

SAFETY DATA SHEET

Date Printed:

Version: 4

Revision date: January 5, 2024

Regulation: In accordance with Commission Regulation (EU) 2020/878

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

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

EC No.: -

REACH Registration No.: -

CAS No.: 24937-78-8

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

1.2.1. Identified Uses

- It is used for industrial resin

1.2.2. Recommended use

- It is used for industrial resin

1.2.3. 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, Ltd., 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

Fax: +82-2-729-3000

Email Address: pce0910@hanwha.com

1.4. Emergency telephone number

Emergency Telephone: +49-6169-5016 / +82-2-729-3819

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 (CLP)

Physical / Chemical Hazards: Not classified

Health Hazards: Not classified

Environmental Hazards: Not classified

2.2 Label elements

- o **Hazard pictograms:** Not applicable
- o **Signal word:** Not applicable
- o **Hazard statement:** Not applicable
- o **Precautionary statements:** Not applicable

2.3 Other hazards

- **Additional precautionary statements:** Not applicable
- **National Fire Protection Association (NFPA)**
 - Health:** Not available
 - Flammability:** Not available
 - Reactivity:** Not available

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances:

Component	CAS No.	EC No.	Conc. / %	Classification according to 1272/2008/EEC	SCL/ M-factor/ ATE	Registration No.
Ethylene Vinyl Acetate Copolymer	24937-78-8	-	>99.5	Not classified	-	01-2119462827-27-0000 01-2119471301-50-0000

***Under EU REACH regulation, monomers in Polyethylene copolymer are registered.**

3.2 Mixtures: Not applicable

4. FIRST AID MEASURES

4.1 Description of first aid measures

- 4.1.1. General information:** Remove soiled or soaked clothing immediately, do not allow to dry. Adhere to personal protective measures when giving first aid. Clean body thoroughly (Bad, shower).
- 4.1.2. Following 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.
- 4.1.3. Following 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.
- 4.1.4. Following eye contact:** In case of contact with substance, immediately flush eyes with running water at least 20 minutes. Do not rub your eyes.
- 4.1.5. Following 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.
- 4.1.6. Self-protection of the first aider:** First aider: Pay attention to self-protection!

4.2 Most important symptoms and effects, both acute and delayed:

- Symptoms and effects: None known.

4.3 Indication of any immediate medical attention and special treatment needed:

- 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 substance or mixture

- 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 Advice for firefighters

- 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**6.1.1 For non-emergency personnel**

- Stop leak if you can do it without risk.
- Do not touch or walk through spilled material.

6.1.2 For emergency responders

- Eliminate all ignition sources.
- Ventilate the area.
- Prevent dust cloud.
- For further information refer to section 8.2.

6.2 Environmental precautions

- Prevent entry into water ways, sewers, basements or confined areas.

6.3 Methods and material 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.

6.4 Reference to other sections

- If appropriate, Section 8 and 13 shall be referred to.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

- Storing plastic dust that has undergone polymerization process or during abnormal operation, there is a high risk of ignition, so it is necessary to monitor the temperature inside the dust during the process. In case of abnormal operation, completely remove dust or manage ignition sources.
- Although plastic dust has a large average particle size, the proportion of fine dust with a particle size of several μm is very high and the specific gravity is small, so it is easy to generate suspended dust in the air. Also, be careful about the risk of ignition or explosion because the ignition energy is small.
- The lower explosive limit concentration of plastic dust is 50g/m³ or less, so the possibility of fire and explosion is high, so manage the dust concentration when handling or using dust.
- 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.

7.3 Specific end use(s)

- Recommendations shall relate to the identified use(s) referred to in subsection 1.2 and be detailed and operational.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters
Occupational Exposure limits

- o **EU regulation:** Not applicable
- o **U.S regulation:**
 - NIOSH: Not applicable
 - OSHA: Not applicable
- o **ACGIH:** Not applicable
- o **Biological exposure index:** Not applicable
- o **Others:** Not applicable
- o **DNELs, PNECs:** Not applicable

8.2 Exposure controls
Appropriate engineering controls:

- Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

Individual protection measures, such as personal protective equipment:
Respiratory protection:

- Wear European Standard type P1(EN 143) approved dust mask respiratory protective equipment when necessary.

Eye protection:

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

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.

Thermal hazards:

- If appropriate, Section 5.3 shall be referred to.

Environmental exposure controls: Not available

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties
Appearance

Physical state:	Solid
Color:	White (Colorless)
Odor:	Sour
Odor threshold:	Not available
pH:	Not available
Melting point/freezing point:	60°C~105°C
Boiling point or initial boiling point and boiling range:	Not available
Flash point:	>270 °C

Evaporation rate:	Not applicable
Flammability (solid, gas):	Not available
Upper/lower flammability or explosive limits:	Not available
Vapour pressure:	Not applicable
Vapour density:	Not available
Density and/or relative density:	0.92~0.95g/cm ³ (25°C)
Solubility(ies):	Not available
Partition coefficient: n-octanol/water:	Not available
Auto-ignition temperature:	400°C
Decomposition temperature:	340°C
Viscosity:	Not available
Kinematic viscosity:	Not available
Explosive properties:	Not available
Oxidizing properties:	Not available
Molecular weight:	Hundreds of thousands g/mol
Specific gravity:	Not available
Particle characteristics (solid):	Not available
Particle Size (Polymer compound):	Not available
Self-accelerated decomposition temperature (Polymer compound):	Not available

9.2 Other information: Not available

10. STABILITY AND REACTIVITY

10.1 Reactivity

- Not available

10.2 Chemical stability

- If inhaled, may be harmful.
- Stable at normal temperatures and pressure.

