1. Identification of the Material and Company

Chemical Name: ETHYLENE-VINYL ACETATE COPOLYMER
Trade Name: EVATHENE®
Synonyms: ETHYLENE-VINYL ACETATE COPOLYMER RESINS, EVA

Main Applications: Each EVA has its individual application such as foaming, film extrusion, injection molding, hot melt adhesive, binders used in ink, solar cell encapsulation... etc.

Please refer to the TDS (Technical Data Sheet) for the detailed information.

Supplier Name: USI Corporation
Address: NO. 330, FENGEN RD., RENWU DIST., KAOSHIUNG, TAIWAN/TEL:+886-2-8751-6888
Emergency phone Number/FAX : +886-2-87516888 /FAX:+886-3-318-7229

2. Hazardous Identification

Not a hazardous substance or mixture
Classification according to Regulation GHS: None
Classification according to Regulation (EC) No 1272/2008[CLP]: None
Contents of label: None
Other Hazards: None
Results of PBT and vPvB assessment: This information is not required.

3. Composition/Information on Ingredients

Pure substance:

<table>
<thead>
<tr>
<th>Chinese and English Chemical name</th>
<th>Ethylene-Vinyl Acetate Copolymer</th>
<th>Vinyl Acetate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Synonyms</td>
<td>Ethylene-Vinyl Acetate Copolymer resins, EVA</td>
<td>Vinyl Acetate Monomer, VAM</td>
</tr>
<tr>
<td>Chemical Abstracts Service No. (CAS No.)</td>
<td>24937-78-8</td>
<td>108-05-4</td>
</tr>
<tr>
<td>REACH registration number</td>
<td>01-2119471301-50-xxxx</td>
<td>01-2119471301-50-xxxx</td>
</tr>
<tr>
<td>Ingredient percent (%)</td>
<td>&gt;99</td>
<td>&lt;0.5</td>
</tr>
<tr>
<td>The hazardous ingredients (% of the content)</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

Mixture:

Chemical properties:

<table>
<thead>
<tr>
<th>Chinese and English names of the hazardous</th>
<th>CAS No.</th>
<th>Ingredient percent %</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

4. First Aid Measures

The first aid measures for different exposure routes:

● Inhalation: Supply fresh air. Get medical attention.
● Skin Contact: If contact with molten material, immediately immerse contacted area with cold water. Don't attempt to peel off the molten material from skin. Get medical attention.
● Eye Contact: Flush eyes with plenty of water for several minutes. Seek medical advice if pain persists.
● Ingestion: Get medical attention.
Major Symptom And Harm Effect: None
First-Aid Personal Protection: No need
Notes to physician: expatiate symptom or phenomenon of the patient.
5. Fire Fighting Measures

Suitable Extinguishing Media: Water, carbon dioxide, dry chemical
Hazardous Combustion Products: Carbon monoxide (CO), Carbon dioxide (CO2)
Special Extinguishing Procedure:
1. Stand on the up-wind side, then apply fire extinguisher to cover the fire area thoroughly.
2. If possible, remove the remaining pellets or goods to a safe location.
Appropriate protective fire fighting clothing and respirator are necessary for firefighters.

6. Accidental Release Measures

Personal Protection: It may be slippery.
Environmental Protection: Do not flush into surface water or sanitary sewer system.
Methods For Cleaning Up: Stop leak and shovel into container for disposal.

7. Handling And Storage

Handling: Before using, read the Product Data Sheet. Use in well-ventilated area.
Storage: Keep in a dry, cool place. Do not store in heat or direct sunlight.
Keep container tightly closed when not being used.
Specific end uses: None

8. Exposure Control / Personal Protection

Engineering Control: Ventilated area to prevent accumulation of fumes.
Control Factor:
● 8 hours time average exposure limits/Short-term exposure limits/maximum exposure limits:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>PEL - Permissible exposure limit</th>
<th>Regulation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vinyl Acetate</td>
<td></td>
<td>Cal / OSHA</td>
</tr>
<tr>
<td>Ethylene-Vinyl Acetate</td>
<td></td>
<td>USA - OSHA</td>
</tr>
</tbody>
</table>

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<th>Chemical Name</th>
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<tbody>
<tr>
<td>Ethylene-Vinyl Acetate</td>
<td></td>
<td>USA - OSHA</td>
</tr>
</tbody>
</table>

Environmental exposure controls: No special environmental precautions required
● Biological standard: N/A

Personal Protection Equipment:
● Respiratory Protection: Use dust-proof mask.
● Hand Protection: Use rubber gloves. Use thermal resistant gloves, when needed.
● Eye Protection: Use safety goggles, when fumes is present.
● Skin & Body Protection: Long sleeve lab coats and gloves to protect skin exposure.
Hygiene Procedures: None
**9. Physical and Chemical Properties / Characteristics**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance (physical, color, etc.)</td>
<td>Translucent white solid pellets</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No applicable data available.</td>
</tr>
<tr>
<td>Odor</td>
<td>Negligible</td>
</tr>
<tr>
<td>Melting Point</td>
<td>40 ~ 100°C</td>
</tr>
<tr>
<td>PH value</td>
<td>No applicable data available.</td>
</tr>
<tr>
<td>Inflammability</td>
<td>No applicable data available.</td>
</tr>
<tr>
<td>Flash Point</td>
<td>No applicable data available.</td>
</tr>
<tr>
<td>Boiling Point/Boiling Range</td>
<td>No applicable data available.</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>No applicable data available.</td>
</tr>
<tr>
<td>Test Method (Open Cup or Close Cup)</td>
<td>No applicable data available.</td>
</tr>
<tr>
<td>Autoignition Temperature</td>
<td>&gt;300°C</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>No applicable data available.</td>
</tr>
<tr>
<td>Density</td>
<td>0.92 ~ 0.97</td>
</tr>
<tr>
<td>Solubility In Water</td>
<td>Insoluble</td>
</tr>
<tr>
<td>Partition coefficient (n-octanol/water, log Kow)</td>
<td>No applicable data available.</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No applicable data available.</td>
</tr>
</tbody>
</table>

**10. Stability and Reactivity**

Reactivity: Stable under normal conditions of handling, use and transportation.

