

Last revised date: 2022-07-01

PCN No.:

Safety Data Sheet(SDS)

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

- 1) Product identifier: EVA EA28400 25KG BAG PP
- 2) Relevant identified uses of the substance or mixture and uses advised against
 - o 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

o Product NFPA Level

| Health | Flamm abliity | Reactivity |
|--------|---------------|------------|
| 0 | 0 | 0 |

(\times 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 | 99.75 |
| Trade secret substances1 | | | 0.1 |
| Trade secret substances2 | | | 0.15 |

4. FIRST AID MEASURES

Following eye contact
 No data available

2) Following skin contact

No data available

3) Following inhalation

No data available

4) Following ingestion

No data available

5) Advice to physician

No data available

5. FIRE FIGHTING MEASURES



- 1) Suitable (and unsuitable) extinguishing media
 - Suitable extinguishing media
 - No data available
 - Unsuitable extinguishing media
 - No data available
- 2) Special hazards arising from the substance or mixture
 - o Pyrolytic product
 - No data available
 - o Risk of fire and explosion
 - No data available
 - Other
 - No data available
- 3) Special protective equipment for firefighters
 - No data available

6. ACCIDENTAL RELEASE MEASURES

1) Health considerations and protective equipment

No data available

2) Environmental precautions

No data available

3) For cleaning up

No data available

7. HANDLING AND STORAGE

1) Precautions for safe handling

No data available

2) Conditions for safe storage (including any incompatibilities)

No data available

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 |



| Components | Occupational exposure limits | ACGIH | Biological standard |
|--------------------------|---|---|---------------------|
| 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

- Not applicable
- 3) Personal protection equipment
 - o Respiratory protection
 - If high frequency of use or exposure, wear air respirator.
 - Wear breathing protection, which needs a confirmation from the Korea Occupational Safety and Health Agency.
 - Eye protection
 - Wear suitable protective goggles and face shields.
 - Hand protection
 - Wear suitable protective gloves.
 - Body protection
 - 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 |
| рН | 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

Stability and hazardous reactivity
 No data available

2) Conditions to avoid No data available

3) Incompatible materials

No data available

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 : LD50> 2000 mg / kg experimental species: Rat, Source: OECD TG423, Ministry of existing chemical safety testing (2001-2004)
 - Trade secret substances2 : No data available
- Acute toxicity(Dermal) PRODUCT : Not classified
 - Ethylene/vinyl acetate copolymer : No data available
 - Trade secret substances1 : LD50> 2000 mg / kg experimental species: Rat, Source: OECD SIDS, EU IUCLID
 - Trade secret substances2 : No data available
- 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 : LC50> 1.81 mg / ℓ 4 hr experiment Species: Rat, Source: ECHA registration materials
 - Trade secret substances2 : No data available
- o Skin corrosion/irritation PRODUCT: Not classified
 - Ethylene/vinyl acetate copolymer : No data available
 - Trade secret substances1 : There is only a very slight irritation: Rabbit, recovered within 7 days, Source: OECD TG404, OECD SIDS
 - Trade secret substances 2 : Probability of MOD / SEV = 0.283, Source: TOPKAT; Skin Irritation
- o Serious eye damage/eye irritation PRODUCT : Not classified
 - Ethylene/vinyl acetate copolymer : No data available
 - Trade secret substances1 : Irritation: test stimulation index: 4/110, Source: EU IUCLID
 - Trade secret substances2 : Prob. of SEV Ocular Irritancy = 0.003, Source: TOPKAT; Ocular Irritancy SEV vs MOD
- Respiratory sensitization PRODUCT : Not classified
 - Ethylene/vinyl acetate copolymer : No data available
 - Trade secret substances1 : No data available



- Trade secret substances2 : No data available

O Skin sensitization PRODUCT: Not classified

- Ethylene/vinyl acetate copolymer : No data available

- Trade secret substances1 : Guinea Pig: 3 weeks 3 intradermal injection, using 20 animals, no emotional reaction, Source: OECD SIDS

