

## Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Issue date 05/31/2016

Reviewed on 05/31/2016

### 1 Identification

- **Product Identifier**
- **Trade name: RZ-3**
- **Product Number:** Rayzist RZ-3
- **Relevant identified uses of the substance or mixture and uses advised against:**  
Adhesive to bond SR-2000 photo sensitive film to glass, crystal and stone. Advise against: any use not listed above.
- **Product Description**  
RZ-3 is a low viscosity, high tact, water based adhesive that can be easily sandblasted thru.
- **Application of the substance / the mixture:**  
Adhesive should be sprayed with HPLV spray gun on to the surface of a developed and dried sheet of SR-2000 film.
- **Details of the Supplier of the Safety Data Sheet:**
- **Manufacturer/Supplier:**  
Rayzist Photomask, Inc.  
955 Park Center Drive, Vista, CA 92081  
Phone (760) 727-8185  
FAX (760) 727-2986  
www.rayzist.com
- **Emergency telephone number:** Billy Willis (760) 212-3583

### 2 Hazard(s) Identification

- **Classification of the substance or mixture:**



GHS08 Health hazard

Carc. 2 H351 Suspected of causing cancer.

- **Label elements:**
- **GHS label elements**  
The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms:**



GHS08

- **Signal word:** Warning
- **Hazard statements:**  
H351 Suspected of causing cancer.
- **Precautionary statements:**  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P201 Obtain special instructions before use.  
P202 Do not handle until all safety precautions have been read and understood.  
P308+P313 IF exposed or concerned: Get medical advice/attention.  
P405 Store locked up.  
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

(Contd. on page 2)

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- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



- **HMS-ratings (scale 0 - 4)**

HEALTH	0	Health = *0
FIRE	0	Fire = 0
REACTIVITY	0	Reactivity = 0

- **Hazard(s) not otherwise classified (HNOC):** None known

**3 Composition/Information on Ingredients**

- **Chemical characterization: Mixtures**
- **Description:** Mixture: consisting of the following components.

- **Dangerous Components:**

RTECS: AK 0875000	Vinyl Acetate Monomer	≤ 2.5%
	⚠ Flam. Liq. 2, H225; ⚠ Carc. 2, H351; ⚠ Acute Tox. 4, H332; STOT SE 3, H335	

**4 First-Aid Measures**

- **Description of first aid measures:**
- **After inhalation:**  
Generally the product does not irritate with inhalation.  
Supply fresh air; consult doctor in case of complaints.
- **After skin contact:**  
Generally the product does not irritate the skin.  
Wash with soap and water.  
If skin irritation occurs, consult a doctor.
- **After eye contact:**  
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:**  
Rinse out mouth and then drink plenty of water.  
Do not induce vomiting without medical advice.  
If vomiting does occur, repeat fluid administration  
If swallowed and symptoms occur, consult a doctor.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed:** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed:**  
No further relevant information available.

**5 Fire-Fighting Measures**

- **Extinguishing media:**
- **Suitable extinguishing agents:**  
CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture:** No further relevant information available.

(Contd. on page 3)

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- **Advice for firefighters:**
- **Protective equipment:**

As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent) and full protective gear to prevent contact with skin and eyes.

### 6 Accidental Release Measures

- **Personal precautions, protective equipment and emergency procedures:**

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation.

Avoid contact with skin, eyes and clothing.

- **Environmental precautions:**

Dilute with plenty of water.

Do not allow to enter sewers/surface or ground water.

Filtration of used material is recommended prior to disposal. Disposal must be made according to official regulations.

- **Methods and material for containment and cleaning up:**

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

Ensure adequate ventilation.

Dispose contaminated material as waste according to section 13.

Dispose of the collected material according to regulations.

- **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.

### 7 Handling and Storage

- **Handling**

- **Precautions for safe handling:** No special precautions are necessary if used correctly.

- **Information about protection against explosions and fires:** No special measures required.

- **Conditions for safe storage, including any incompatibilities:**

- **Storage**

- **Requirements to be met by storerooms and receptacles:** No special requirements.

- **Information about storage in one common storage facility:** Not required.

- **Further information about storage conditions:** None.

- **Specific end use(s):** No further relevant information available.

### \* 8 Exposure Controls/Personal Protection

- **Additional information about design of technical systems:** No further data; see section 7.

