

Last revised date : 2022-07-11

PCN No. :

Safety Data Sheet(SDS)

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

1) Product identifier : EVA EA33400 25KG BAG PE

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

○ Relevant identified uses

1.Feed materials, Intermediates, 2.Adhesives, sealants, 29.Polymer preparations and compounds

○ Uses advised against

Prohibited for use other than recommended

3) Supplier information

○ Company name [Manufacture]

Company : LG Chem, Ltd.

Address : 54, Dokgot 1-ro, Daesan-eup, Seosan-si, Chungcheongnam-do, Republic of Korea

Emergency number : +82 41-661-2498

2. HAZARD IDENTIFICATION

1) Hazard classification

Not applicable

2) Allocation label elements

Hazard pictograms

Signal word

- NONE

Hazard statements

No data available

Precautionary statements

Not applicable

3) Other hazards

○ Product NFPA Level

Health	Flamm ability	Reactivity
0	0	0

(※ 0 = Insufficient , 1 = Slightly , 2 = ordinary , 3 = Highness , 4 = Very high)

3. Composition/Information on ingredients

Components	EU REACH No.	CAS No.	PCT(wt%)
Ethylene/vinyl acetate copolymer		24937-78-8	99.5
Trade secret substances1			0.1
Trade secret substances2			0.4

4. FIRST AID MEASURES

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.

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.

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) Following ingestion

- Get medical aid immediately.
- If unconscious but breathing, never give anything by mouth.

5) Advice to physician

- 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.

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 (Unsuitable extinguishing media).

2) Special hazards arising from the substance or mixture

- Pyrolytic product
 - No data available
- Risk of fire and explosion
 - Containers may explode when heated.
 - Fire may produce irritating and/or toxic gases.
 - May ignited from heat, friction or contamination.
 - Some may burn but none ignite readily.
- Other
 - May cause toxic effects if inhaled.

3) Special protective equipment 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.

6. ACCIDENTAL RELEASE MEASURES

1) Health considerations and protective equipment

- Do not touch or walk through spilled material.
- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- Please note that materials and conditions to be avoided.
- Prevent dust cloud.
- Stop leak if you can do it without risk.
- Ventilate the contaminated area.

2) Environmental precautions

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

3) For cleaning up

- Cover powder spill with plastic sheet or tarp to minimize spreading and keep powder dry.
- Small Spill: Flush area with flooding quantities of water.
- With clean shovel place material into clean, dry container and cover loosely; move containers from spill area.

7. HANDLING AND STORAGE

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.)

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}

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

1) Chemical exposure limits, Biological exposure standard

Components	Occupational exposure limits	ACGIH	Biological standard
Ethylene/vinyl acetate copolymer	TWA : Not applicable STEL : Not applicable	TWA : Not applicable STEL : Not applicable	Not applicable
Trade secret substances1	TWA : Not applicable STEL : Not applicable	TWA : Not applicable STEL : Not applicable	Not applicable
Trade secret substances2	TWA : Not applicable STEL : Not applicable	TWA : Not applicable STEL : Not applicable	Not applicable

2) Appropriate engineering controls

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

3) Personal protection equipment

- Respiratory protection
 - If there is a direct contact or exposure, wear a certified appropriate respiratory protection.
- Eye protection
 - Provide emergency showers and eyewash.
 - Wear an appropriate security diameter.
- Hand protection
 - Wear safety gloves for chemicals.
- Body protection
 - Wear a protective gloves/protective clothes/security diameter/security surface/earplugs.
 - Wear suitable protective clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	No data available
Physical state	Solid
Colour	No data available
Odour	No data available
Odour threshold	No data available
pH	No data available
Melting point/freezing point	No data available
Initial boiling point and boiling range	No data available
Flash point	No data available
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)	No data available
Vapour density	No data available
Relative density	No data available
n-octanol/water partition coefficient	No data available

Auto ignition temperature	>450°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
 - 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.
- 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) PRODUCT : Not classified

- Ethylene/vinyl acetate copolymer : No data available
- Trade secret substances1 : No data available
- Trade secret substances2 : LD50> 2000 mg / kg experimental species: Rat, Source: OECD TG423, 환경부 기존화학물질안전성시험(2001-2004)

● Acute toxicity(Dermal) PRODUCT : Not classified

- Ethylene/vinyl acetate copolymer : No data available
- Trade secret substances1 : No data available
- Trade secret substances2 : LD50> 2000 mg / kg experimental species: Rat, Source: OECD SIDS, EU IUCLID

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

- Ethylene/vinyl acetate copolymer : No data available
- Trade secret substances1 : No data available
- Trade secret substances2 : No data available

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

- Ethylene/vinyl acetate copolymer : No data available
- Trade secret substances1 : No data available
- Trade secret substances2 : No data available

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

- Ethylene/vinyl acetate copolymer : No data available
- Trade secret substances1 : No data available
- Trade secret substances2 : LC50> 1.81 mg / ℓ 4 hr experiment Species: Rat, Source: ECHA 등록자료

