

### 6. ACCIDENTAL RELEASE MEASURES

### A. Personal precautions, protective equipment and emergency procedures

- Pellets or beads may present a slipping hazard.
- Sources of ignition should be kept well clear.

### B. Environmental precautions

- Discharge into the environment must be avoided.
- Keep out of irrigation ditches, sewers, and water supplies.
- Spills should be collected to prevent contamination of waterways.
- If large amounts have been spilled, inform the relevant authorities.

### C. Methods and materials for containment and cleaning up

- Sweep up.
- Appropriate container for disposal of spilled material collected.
- Avoid raising dust.
- Ensure adequate ventilation.

## 7. HANDLING AND STORAGE

### A. Precautions for safe handling

- Avoid formation of dust.
- When the product is ground (chopped), dust explosion regulations should be noted.
- Avoid pellets / bags from getting wet.
- Keep bags always closed / Keep container lightly closed.
- Do not handle until all safety precautions have been read and understood.

### B. Conditions for safe storage, including any incompatibilities

- Protect against moisture. Keep sealed when not in use.
- Avoid extreme heat. Avoid all sources of ignition: heat, sparks, open flame.
- Please pay attention to incompatibilities materials and conditions to avoid.
- Keep bags / containers in a well-ventilated place.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### A. Exposure limits

- o ACGIH TLV
  - Not available

### B. Engineering controls

- Good general ventilation should be sufficient for most conditions.
- Local exhaust ventilation may be necessary for some operations.

### C. Personal protective equipment

- o **Respiratory protection**
  - Consider warning properties before use.
  - For most conditions, no respiratory protection should be needed ; however, If handling at elevated temperatures without sufficient ventilation, use an approved air-purifying respirator.
  - In dusty atmospheres, use an approved.
- o **Eye protection**
  - Wear primary eye protection such as splash resistant safety goggles with side-shields (frame goggles).
- o **Hand protection**
  - Wear appropriate glove.
- o **Skin protection**
  - Wear appropriate clothing.
- o **Others**
  - Not available

## 9. PHYSICAL AND CHEMICAL PROPERTIES

A. Appearance	
- Appearance	Solid(Pellets)
- Color	Not available
B. Odor	Almost Odorless
C. Odor threshold	Not available
D. pH	Not available
E. Melting point/Freezing point	180~200 °C / Not available
F. Initial Boiling Point/Boiling Ranges	Not available
G. Flash point	Not available
H. Evaporation rate	Not available
I. Flammability(solid, gas)	Not available
J. Upper/Lower Flammability or explosive limits	Not available
K. Vapour pressure	Not available
L. Solubility	Not available
M. Vapour density	Not available
N. Specific gravity	1.07
O. Partition coefficient of n-octanol/water	Not available
P. Autoignition temperature	Not available
Q. Decomposition temperature	Not available
R. Viscosity	Not available
S. Molecular weight	50,000~250,000

## 10. STABILITY AND REACTIVITY

### A. Chemical stability

- This material is stable under recommended storage and handling conditions.
- Hazardous Polymerization will not occur.

### B. Possibility of hazardous reactions

- Avoid extreme heat. Avoid all sources of ignition: heat, sparks, open flame.
- Avoid fire and heating above 60 °C for storage conditions.

### C. Conditions to avoid

- Avoid contact with incompatible materials and condition.
- Avoid : Accumulation of electrostatic charges, Heating, Flames and hot surfaces

### D. Incompatible materials

- Strong oxidizing agents

### E. Hazardous decomposition products

- May emit flammable vapour if involved in fire.
- Gaseous products of degradation can be given off if the product is greatly overheated., monomers, hydrocarbons, gases/vapours, cyclic low molecular weight oligomers, oxides and hydrogen cyanide.

