

SAFETY DATA SHEET

Date Printed: January 5, 2024 Version: 2 Regulation: According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

1. Identification

1.1 Product identifier

1.1.1 Product name: EVA1122, EVA1125, EVA1157, EVA1158, EVA1159, EVA1214, EVA1218, EVA1315, EVA1316, EVA1317, EVA1326, EVA1328, EVA1333, EVA1334, EVA1340, EVA1519, EVA1520, EVA1528, EVA1529, EVA1533, EVA1540, EVA1625, EVA1626, EVA1628, EVA1629, EVA1631, EVA1815, EVA1828, EVA1833, EVA1834, EVA2020, EVA2030, EVA2031, EVA2040, EVA2041, EVA2050, EVA2051, EVA2060, EVA2240, EVA2250, EVA2315, EVA2319, EVA2815, EVA4318, EVA4322, EVA4325, EVA4326, EVA4328, EVA4333, EVA4340, EVA1918MED, EVA1928MED, EVA1931MED, EVA2910MED **1.1.2 Other means of identification:** EVA

1.2 Recommended use of the chemical and restrictions on use

1.2.1 Recommended use: It is used for industrial resin

1.2.2. Restrictions on use: Do not use for purposes other than those recommended

1.3 Details of the supplier of the safety data sheet

1.3.1 Manufacturer

Company name: Hanwha Solutions Co, Ltd. Address: Ulsan plant, Hanwha Solutions Co, 141 Sanggae-ro, Nam-gu, Ulsan, Korea Yeosu plant, Hanwha Solutions Co, Ltd., 117, Yeosusandan 3-ro, Yeosu-si, Jeollanam-do, Korea Prepared by: Ulsan PE Production Team, PE Production 1 Team Contact Telephone: +82-52-279-2201, Fax: +82-52-279-2204 +82-61-688-1681, Fax: +82-61-688-1680

1.3.2 Supplier&Distributor

Company name: Hanwha Solutions Co, Ltd. Address: Hanwha Bldg., Janggyo-dong, Jung-gu, Seoul, Korea Prepared by: PO Global Business Team Contact Telephone: +82-2-729-3819

1.4 Emergency phone number

Emergency phone: +82-52-279-2201, +82-61-688-1681

2. Hazard(s) identification

2.1 Classification of the substance or mixture

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

Physical / Chemical Hazards: Not classified

Health Hazards: Not classified

Environmental Hazards: Not classified

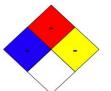
2.2 Label elements, including precautionary statements

- o Pictogram and symbol: Not applicable
- o Signal word: Not applicable
- o Hazard statements: Not applicable



- o Precautionary statements: Not applicable
 - Prevention: Not applicable
 - Response: Not applicable
 - Storage: Not applicable
 - Disposal: Not applicable

2.3 Other hazard information not included in hazard classification (National Fire Protection Association; NFPA)



o Health: o Flammability: o Reactivity: o Specific hazard: -

3. Composition/information on ingredients

Component	Common name and synonyms	CAS No.	Conc. / %
Ethylene Vinyl Acetate Copolymer	Ethylene-vinyl acetate (EVA)	24937-78-8	> 99.5
Additive	Not applicable	Not applicable	< 0.5

4. First-aid measures

4.1 Description of first aid measures

Eye contact

- In case of contact with substance, immediately flush eyes with running water at least 20 minutes.
- Do not rub your eyes.

Skin contact

- In case of contact with substance, immediately flush skin with running water at least 20 minutes.
- Remove and isolate contaminated clothing and shoes.
- Wash contaminated clothing and shoes before reuse.
- Get immediate medical advice/attention.

Inhalation

- Specific medical treatment is urgent.
- Move victim to fresh air.
- Give artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- Loosen tight clothing such as a collar, tie, belt or waistband.

Ingestion

- Do not let him/her eat anything, if unconscious.
- Get immediate medical advice/attention.
- Do not induce vomiting unless directed to do so by medical personnel.
- Wash out mouth and water.