- **Control parameters:**

All ventilation should be designed in accordance with OSHA standard (29 CFR 1910.94). Use mechanical (general) ventilation for storage areas. Use appropriate ventilation as required to keep Exposure Limits in Air below TLV & PEL limits.

- **Components with occupational exposure limits:**

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 that were valid during the creation of this SDS were used as basis.

(Contd. on page 4)

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- **Exposure controls:**
- **Personal protective equipment:**
- **General protective and hygienic measures:**  
Wash hands before breaks and at the end of work.  
If spraying adhesives use all protective equipment, based on rules and regulations of state and local municipalities. Some people may be more susceptible to irritations and may need gloves and breathing apparatus' to avoid irritations.
- **Breathing equipment:** Not required.
- **Protection of hands:** Not required.
- **Material of gloves:** Not required.
- **Penetration time of glove material:** Not applicable.
- **Eye protection:**



Safety glasses

- **Body protection:** Not required.

## 9 Physical and Chemical Properties

- **Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**
  - Form:** Liquid
  - Color:** White
- **Odor:** Odorless
- **Odor threshold:** Not determined.
- **pH-value:** Not determined.
- **Change in condition**
  - Melting point/Melting range:** Not determined.
  - Boiling point/Boiling range:** 100 °C (212 °F)
- **Flash point:** None
- **Flammability (solid, gaseous):** Not applicable.
- **Ignition temperature:** 425 °C (797 °F)
- **Decomposition temperature:** Not determined.
- **Auto igniting:** Product is not self-igniting.
- **Danger of explosion:** Product does not present an explosion hazard.
- **Explosion limits:**
  - Lower:** Not determined.
  - Upper:** Not determined.
- **Vapor pressure @ 20 °C (68 °F):** 23 hPa (17 mm Hg)
- **Density @ 20 °C (68 °F):** 1.000 g/cm<sup>3</sup> (8.345 lbs/gal)
- **Relative density:** Not determined.
- **Vapor density:** Not determined.
- **Evaporation rate:** Not determined.

(Contd. on page 5)

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**Trade name: RZ-3**· **Solubility in / Miscibility with:****Water:** Soluble.· **Partition coefficient (n-octanol/water):** Not determined.· **Viscosity:****Dynamic:** Not determined.**Kinematic:** Not determined.· **Solvent content:****Organic solvents:** 0.0 %**Water:** 99.9 %· **Other information:** No further relevant information available.**10 Stability and Reactivity**

- **Reactivity:** No further relevant information available.
- **Chemical stability:** Stable under normal conditions.
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions:** No dangerous reactions known.
- **Conditions to avoid:** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

**11 Toxicological Information**· **Information on toxicological effects:**· **Acute toxicity:**· **LD/LC50 values that are relevant for classification:****Vinyl Acetate Monomer**

Oral	LD50	2920 mg/kg (rat)
Dermal	LD50	2335 mg/kg (rabbit)
Inhalative	LC50/4 h	14.1 mg/l (rat)
	LC50/96 hours	14 mg/l (Fathead Minnow)

· **Primary irritant effect:**· **On the skin:** No irritating effect.· **On the eye:** No irritating effect.· **Additional toxicological information:**· **Carcinogenic categories:**· **IARC (International Agency for Research on Cancer):**

Group 1 - Carcinogenic to humans

Group 2A - Probably carcinogenic to humans

Group 2B - Possibly carcinogenic to humans

Group 3 - Not classifiable as to its carcinogenicity to humans

Group 4 - Probably not carcinogenic to humans

Vinyl Acetate Monomer

2B

· **NTP (National Toxicology Program):**

None of the ingredients are listed.

· **OSHA-Ca (Occupational Safety & Health Administration):**

None of the ingredients are listed.

(Contd. on page 6)

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Reviewed on 05/31/2016

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### 12 Ecological Information

- **Toxicity:**

- **Aquatic toxicity:**

**Vinyl Acetate Monomer**

EC50	12.7 mg/l (Green algae)
	12.6 mg/l (daphnia)

- **Persistence and degradability:** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential:** No further relevant information available.
- **Mobility in soil:** No further relevant information available.
- **Results of PBT and vPvB assessment:**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects:** No further relevant information available.

### 13 Disposal Considerations

- **Waste treatment methods:**
- **Recommendation:**  
Observe all federal, state and local environmental regulations when disposing of this material.
- **Uncleaned packagings**
- **Recommendation:**  
Dispose of as unused product.  
Disposal must be made according to official regulations.

