

## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 15.09.2022

Version number 2

Revision: 15.09.2022

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

- **1.1 Product identifier**
- **Trade name:** UVPSA-10J UV-PSA Screenprint Spacer Adhesive
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
- **Sector of Use** SU16 Manufacture of computer, electronic and optical products, electrical equipment
- **Application of the substance / the mixture** UV-PSA Screenprint Spacer Adhesive
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
 Kayaku Advanced Materials, Inc.  
 200 Flanders Road  
 Westborough, MA 01581  
 Tel: (617) 965-5511  
 Fax: (617) 965-5818
- **Further information obtainable from:**  
 Product Safety  
 Email: [productsafety@kayakuAM.com](mailto:productsafety@kayakuAM.com)
- **1.4 Emergency telephone number:**  
 Kayaku Advanced Materials : 617-965-5511  
 Chemtrec USA Emergency : 800-424-9300 (24 hr)  
 Chemtrec International Emergency : 703-527-3887 (24 hr)

### SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



GHS07

- |              |   |
|--------------|---|
| Acute Tox. 4 | H302 Harmful if swallowed.                |
| Acute Tox. 4 | H312 Harmful in contact with skin.        |
| Skin Sens. 1 | H317 May cause an allergic skin reaction. |

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Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

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- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**  
 The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms**



GHS07

- **Signal word** Warning
- **Hazard-determining components of labelling:**  
 Photosensitive Monomer  
 Photosensitive Resin
- **Hazard statements**  
 H302+H312 Harmful if swallowed or in contact with skin.  
 H317 May cause an allergic skin reaction.

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H412 Harmful to aquatic life with long lasting effects.

**· Precautionary statements**

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.

P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P304+P341 IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P337+P313 If eye irritation persists: Get medical advice/attention.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

**· 2.3 Other hazards**
**· Results of PBT and vPvB assessment**
**· PBT:** Not applicable.

**· vPvB:** Not applicable.

### SECTION 3: Composition/information on ingredients

**· 3.2 Chemical characterisation: Mixtures**
**· Description:** Mixture of substances listed below with nonhazardous additions.

**· Dangerous components:**

Photosensitive Resin	25-50%
⚠ Skin Sens. 1, H317; Aquatic Chronic 3, H412	
Photosensitive Monomer	25-50%
⚠ Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Sens. 1, H317; Aquatic Chronic 3, H412	
Synthetic Resin	10-25%
⚠ Acute Tox. 4, H302; Acute Tox. 4, H312	

**· Additional Components:**

Photoinitiator	1-5%
Additive	1-5%

**· Additional information:** For the wording of the listed hazard phrases refer to section 16.

### SECTION 4: First aid measures

**· 4.1 Description of first aid measures**
**· After inhalation:**

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

**· After skin contact:**

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

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**· After eye contact:**

Wash eyes immediately with a large amount of water or normal saline, occasionally lifting upper and lower eye lids until no evidence of chemical remains (about 20 minutes). Remove contact lenses if present and easy to remove. Seek immediate medical attention.

**· After swallowing: If symptoms persist consult doctor.****· 4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.**· 4.3 Indication of any immediate medical attention and special treatment needed** Treat symptomatically.**SECTION 5: Firefighting measures****· 5.1 Extinguishing media****· Suitable extinguishing agents:**

Alcohol resistant foam

Fire-extinguishing powder

Carbon dioxide

**· 5.2 Special hazards arising from the substance or mixture** No further relevant information available.**· 5.3 Advice for firefighters****· Protective equipment:** Wear self-contained respiratory protective device.**SECTION 6: Accidental release measures****· 6.1 Personal precautions, protective equipment and emergency procedures**

Ensure adequate ventilation

Wear protective equipment. Keep unprotected persons away.

**· 6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.**· 6.3 Methods and material for containment and cleaning up:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

**· 6.4 Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

**SECTION 7: Handling and storage****· 7.1 Precautions for safe handling**

Ensure good ventilation/exhaust at the workplace.

Keep away from heat and direct sunlight.

**· Information about fire - and explosion protection:**

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

**· 7.2 Conditions for safe storage, including any incompatibilities****· Storage:****· Requirements to be met by storerooms and containers:** No special requirements.**· Information about storage in one common storage facility:** Store away from oxidising agents.**· Further information about storage conditions:**

Store in cool, dry conditions in well sealed containers.

Protect from heat and direct sunlight.

Store receptacle in a well ventilated area.

Protect from UV light.

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 · 7.3 **Specific end use(s)** No further relevant information available.

### SECTION 8: Exposure controls/personal protection

#### · 8.1 Control parameters

 · **Additional information about design of technical facilities:** No further data; see item 7.

#### · **Ingredients with limit values that require monitoring at the workplace:**

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

 · **Additional information:** The lists valid during the making were used as basis.

#### · 8.2 Exposure controls

##### · **Personal protective equipment:**

 · **General protective and hygienic measures:** Wash hands before breaks and at the end of work.