- Trade secret substances2 : No data available

o Carcinogenicity PRODUCT : Not classified

- Ethylene/vinyl acetate copolymer : No data available

- Trade secret substances1 : No data available

- Trade secret substances2 : No data available

o Germ cell mutagenicity PRODUCT : Not classified

- Ethylene/vinyl acetate copolymer : No data available

- Trade secret substances1: 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
- Trade secret substances2 : Computed Probability of Mutagenicy = 0.069, Source: TOPKAT; Ames Mutagenicity
- Reproductive toxicity PRODUCT : Not classified
 - Ethylene/vinyl acetate copolymer : No data available
 - Trade secret substances1: 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
 - Trade secret substances2 : No data available
- o 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: 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
 - Trade secret substances2 : No data available
- \circ 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 : LC50 100 mg / ℓ 96 hr Lepomis macrochirus (), Source: NCIS existing chemical safety testing
 - Trade secret substances2 : No data available
- Crustacea>PRODUCT : Not classified
 - Ethylene/vinyl acetate copolymer : No data available
 - Trade secret substances1 : EC50 100 mg / ℓ 24 hr Daphnia magna (), Source: NCIS existing chemical safety testing
 - Trade secret substances2 : No data available
- Aquatic algae>PRODUCT : Not classified
 - Ethylene/vinyl acetate copolymer : No data available
 - Trade secret substances1 : ErC50> 30 mg / ℓ 72 hr Scenedesmus subspicatus (), Source: Directivw 87/302/EEC, GLP . IUCLID
 - Trade secret substances2 : No data available
- 2) Persistence and degradation
 - n-octanol water partition coefficient>PRODUCT : Not classified
 - Ethylene/vinyl acetate copolymer: (Not applicable)
 - Trade secret substances1 : 13.41 log Kow ((estimated))
 - Trade secret substances2: 13.55 log Kow (), Source: Ecological Structure Activity Relationships(ECOSAR)
 - 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 : 39 (%) \sim 21 (%) 28 day (), Source: OECD TG 301 C . OECD SIDS
 - Trade secret substances2 : (Cut-off value = 0.5820; recalcitrant (BIOWIN 6)), Source: EPI Suite
- 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 : ≤12 (carp (Cyprinus carpio) 6 Day 12 than at 0.05mg / L), Source: CERI
 - Trade secret substances2: 8.2 (), Source: Ecological Structure Activity Relationships(ECOSAR)





4) Mobility in soil>PRODUCT: Not classified

- Ethylene/vinyl acetate copolymer: No data available

- Trade secret substances1 : No data available

- Trade secret substances2: 8.369 (), Source: Quantitative Structure Activity Relation(QSAR)

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)

- Do not allow spill material to enter sewers, storn water drains, soil, etc.

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

 \cdot 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 fluori

Not applicable



16. OTHER INFORMATION

- 1) Reference
 - CERI
 - Directivw 87/302/EEC, GLP . IUCLID
 - ECHA registration materials
 - EPI Suite
 - EU CLP
 - EU IUCLID
 - Ecological Structure Activity Relationships(ECOSAR)
 - NCIS existing chemical safety testing
 - OECD SIDS
 - OECD SIDS, EU IUCLID
 - OECD TG 301 C . OECD SIDS
 - OECD TG404, OECD SIDS
 - OECD TG423, Ministry of existing chemical safety testing (2001-2004)
 - Quantitative Structure Activity Relation(QSAR)
 - TOPKAT; Ames Mutagenicity
 - TOPKAT; Ocular Irritancy SEV vs MOD
 - TOPKAT;Skin Irritation
- 2) Print date: 2022-06-29
- 3) Revision date
 - O Revised date count: 1
 - o Last revised date: 2022-07-01
 - o Last revised history : Update request
- 4) Other