4.2 Most important symptoms and effects, both acute and delayed



- None known

4.3 Indication of immediate medical attention and notes for physician

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

5. Fire-fighting measures

5.1 Extinguishing media

- Suitable extinguishing media: Dry sand, dry chemical powder, alcohol-resistant foam, water spray, regular foam, CO₂

- Unsuitable extinguishing media: High Pressure Water streams

5.2 Specific hazards arising from the chemical

- May be ignited by heat, sparks or flames.
- Containers may explode when heated.
- Some of these materials may burn, but none ignite readily.
- Fire will produce irritating and/or toxic gases.
- If inhaled, may be harmful.

5.3 Special protective equipment and precautions for fire-fighters

- Dike fire-control water for later disposal; do not scatter the material.
- Move containers from fire area if you can do it without risk.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- Eliminate all ignition sources.
- Stop leak if you can do it without risk.
- Ventilate the area.
- Do not touch or walk through spilled material.
- Prevent dust cloud.

6.2 Environmental precautions

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

6.3 Methods and materials for containment and cleaning up

- With clean shovel place material into clean, dry container and cover loosely; move containers from spill area.
- Small Spill; Flush area with flooding quantities of water. And take up with sand or other non-combustible absorbent material and place into containers for later disposal.
- Large Spill; Dike far ahead of liquid spill for later disposal.

7. Handling and storage

7.1 Precautions for safe handling

- Wash your hands thoroughly after handling.
- Please work with reference to engineering controls and personal protective equipment.
- Be careful to high temperature.



7.2 Conditions for safe storage, including any incompatibilities

- Store in a closed container.
- Store in cool and dry place.

8. Exposure controls/personal protection

8.1 Occupational Exposure limits

- **o ACGIH regulation**: Not applicable
- o Biological exposure index: Not applicable
- o OSHA regulation: Not applicable
- o NIOSH regulation: Not applicable
- **o EU regulation**: Not applicable
- o Other: Not applicable

8.2 Exposure controls

Appropriate engineering controls

- Provide local exhaust ventilation system or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.

Individual protection measures, such as personal protective equipment

Respiratory protection

- Use respirators and components tested and approved under appropriate government standards such as NIOSH

Eye protection

- Wear facepiece with goggles to protect.
- An eye wash unit and safety shower station should be available nearby work place.

Hand protection

- Wear appropriate protective gloves by considering physical and chemical properties of chemicals.

Body protection

- Wear appropriate protective clothing by considering physical and chemical properties of chemicals.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	
Description:	Solid
Color:	Not available
Odor:	Not available
Odor threshold:	Not available
pH:	Not available
Melting point/freezing point:	60°C~105°C
Initial boiling point and boiling range:	Not available
Flash point:	>270 ℃
Evaporation rate:	Not applicable
Flammability (solid, gas):	Not available
Upper/lower flammability or explosive limits:	Not available
Vapor pressure:	Not applicable
Vapor density:	Not available



Relative density:	0.92~0.95g/cm3(25℃)
Solubility:	Not available
Partition coefficient: n-octanol/water:	Not available
Auto-ignition temperature:	400°C
Decomposition temperature:	Not available
Viscosity:	Not available
Molecular weight	Hundreds of thousands g/mol

"NOTE: The physical data presented above are typical values and should not be construed as a specification"

10. Stability and reactivity

10.1 Reactivity/Chemical stability/Possibility of hazardous reactions

- Stable at normal temperatures and pressure
- Fire may produce irritating and/or toxic gases.
- If inhaled, may be harmful.

10.2 Conditions to avoid

- Keep away from heat/sparks/flames.