##### · **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

 · **Material of gloves** Nitrile rubber, NBR

##### · **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

##### · **Eye protection:**



Tightly sealed goggles

### SECTION 9: Physical and chemical properties

#### · 9.1 Information on basic physical and chemical properties

##### · **General Information**

##### · **Appearance:**

Form:	Liquid
Colour:	Light yellow
Odour:	acrylic-like
Odour threshold:	Not determined.

· pH-value:	Not determined.
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##### · **Change in condition**

Melting point/freezing point:	Undetermined.
Initial boiling point and boiling range:	> 70 °C

· Flash point:	109 °C
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· Flammability (solid, gas):	Not applicable.
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· Decomposition temperature:	Not determined.
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· <b>Auto-ignition temperature:</b>	Product is not selfigniting.
· <b>Explosive properties:</b>	Product does not present an explosion hazard.
· <b>Explosion limits:</b>	
<b>Lower:</b>	Not determined.
<b>Upper:</b>	Not determined.
· <b>Vapour pressure:</b>	Not determined.
· <b>Density at 20 °C:</b>	0.93 g/cm <sup>3</sup>
· <b>Relative density</b>	Not determined.
· <b>Vapour density</b>	Not determined.
· <b>Evaporation rate</b>	Not determined.
· <b>Solubility in / Miscibility with water:</b>	Fully miscible.
· <b>Partition coefficient: n-octanol/water:</b>	Not determined.
· <b>Viscosity:</b>	
<b>Dynamic:</b>	Not determined.
<b>Kinematic:</b>	Not determined.
· <b>9.2 Other information</b>	No further relevant information available.

### SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability** Stable
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** Polymerisation.
- **10.4 Conditions to avoid**  
 Contact with incompatible materials.  
 Heat, flames and sparks. Extremes of temperature and direct sunlight.  
 Protect from exposure to UV light.
- **10.5 Incompatible materials:** Strong oxidizing agents
- **10.6 Hazardous decomposition products:**  
 Carbon monoxide and carbon dioxide  
 Nitrogen oxides (NO<sub>x</sub>)

### SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity**  
 Harmful if swallowed or in contact with skin.

 · **LD/LC50 values relevant for classification:**
**Synthetic Resin**

Oral	LD50	>300 mg/kg (Rat)
Dermal	LD50	>1,000 mg/kg (Rat)

- **Primary irritant effect:**
- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.

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- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
- **Respiratory or skin sensitisation**  
May cause an allergic skin reaction.
- **Additional toxicological information:**
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

### SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**  
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water  
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

### SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**  
Must not be disposed together with household garbage. Do not allow product to reach sewage system.  
Disposal must be made in accordance with International, National, and regional regulations.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

### SECTION 14: Transport information

- |  |                       |
|--|-----------------------|
| · <b>14.1 UN-Number</b><br>· <b>ADR, IMDG, IATA</b>                          | Not Regulated         |
| · <b>14.2 UN proper shipping name</b><br>· <b>ADR</b><br>· <b>IMDG, IATA</b> | Void<br>Not Regulated |

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- |  |                 |
|--|-----------------|
| · <b>14.3 Transport hazard class(es)</b>   |                 |
| · <b>ADR, ADN, IMDG, IATA</b>  |                 |
| · <b>Class</b>   | Not Regulated   |
| · <b>14.4 Packing group</b>  |                 |
| · <b>ADR, IMDG, IATA</b>   | Not Regulated   |
| · <b>14.5 Environmental hazards:</b>   | Not applicable. |
| · <b>14.6 Special precautions for user</b>                                       | Not applicable. |
| · <b>14.7 Transport in bulk according to Annex II of Marpol and the IBC Code</b> | Not applicable. |
| · <b>UN "Model Regulation":</b>  | Void            |

### SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3

· <b>DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II</b>
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None of the ingredients is listed.
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- **REGULATION (EU) 2019/1148**

· <b>Annex I - RESTRICTED EXPLOSIVES PRECURSORS</b> (Upper limit value for the purpose of licensing under Article 5(3))
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None of the ingredients is listed.
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· <b>Annex II - REPORTABLE EXPLOSIVES PRECURSORS</b>
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None of the ingredients is listed.
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- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Relevant phrases**

H302 Harmful if swallowed.

H312 Harmful in contact with skin.

H317 May cause an allergic skin reaction.

H412 Harmful to aquatic life with long lasting effects.

- **Classification according to Regulation (EC) No 1272/2008**

Art. 9(1) of Regulation (EC) No. 1272/2008 was used for classification purposes.

- **Department issuing SDS:** Product safety department

- **Contact:** Tom Cole, EHS Manager (tcole@kayakuAM.com)

- **Revision History:**

The hazard classification and precautionary statements for the mixture in Section 2 were revised.

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**Abbreviations and acronyms:**

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 4: Acute toxicity – Category 4

Skin Sens. 1: Skin sensitisation – Category 1

Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

-EU-