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Telephone No.: +81-268-64-2413

Importer/Distributor Established in USA
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Telephone No.: 1-678-730-0100
Emergency Telephone No.: +81-268-64-2413

2. Hazards Identification

Emergency Overview: ADVERSE HUMAN HEALTH HAZARDS
Irritating to eyes, respiratory system and skin.
May cause sensitization by skin contact.

ENVIRONMENTAL EFFECTS
Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Potential Health Effects
Inhalation: Irritating to respiratory system.
Eye Contact: Irritating to eyes.
Skin Contact: Irritating to skin.
Carcinogens: No ingredients are listed by OSHA, IARC, or NTP as known or suspected carcinogens.

Potential Environmental Effects
Very toxic to aquatic organism. May cause long-time adverse effects in the aquatic environment.
Material Safety Data Sheets


Hazard Label

Xi : Irritant

HMIS Rating (scale 0 – 4)
- Health = 1
- Flammability = 1
- Reactivity = 0
- Protective Equipment =

NFPA Rating (scale 0 – 4)
- Health = 1
- Flammability = 1
- Reactivity = 0

3. Composition / Information On Ingredients

<table>
<thead>
<tr>
<th>No</th>
<th>Chemical Name</th>
<th>Wt%</th>
<th>CAS No.</th>
<th>Chemical Formula</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Acrylates</td>
<td>&gt; 95</td>
<td>Registered</td>
<td>-</td>
</tr>
<tr>
<td>2</td>
<td>Additives</td>
<td>&lt; 1</td>
<td>Registered</td>
<td>-</td>
</tr>
</tbody>
</table>

4. First Aid Measures

Inhalation : Supply fresh air and to be sure call for a doctor.
In case of unconsciousness place stably in side position for transportation.

Eye Contact : Rinse opened eye for several wash under running water.
If symptoms persist, consult a doctor.

Skin Contact : Immediately wash with water and soap and rinse thoroughly.

Ingestion : If symptoms persist consult doctor.

5. Fire Fighting Measures

Flammable Properties
- Autoignition temperature : No Data Available
- Flash Point : 125-135 degree C
  [Test Method: Cleveland Open Cup]
- Flammable Limits – LEL : No Data Available
Material Safety Data Sheets

Flammable Limits – UEL : No Data Available

Extinguishing Media : Dry chemical powder, form or dioxide.

Fire Fighting Instructions
: Fight fire from maximum distance.
Shut off fuel to fire if possible to do so without hazard.
Wear full fire-fighting turn-out gear (full bunker gear) and
respiratory protection (self-contained breathing apparatus).

6. Accidental Release Measures

Person-related safety precautions : Not required.
Measures for environmental protection : Inform respective authorities in case of seepage into
water course or sewage system.
Do not allow to enter sewers/ surface or ground water.
Measures for cleaning/ collecting : Absorb with liquid-binding material (sand, diatomite,
acid binders, universal binders, sawdust).
Ensure adequate ventilation.

7. Handling And Storage

Handling : Keep away from heat and direct sunlight.
Keep receptacles tightly sealed.
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.

Storage : Store product in tightly closed original containers in dry and cool
place protected from sunlight fluorescent light, preferably at below
25 degree C on impermeable ground.
Keep away from sources of ignition.
Store away from oxidizing agents.
8. Exposure Controls / Personal Protection

Control parameters of ingredients

: Not established.

Exposure Controls

Occupational Exposure Controls

Engineering Controls : Do not use in areas without adequate ventilation.

Personal hygiene and protective equipment

: Keep away from foodstuffs, beverages and feed.
  Immediately remove all soiled and contaminated clothing.
  Wash hands before breaks and at the end of work.
  Avoid contact with the eyes and skin.

Personal Protection

Respiratory Protection

: In case of brief exposure or low pollution use respiratory filter device.

In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

Hand Protection

: Protective gloves

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

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacture to manufacture. As the product is a preparation of several substances, the resistance of the glove material cannot be calculated in advance has therefore to be checked prior to the application.

The exact break trough time has to be found out by the manufacture of the protective gloves and has to be observed.
Eye Protection: Tightly sealed goggles

Skin Protection: Long sleeve clothing, resistant to solvents.