10.3 Incompatible materials

- strong oxidizing agent, amine

10.4 Hazardous decomposition products

- Irritating and/or toxic gases, carbon monoxide, co2, acetic acid

11. Toxicological information		
Information on toxicological effects		
(a) Acute toxicity		
Oral	Not available	
Dermal	Not available	
Inhalation	Not available	
(b) Skin Corrosion/ Irritation	Not available	
(c) Serious Eye Damage/ Irritation	Not available	
(d) Respiratory sensitization	Not available	
(e) Skin Sensitization	Not available	
(f) Carcinogenicity	Not available	
(g) Mutagenicity	Not available	



(h) Reproductive toxicity	Not available
(i) Specific target organ toxicity (single exposure)	Not available
(j) Specific target organ toxicity (repeat exposure)	Not available
(k) Aspiration Hazard	Not available

12. Ecological information	
12.1 Toxicity	
Acute toxicity	Not available
Chronic toxicity	Not available
12.2 Persistence and degradability	Not available
12.3 Bioaccumulative potential	Not available
12.4 Mobility in soil	Not available
12.5 Hazardous to the ozone layer	Not classified
12.6 Other adverse effects	Not available

13. Disposal considerations

13.1 Disposal method

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

13.2 Disposal precaution

Consider the required attentions in accordance with waste treatment management regulation.

14. Transport information

14.1 UN No.: Not applicable

14.2 UN Proper shipping name: Not applicable

14.3 Transport Hazard classes:

ADR: Not applicable IMDG: Not applicable ICAO/IATA: Not applicable RID: Not applicable



14.4 Packing group: Not applicable

14.5 Environmental hazards: Not applicable

14.6 Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code): Not established

- 14.7 Special precautions for user
 - in case of fire: Not applicable in case of leakage: Not applicable

15. Regulatory information

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

USA Regulatory Information

TSCA (Toxic Substances Control Act): Section8 (b) inventory(Present) [XU]

Proposition 65: Not regulated

OSHA Regulation: Not regulated

CERCLA Regulation: Not regulated

SARA 302 Regulation: Not regulated

SARA 304 Regulation: Not regulated

SARA 313 Regulation: Not regulated

Foreign Regulatory Information

Substance of Rotterdam Protocol: Not regulated Substance of Stockholm Protocol: Not regulated Substance of Montreal Protocol: Not regulated

Foreign Inventory Status

- Korea management information: Existing Chemicals Substance (KE-00037)
- Japan management information: Existing and New Chemical Substances (ENCS): Present ((6)-6, (6)-82)
- China management information: Inventory of Existing Chemical Substances (IECSC): Present (39322)
- Australia management information: Australian Inventory of Chemical Substances (AICS): Present
- Canada management information: Domestic Substances List (DSL): Present
- New Zealand management information: New Zealand Inventory of Chemicals (NZIoC): May be used as a single component chemical under an appropriate group standard
- Philippines management information: Philippine Inventory of Chemicals and Chemical Substances (PICCS): Present

16. Other information, including date of preparation or last revision

16.1 Indication of changes

Preparation date: April 27, 2020 Version: 2 Revision date: January 5, 2024

16.2 Key literature reference and sources for data

o National chemicals information systems; http://ncis.nier.go.kr



- o Pubchem; http://pubchem.ncbi.nlm.nih.gov/
- o AKRON; http://ull.chemistry.uakron.edu/erd/
- O IARC Monographs on the Evaluation of Carcinogenic Risks to Humans; http://monographs.iarc.fr
- o NIOSH(The National Institute for Occupational Safety and Health)
- o ACGIH(American Conference of Governmental Industrial Hygienists)
- o TOMES-LOLI®; http://www.rightanswerknowledge.com/loginRA.asp
- National Emergency Management Agency-Korea dangerous material inventory management system; http://hazmat.mpss.kfi.or.kr/index.do
- o Waste Control Act enforcement regulation attached [1]

16.3 Abbreviations

ACGIH: American Conference of Governmental Industrial hygienists

NIOSH: The National Institute for Occupational Safety and Health

OSHA: Occupational Safety & Health Administration

IARC: International Agency for Research on Cancer

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

ICAO/IATA: International Civil Aviation Organization/ International Air Transport Association

RID: Regulations Concerning the International Transport of Dangerous Goods by Rail

16.4 Others

- Product should be handled, stored, and used in accordance with the generally accepted industrial hygiene practices and in conformity with all the applicable legal regulations.
- The information provided herein is based on the knowledge possessed at this present time from the view point of safety requirements.
- It should, therefore, not be construed as guaranteeing specific properties.