○ Skin corrosion/irritation PRODUCT : Not classified

- Ethylene/vinyl acetate copolymer : No data available
- Trade secret substances1 : Probability of MOD / SEV = 0.283, Source: TOPKAT;Skin Irritation
- Trade secret substances2 : There is only a very slight irritation: Rabbit, recovered within 7 days, Source: OECD TG404, OECD SIDS

○ Serious eye damage/eye irritation PRODUCT : Not classified

- Ethylene/vinyl acetate copolymer : No data available
- Trade secret substances1 : Prob. of SEV Ocular Irritancy = 0.003, Source: TOPKAT;Ocular Irritancy SEV vs MOD
- Trade secret substances2 : Irritation: test stimulation index: 4/110, Source: EU IUCLID

○ Respiratory sensitization PRODUCT : Not classified

- Ethylene/vinyl acetate copolymer : No data available
- Trade secret substances1 : No data available

- Trade secret substances2 : No data available
- Skin sensitization PRODUCT : Not classified
 - Ethylene/vinyl acetate copolymer : No data available
 - Trade secret substances1 : No data available
 - Trade secret substances2 : Guinea Pig: 3 weeks 3 intradermal injection, using 20 animals, no emotional reaction, Source: OECD SIDS
- Carcinogenicity PRODUCT : Not classified
 - Ethylene/vinyl acetate copolymer : No data available
 - Trade secret substances1 : No data available
 - Trade secret substances2 : No data available
- Germ cell mutagenicity PRODUCT : Not classified
 - Ethylene/vinyl acetate copolymer : No data available
 - Trade secret substances1 : Computed Probability of Mutagenicity = 0.069, Source: TOPKAT;Ames Mutagenicity
 - Trade secret substances2 : Reverse mutation test: negative, TA98, TA100, TA1535, TA1537, voice over chromosomes with or without metabolic activation system applied in a used WP2uvrA hyayeo 4.1-1000µg / plate density test: Metabolic activity in voice, 10-100µg / ml with or without speech-based application-Dominant lethal in vivo assay: voice, NMRI mouse: 1000-3000 mg / kg bw Somatic mutation assay: voice, chinese hamster: 500-2000 mg / kg bw, Source: OECD SIDS, EU IUCLID
- Reproductive toxicity PRODUCT : Not classified
 - Ethylene/vinyl acetate copolymer : No data available
 - Trade secret substances1 : No data available
 - Trade secret substances2 : Rat: 2-generation reproductive toxicity study Reproductive toxicity: NOAEL 315mg / kg bw / day (up to a concentration probably has no effect), NOAEL for pup development: reduced newborn (96-111mg / kg bw / day's survival and growth at the highest concentration), Source: OECD SIDS
- Specific target organ toxicity single exposure PRODUCT : Not classified
 - Ethylene/vinyl acetate copolymer : No data available
 - Trade secret substances1 : No data available
 - Trade secret substances2 : No data available
- Specific target organ toxicity repeated exposure PRODUCT : Not classified
 - Ethylene/vinyl acetate copolymer : No data available
 - Trade secret substances1 : No data available
 - Trade secret substances2 : rat (dust / mist inhalation, 21 days 5 days, 6 hours of exposure to one day per week): NOAEL> 0.543mg / L (EU IUCLID), Rat: NOEL 30mg / kg bw / day 28 day 0, 5, 30 , gavage result of exposure to 100 and 300 mg 100, 300mg / kg bw / day group weight gain between the male 100, increases in Microsomal enzymes group 300 and the female 300mg / kg bw / day group, Source: OECD SIDS
- Aspiration hazard PRODUCT : Not classified

- Ethylene/vinyl acetate copolymer : No data available
- Trade secret substances1 : No data available
- Trade secret substances2 : No data available

12. ECOLOGICAL INFORMATION

1) Aquatic toxicity

- Fish>PRODUCT : Not classified
 - Ethylene/vinyl acetate copolymer : No data available
 - Trade secret substances1 : No data available
 - Trade secret substances2 : LC50 100 mg / ℓ 96 hr *Lepomis macrochirus*, Source: NCIS 기존화학물질 안전성 시험
- Crustacea>PRODUCT : Not classified
 - Ethylene/vinyl acetate copolymer : No data available
 - Trade secret substances1 : No data available
 - Trade secret substances2 : EC50 100 mg / ℓ 24 hr *Daphnia magna*, Source: NCIS 기존화학물질 안전성 시험
- Aquatic algae>PRODUCT : Not classified
 - Ethylene/vinyl acetate copolymer : No data available
 - Trade secret substances1 : No data available
 - Trade secret substances2 : ErC50> 30 mg / ℓ 72 hr *Scenedesmus subspicatus*, Source: Directiw 87/302/EEC, GLP . IUCLID

2) Persistence and degradation

- n-octanol water partition coefficient>PRODUCT : Not classified
 - Ethylene/vinyl acetate copolymer : (Not applicable)
 - Trade secret substances1 : 13.55 log Kow, Source: Ecological Structure Activity Relationships(ECOSAR)
 - Trade secret substances2 : 13.41 log Kow ((estimated))
- Degradation>PRODUCT : Not classified
 - Ethylene/vinyl acetate copolymer : No data available
 - Trade secret substances1 : No data available
 - Trade secret substances2 : No data available
- Biodegradation>PRODUCT : Not classified
 - Ethylene/vinyl acetate copolymer : No data available
 - Trade secret substances1 : (Cut-off value = 0.5820; recalcitrant (BIOWIN 6)), Source: EPI Suite
 - Trade secret substances2 : 39 (%) ~ 21 (%) 28 day, Source: OECD TG 301 C . OECD SIDS

3) Bioaccumulative potential>PRODUCT : Not classified

- Ethylene/vinyl acetate copolymer : (112 ug / L 2.1 sigan BCF (residual) bit duckweed 60ug / L)
- Trade secret substances1 : 8.2, Source: Ecological Structure Activity Relationships(ECOSAR)
- Trade secret substances2 : ≤12 (carp (*Cyprinus carpio*) 6 Day 12 than at 0.05mg / L), Source: CERI

4) Mobility in soil>PRODUCT : Not classified

- Ethylene/vinyl acetate copolymer : No data available
- Trade secret substances1 : 8.369, Source: Quantitative Structure Activity Relation(QSAR)
- Trade secret substances2 : No data available

5) Other adverse effects>PRODUCT : Not classified

- Ethylene/vinyl acetate copolymer : No data available
- Trade secret substances1 : No data available
- Trade secret substances2 : No data available

13. DISPOSAL CONSIDERATIONS

1) Disposal methods

- Every commercial waste producer shall either treat wastes generated from his/her place of business by him/herself or commission the treatment of such wastes to a person who has license for a waste treatment business under Article 26(3), a person who recycles of such wastes under Article 44(2), a person who has installed and operates a waste disposal facility under Article 4 or 5, a person who has completed the registration of a business of discharging wastes into the sea under Article 18 of the Marine Environment Management Act.

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

- Discuss it according to waste regulation.
- Do not allow spill material to enter sewers, storm water drains, soil, etc.
- Empty containers may explode and residues can be ignited when pressured, cut, weld, heated.
- Empty containers may rupture when pressured.
- Empty containers recycled under environmental laws.
- Use a certified waste disposal company.
- Wear an appropriate Personal protection. (See Exposure Controls/Personal Protection section.)

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

- Global Inventory - EU. European Inventory of Existing Commercial Chemical Substances (EINECS)

- Trade secret substances1

- Trade secret substances2

- ETC regulation - EU. Regulation 1005/2009/EC on substances that deplete the ozone layer, Annex I, Controlled Substances (L286, Vol. 52, 31 Octobe

Not applicable

- ETC regulation - EU. Directive 2010/75/EU on Industrial Emissions (IPPC), Annex II, L 334/17, 24 November 2010

Not applicable

- ETC regulation - EU. Regulation No 850/2004 prohibiting and restricting persistant organic pollutants (POPs), as last amended by Regulation No 51

Not applicable

- ETC regulation - EU. REACH, Annex XVII, Restrictions on manufacture, placing on the market and use of certain dangerous substances (Reg 1907/2006

Not applicable

- ETC regulation - EU. GHS Classification. CLP Reg. No 1272/2008 of 16 Dec 2008, Annex VI, Table 3.1, List of harmonized classification & labelling

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. REACH, Annex XIV, Substances Subject to Authorization, as amended through Regulation No 895/2014 of 19 August 2014

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. Regulation EU No. 649/2012, Annex V, Chemicals and articles subject to export ban, OJ L 201, p. 60, 27 July 2012

Not applicable

- ETC regulation - EU. Annexes I, II (F-gases subject to emission limits/reporting), IV (GWPs for mixture calculations), Reg. 517/2014/EU on fluorid

Not applicable

16. OTHER INFORMATION

1) Reference

- CERl
- Directiw 87/302/EEC, GLP . IUCLID
- ECHA 등록자료
- EPI Suite
- EU CLP
- EU IUCLID
- Ecological Structure Activity Relationships(ECOSAR)
- NCIS 기존화확물질 안전성 시험
- NCIS 기존화확물질 안전성시험
- OECD SIDS
- OECD SIDS, EU IUCLID
- OECD TG 301 C . OECD SIDS
- OECD TG404, OECD SIDS
- OECD TG423, 환경부 기존화확물질안전성시험(2001-2004)
- Quantitative Structure Activity Relation(QSAR)
- TOPKAT;Ames Mutagenicity
- TOPKAT;Ocular Irritancy SEV vs MOD
- TOPKAT;Skin Irritation

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4) Other