### 14 Transport Information

- **UN-Number:**
- **DOT, ADR, ADN, IMDG, IATA** Non-Regulated Material
- **UN proper shipping name:**
- **DOT, ADR, ADN, IMDG, IATA** Non-Regulated Material
- **Transport hazard class(es):**
- **DOT, ADR, ADN, IMDG, IATA**
- **Class:** Non-Regulated Material
- **Packing group:**
- **DOT, ADR, IMDG, IATA** Non-Regulated Material
- **Environmental hazards:** Not applicable.
- **Special precautions for user:** Not applicable.
- **Stowage Category** B
- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:** Not applicable.
- **UN "Model Regulation":** Non-Regulated Material

### 15 Regulatory Information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture:**
- **SARA (Superfund Amendments and Reauthorization):**

- **Section 355 (extremely hazardous substances):**

Vinyl Acetate Monomer

(Contd. on page 7)

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· <b>Section 313 (Specific toxic chemical listings):</b>	
Vinyl Acetate Monomer	
· <b>TSCA (Toxic Substances Control Act):</b>	
All ingredients are listed or exempt from listing.	
· <b>California Proposition 65:</b>	
· <b>Chemicals known to cause cancer:</b>	
None of the ingredients are listed.	
· <b>Chemicals known to cause reproductive toxicity for females:</b>	
None of the ingredients are listed.	
· <b>Chemicals known to cause reproductive toxicity for males:</b>	
None of the ingredients are listed.	
· <b>Chemicals known to cause developmental toxicity:</b>	
None of the ingredients are listed.	
· <b>New Jersey Right-to-Know List:</b>	
Vinyl Acetate Monomer	
· <b>New Jersey Special Hazardous Substance List:</b>	
Vinyl Acetate Monomer	CA, F3, R2
· <b>Pennsylvania Right-to-Know List:</b>	
Vinyl Acetate Monomer	
· <b>Pennsylvania Special Hazardous Substance List:</b>	
Vinyl Acetate Monomer	E
· <b>Carcinogenic categories:</b>	
· <b>EPA (Environmental Protection Agency):</b>	
None of the ingredients are listed.	
· <b>TLV (Threshold Limit Value established by ACGIH):</b>	
Vinyl Acetate Monomer	A3
· <b>NIOSH-Ca (National Institute for Occupational Safety and Health):</b>	
None of the ingredients are listed.	

· **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

· **Hazard pictograms:**

GHS08

· **Signal word:** Warning· **Hazard statements:**

H351 Suspected of causing cancer.

· **Precautionary statements:**

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

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P308+P313 IF exposed or concerned: Get medical advice/attention.

(Contd. on page 8)

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P405 Store locked up.  
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

**· National regulations:**

The product is subject to be classified according with the latest version of the regulations on hazardous substances.

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

**16 Other Information**

The information and recommendations in this safety data sheet are, to the best of our knowledge, accurate as of the date of issue. Nothing herein shall be deemed to create warranty, expressed or implied, and shall not establish a legally valid contractual relationship. It is the responsibility of the user to determine applicability of this information and the suitability of the material or product for any particular purpose.

· **Date of preparation / last revision:** 05/31/2016 / -

**· Abbreviations and acronyms:**

ADR: The European Agreement concerning the International Carriage of Dangerous Goods by Road  
 ADN: The European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways  
 IMDG: International Maritime Code for Dangerous Goods  
 DOT: US Department of Transportation  
 IATA: International Air Transport Association  
 ACGIH: American Conference of Governmental Industrial Hygienists  
 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)  
 NFPA: National Fire Protection Association (USA)  
 HMIS: Hazardous Materials Identification System (USA)  
 LC50: Lethal concentration, 50 percent  
 LD50: Lethal dose, 50 percent  
 PBT: Persistent, Bioaccumulative and Toxic  
 vPvB: very Persistent and very Bioaccumulative  
 NIOSH: National Institute for Occupational Safety  
 OSHA: Occupational Safety & Health  
 TLV: Threshold Limit Value  
 PEL: Permissible Exposure Limit  
 REL: Recommended Exposure Limit  
 Flam. Liq. 2: Flammable liquids – Category 2  
 Acute Tox. 4: Acute toxicity – Category 4  
 Carc. 2: Carcinogenicity – Category 2  
 STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

· **\* Data compared to the previous version altered.**

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