## 11. TOXICOLOGICAL INFORMATION

### A. Information on the likely routes of exposure

- o (Respiratory tracts)
  - Not available
- o (Oral)
  - Not available
- o (Eye-Skin)
  - Not available

### B. Delayed and immediate effects and also chronic effects from short and long term exposure

- o Acute toxicity
  - \* Oral
    - [2-Propenoic acid butyl ester polymer with ethenylbenzene and 2-propenenitrile] : LD50 > 5000 mg/kg Rat

- \* **Dermal**
  - Not available
- \* **Inhalation**
  - Not available
- **Skin corrosion/irritation**
  - Not available
- **Serious eye damage/irritation**
  - Not available
- **Respiratory sensitization**
  - Not available
- **Skin sensitization**
  - Not available
- **Carcinogenicity**
  - \* **IARC**
    - Not available
  - \* **OSHA**
    - Not available
  - \* **ACGIH**
    - Not available
  - \* **NTP**
    - Not available
  - \* **EU CLP**
    - Not available
- **Germ cell mutagenicity**
  - Not available
- **Reproductive toxicity**
  - Not available
- **STOT-single exposure**
  - Not available
- **STOT-repeated exposure**
  - Not available
- **Aspiration hazard**
  - Not available

## 12. ECOLOGICAL INFORMATION

### A. Ecotoxicity

- **Fish**
  - Not available
- **Crustaceans**
  - Not available
- **Algae**
  - Not available

### B. Persistence and degradability

- **Persistence**
  - Not available
- **Degradability**
  - Not available

### C. Bioaccumulative potential

- **Bioaccumulative potential**
  - Not available
- **Biodegradation**
  - Not available

### D. Mobility in soil

- Not available

**E. Other adverse effects**

- Not available

**13. DISPOSAL CONSIDERATIONS****A. Disposal methods**

- Must be dumped or incinerated in accordance with local regulations.
- For unused & uncontaminated product, the preferred options include sending to a licensed, permitted: recycler, reclaim, incinerator or other thermal destruction device.

**B. Special precautions for disposal**

- Do not Dump into any sewers, on the ground, or into any body of water. All disposal methods must be in compliance with all Federal, State/Provincial and local laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with appliance laws are the responsibility solely of the waste generator.

**14. TRANSPORT INFORMATION****A. UN number, (IMDG)**

- Not available

**B. Proper shipping name**

- Not available

**C. IMDG Class**

- Not available

**D. IMDG Packing group**

- Not available

**E. Marine pollutant**

- Not applicable

**F. Special precautions for user related to transport or transportation measures**

- Local transport follows in accordance with Dangerous goods Safety Management Law.
- Package and transport follow in accordance with Department of Transportation (DOT) and other regulatory agency requirements.
- EmS FIRE SCHEDULE : Not available
- EmS SPILLAGE SCHEDULE : Not available

**15. REGULATORY INFORMATION****A. National and/or international regulatory information**

- o **POPs Management Law**
  - Not applicable
- o **Information of EU Classification**
  - \* **Classification**
    - Not applicable
  - \* **Risk Phrases**
    - Not applicable
  - \* **Safety Phrase**
    - Not applicable
- o **U.S. Federal regulations**
  - \* **OSHA PROCESS SAFETY (29CFR1910.119)**
    - Not applicable
  - \* **CERCLA Section 103 (40CFR302.4)**
    - Not applicable
  - \* **EPCRA Section 302 (40CFR355.30)**
    - Not applicable
  - \* **EPCRA Section 304 (40CFR355.40)**
    - Not applicable

- \* **EPCRA Section 313 (40CFR372.65)**
  - Not applicable
- o **Rotterdam Convention listed ingredients**
  - Not applicable
- o **Stockholm Convention listed ingredients**
  - Not applicable
- o **Montreal Protocol listed ingredients**
  - Not applicable

## 16. OTHER INFORMATION

### A. Reference

- The information contained herein is believed to be accurate. It is provided independently of any sale of the product for purpose of hazard communication. It is not intended to constitute performance information concerning the product. No express warranty, or implied warranty of merchantability or fitness for a particular purpose is made with respect to the product or the information contained herein.
- This Safety Data Sheet was compiled with data and information from the following sources: KOSHA, NITE, ESIS, NLM, SIDS, IPCS

### B. Issue date

- 1996-06-20

### C. Revision number and Last date revised

- 6 times, 2014-03-07

### D. Other

- This MSDS is prepared according to the Globally Harmonized System (GHS).