10.3 Possibility of hazardous reactions

- Fire may produce irritating and/or toxic gases.

10.4 Conditions to avoid

- Keep away from heat/sparks/flames.

10.5 Incompatible materials

- strong oxidizing agent, amine

10.6 Hazardous decomposition products

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

11. TOXICOLOGICAL INFORMATION

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008	
(a) Acute toxicity	Not available
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 classified
	IARC, NTP, OSHA, ACGIH, EU CLP 1272/2008: not listed
(g) Germ cell 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
11.2 Information on other hazards	
11.2.1 Endocrine disrupting properties	Not available
11.2.2 Other information	Not available

12. ECOLOGICAL INFORMATION

12.1 Toxicity	Not available
Acute toxicity	Not available
Chronic toxicity	Not available
12.2 Persistence and degradability	Persistence: Not available Degradability: Not available
12.3 Bioaccumulative potential	Bioaccumulation: Not available Biodegradation: Not available
12.4 Mobility in soil	Not available
12.5 Results of PBT and vPvB assessment	Not available
12.6 Endocrine disrupting properties	Not available
12.7 Other adverse effects	Not available
12.8 Additional information	Not available

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.

13.1.1 Product/Packaging disposal

- No waste key number as per the European Waste Types List can be assigned to this product, since such classification is based on the (as yet undetermined) use to which the product is put by the consumer.
- The waste key number must be determined as per the European Waste Types List (decision on EU Waste Types List 2000/532/EC) in cooperation with the disposal firm/producing firm/official authority.

13.1.2 Waste treatment-relevant information

Waste must be disposed of in accordance with directive 2008/98/EC.

13.1.3 Sewage disposal-relevant information

Release to the environment or sewage system is prohibited. Must be treated as hazardous waste.

13.1.4 Other disposal recommendations: Not available

14. TRANSPORT INFORMATION

14.1 UN No.: Not applicable

14.2 UN Proper shipping name: Not applicable

14.3 Transport Hazard class

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 Special precautions for user

in case of fire: Not applicable

in case of leakage: Not applicable

14.7 Maritime transport in bulk according to IMO instruments: Not applicable

15. REGULATORY INFORMATION

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

EU Regulatory Information

EU classification

EU 1272/2008(CLP)

Classification: Not classified

Risk phrases: Not classified

Safety phrases: Not classified

EU SVHC list: Not regulated

EU Authorization list: Not regulated

EU Restriction list: Not regulated

Waste Framework Directive 2008/98/EC: Not regulated

Foreign Inventory Status

- Korea management information: Existing Chemical Substance (KE-00037)
- U.S.A management information: Section 8(b) Inventory (TSCA): Present [XU]
- China management information: Inventory of Existing Chemical Substances (IECSC): Present (39322)
- Japan management information: Existing and New Chemical Substances (ENCS): Present ((6)-6, (6)-82)
- Canada management information: Domestic Substances List (DSL): Present
- Australia management information: Australian Inventory of Chemical Substances (AICS): 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: Philippines Inventory of Chemicals and Chemical Substances (PICCS): Present

15.2 Chemical safety assessment: Not available

16. OTHER INFORMATION

Product safety data sheet for prepared in accordance with Commission Regulation (EU) 2020/878

16.1 Indication of changes:

- Preparation date: April 27, 2020
- Version: 4
- Revision date: January 5, 2024

16.2 Key literature reference and sources for data:

National chemicals information systems; <http://ncis.nier.go.kr>
 Pubchem; <http://pubchem.ncbi.nlm.nih.gov/>
 AKRON; <http://ull.chemistry.uakron.edu/erd/>
 IARC Monographs on the Evaluation of Carcinogenic Risks to Humans; <http://monographs.iarc.fr>
 ECHA; <http://echa.europa.eu/registration-dossier/-/registered-dossier/15859>
 OECD SIDS; <http://webnet.oecd.org/>
 HSDB; <http://toxnet.nlm.nih.gov/>
 NIOSH (The National Institute for Occupational Safety and Health)
 ACGIH (American Conference of Governmental Industrial Hygienists)
 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>
 Waste Control Act enforcement regulation attached [1]
 EPISUITE Program ver.4.1

16.3 Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008(CLP):

Classification according to Regulation (EC) 1272/2008 (CLP)	Classification procedure
-	-

16.4 Abbreviations

EC₅₀: median effective concentration
 LC₅₀: median lethal concentration
 LD₅₀: median lethal dose
 OEL: Occupational exposure limit
 PBT: Persistent, bioaccumulative, toxic chemical
 STEL: short-term exposure limit
 TWA: time weighted average
 vPvB: very persistent, very bioaccumulative chemical
 EWC: the European Waste Code
 SCL: Specific concentration limit
 M-factor: Multiplication factor
 ATE: Acute toxicity estimate

16.5 Other

- 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.