9. Physical And Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>- Physical state: liquid</td>
</tr>
<tr>
<td></td>
<td>- Color: Clear</td>
</tr>
<tr>
<td>Odor</td>
<td>Characteristic odor</td>
</tr>
<tr>
<td>pH</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Boiling Point / Boiling Range</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting Point / Melting Range</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash Point</td>
<td>125-135 degree C</td>
</tr>
<tr>
<td>Auto-Ignition Temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive Properties</td>
<td>Product does not present an explosion hazard.</td>
</tr>
<tr>
<td>Flammable Limits</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapour Pressure</td>
<td>Not available</td>
</tr>
<tr>
<td>VOC</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>0.99 [Ref Std: WATER=1]</td>
</tr>
<tr>
<td>Solubility</td>
<td>Miscible in organic solvent</td>
</tr>
<tr>
<td>Water solubility</td>
<td>Not miscible or difficult to mix.</td>
</tr>
<tr>
<td>Viscosity</td>
<td>2 – 5 mPa·s (25 degree C)</td>
</tr>
<tr>
<td>Surface tension</td>
<td>28 – 30 mN/m (25 degree C)</td>
</tr>
<tr>
<td>Solvent content</td>
<td>Organic solvents 0.0%</td>
</tr>
</tbody>
</table>

10. Stability And Reactivity

Thermal decomposition/ Conditions to be avoided: No decomposition if used according to specifications.

Dangerous reaction: No dangerous reactions known.

Dangerous decomposition products: No dangerous decomposition products known.
11. Toxicological Information

- **Acute Toxicity**: Not available
- **Eye Irritation**: Irritating effect.
- **Skin Irritation**: Irritant to skin and mucous membranes.
- **Sensitization**: Sensitization possible through skin contact. May cause sensitization by skin contact.
- **Mutagenicity**: Not available
- **Others**: The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version: Irritant

12. Ecological Information

- **Ecotoxicity**: Not available
- **Persistence And Degradability**: Not available
- **Bioaccumulative Potential**: Not available
- **Other Adverse Effects**: Not available
- **Remark**: Toxic for fish
- **General notes**
  - Water hazard class2 (German Regulation) (Self-assessment)
    - Hazardous for water.
    - Do not allow product to reach ground water, water course or sewage system.
    - Danger to drinking water if even small quantities leak into the ground.
    - Also poisonous for fish and plankton in water bodies.
    - Toxic for aquatic organisms.
13. Disposal Considerations

Must not be disposed together with household garbage.
Comply with all USA, national and local regulations.
Do not dump this product into sewers, on the ground or into any body of water.

14. Transport Information

Check a thing without a leak in a container.
Perform prevention of collapse of cargo surely.
Us Department of Transportation (DOT)
Hazardous Materials : Not Applicable

Sea Transport (IMDG)
Class : 9
Packing Group (PG) : Ⅲ
UN Number : 3082
Label : 9
Proper Shipping Name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(isooctyl Acrylate)
Marine Pollutant : No

Air Transport (ICAO/IATA)
Class : 9
Packing Group(PG) : Ⅲ
UN Number : 3082
Label : 9
Proper Shipping Name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(isooctyl Acrylate)

UN "Model Regulation" : UN3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.: 9 ; Ⅲ
Environmental hazards : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUIDN.O.S.
Material Safety Data Sheets

15. Regulatory Information

Follow all regulations in your country.

OSHA Status

: This product is NOT considered hazardous under the OSHA Hazard Communication Standard (29 CFR 1910.1200).

TSCA Status

: All ingredients are listed.

CERCLA Reportable Quantity (40 CFR 117, 302)

: None of the ingredient is listed.

SARA Title III

Section 302 (40 CFR 355)

: None of the ingredient is listed.

Section 311/312 (40 CFR 370)

: Not evaluated.

Section 313 (40 CFR 372)

: None of the ingredient is listed.

Others

: Please refer to any other federal, state and local regulations.

Proposition 65

Chemicals known to cause cancer

: None of the ingredient is listed.

Chemicals known to cause developmental toxicity

: None of the ingredient is listed.

Product related hazard information

: The product has been classified and marked in accordance with directives on hazardous materials.

Hazard symbols

: Irritant

Risk information

: Irritating to eyes, respiratory system and skin. May cause sensitization by skin contact. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety information

Do not breathe gas/fumes/vapor/spray (appropriate wording to be specified by the manufacturer). Avoid contact with skin. Wear
suitable gloves.

National regulations

Water hazard class

: Water hazard class 2 (self-assessment)
: Hazardous for water.

16. Other Information

This information is furnished without warranty, express or implied, except that it is accurate to
the best knowledge of Mimaki Engineering Corporation.
It relates only to the specific material designated herein, and does not relate to use in
combination with any other material or process.
Mimaki Engineering Corporation assumes no legal responsibility for use or reliance upon this
information.

Revision history

<table>
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<tr>
<th>Version</th>
<th>Date</th>
<th>Content</th>
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<tr>
<td>1.0</td>
<td>2008/06/20</td>
<td>First issue</td>
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<tr>
<td>2.0</td>
<td>2012/01/17</td>
<td>Revised except section 1 and 16.</td>
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