Stability: Stable

Special Conditions Of Hazardous Reaction: Not applicable.

Conditions To Avoid: Avoid heating above the recommended processing temperature.

Incompatibility: might react with strong oxidant.

Hazardous Decomposition Products: CO, CO2, Acetic Acid, Vinyl Acetate.

**11. Toxicological Information**

Routes of exposure: Inhalation, ingestion, eyes, skin contact

Immediate effects:

Chemical Name: Vinyl Acetate

- Eye: slight irritation, rabbit
- Inhalation: slight irritation.
- Skin Contact: slight irritation, rabbit
- Ingestion: Essentially non-toxic based on components.

Chemical Name: Ethylene-Vinyl Acetate Copolymer

- Eye: No eye irritation
- Inhalation: No data available.
- Skin Contact: No skin irritation
- Ingestion: Essentially non-toxic based on components.

Other:

- Carcinogenicity
- Vinyl Acetate: Suspected human carcinogens

Ethylene-Vinyl Acetate Copolymer: No data available.

- Acute toxicity, Chronic toxicity or Long-term toxicity data are not available.
### 12. Ecological Information

**Ecological Toxicity:** Difficult to biodegrade. It can be recycled with appropriate technologies.

**Sustainable and De-toxic:** hard to naturally degrade.

**Ecologic Accumulation:** None

**Liquidity in Soil:** None

**Results of PBT and vPvB assessment:** This information is not required.

**Other poor Effect:** Improper burning may generate hazardous gas.

### 13. Disposal Information

Disposal Information: Dispose of waste material at an approved waste incineration facility in accordance with applicable regulations.

### 14. Transport Information

Not classified as dangerous in the meaning of transport regulations.

- **The United Nations Number (UN-No):** Not regulated
- **The United Nations Shipping Name:** Not regulated
- **D.O.T. Hazard Class:** Not regulated as a hazardous for transportation.
- **Package Category:** Not regulated
- **Maritime Pollutants:** Not regulated
- **Special Transport Way And Note:** Not regulated

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: Not applicable.

**International Regulatory For Transport:**

This material is not considered hazardous according to The General Rule for Classification and Hazard Communication of Chemicals (RIR-ADR, IMO, IATA, IMDG, FS A11).

### 15. Regulatory Information

Ethylene-Vinyl Acetate Copolymer (CAS#24937-78-8) is listed in the following chemical inventories:

- Australian - AICS
- Canada - DSL
- Chinese - Chinese Inventory of Existing Chemical Substances
- European EINECS are exempt from the listings, all monomers are listed.
- Japan - ENCS
- New Zealand - NZIoC
- Philippines - PICCS
- USA - TSCA
- Taiwan - Taiwan’s chemical substance inventory (TCSI)
### 16. Other Information

<table>
<thead>
<tr>
<th>Abbreviation and Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cal / OSHA</td>
<td>California Division of Occupational Safety and Health</td>
</tr>
<tr>
<td>CAS</td>
<td>Chemical Abstracts Service (division of the American Chemical Society)</td>
</tr>
<tr>
<td>CLP</td>
<td>Classification, Labelling and Packaging</td>
</tr>
<tr>
<td>D.O.T.</td>
<td>Department of Transportation</td>
</tr>
<tr>
<td>GHS</td>
<td>Globally Harmonized System of Classification and Labelling of Chemicals</td>
</tr>
<tr>
<td>IBC Code</td>
<td>International Bulk Chemical Code</td>
</tr>
<tr>
<td>MARPOL</td>
<td>International Convention for the Prevention of Pollution from Ships</td>
</tr>
<tr>
<td>PBT</td>
<td>Persistent, bioaccumulative and toxic</td>
</tr>
<tr>
<td>PEL</td>
<td>Permissible exposure limit</td>
</tr>
<tr>
<td>TLV-C</td>
<td>Threshold Limit Values-Ceiling exposure limit</td>
</tr>
<tr>
<td>TLV-STEL</td>
<td>Threshold Limit Values-Short Time Exposure Limit</td>
</tr>
<tr>
<td>TLV-TWA</td>
<td>Threshold Limit Values-Time Weighted Average</td>
</tr>
<tr>
<td>USA-OSHA</td>
<td>Occupational Safety and Health Administration</td>
</tr>
<tr>
<td>vPvB</td>
<td>Very Persistent and very Bioaccumulative</td>
</tr>
</tbody>
</table>

Reference: None

Producer: USI Corporation

Addresses No. 9, Dinghu 5th St., Guishan Dist., Taoyuan City 333, Taiwan

Phone Number: +886-2-8751-6888

Person who prepared the SDS: R & D Division

Date that the SDS was prepared: 2020/10/21

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification.