1. Identification of the substance/preparation and of the company/undertaking

Trade name Acrylic Acid

Synonyms Glacial Acrylic Acid

Use For industrial use only.

Company Hitech Chemicals

2. Composition/information on ingredients

acrylic acid; prop-2-enoic acid

Contents: 100.00 % W/W

CAS-No. 79-10-7  Index-No. 607-061-00-8  EC-No. 201-177-9

Symbol(s) C, N  R-phrase(s) -R10 -R20/21/22 -R35 -R50

For the full text of the R phrases mentioned in this Section, see Section 16.

3. Hazards identification

Identification of the risks

R10 Flammable.
R20/21/22 Harmful by inhalation, in contact with skin and if swallowed.
R35 Causes severe burns.
R50 Very toxic to aquatic organisms.

4. First aid measures

General advice In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Inhalation Move to fresh air in case of accidental inhalation of vapours. If breathing is irregular or stopped, administer artificial respiration. Monitor breathing, seek medical advice.
Skin contact
Take off contaminated clothing and shoes immediately. Wash off immediately with soap and plenty of water. Call a physician immediately.

Eye contact
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Protect unharmed eye.

Ingestion
If swallowed, seek medical advice immediately and show this container or label. Do NOT induce vomiting. Never give anything by mouth to an unconscious person.

Notes to physician

Risks
corrosive effects sensitising effects

5. Fire-fighting measures

Suitable extinguishing media
Water spray, Dry powder, Foam, Carbon dioxide (CO2)

Specific hazards during fire fighting
Do not allow run-off from fire fighting to enter drains or water courses.

Special protective equipment for fire-fighters
Wear self-contained breathing apparatus and protective suit.

Further information
In the event of fire, cool tanks with water spray.

6. Accidental release measures

Personal precautions
Use personal protective equipment. Do not breathe vapours or spray mist.

Environmental precautions
Do not flush into surface water or sanitary sewer system. If the product contaminates rivers and lakes or drains inform respective authorities.

Methods for cleaning up
Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

Additional advice
Never return spills in original containers for re-use.

7. Handling and storage

Handling

Safe handling advice
Wear personal protective equipment. Do not breathe vapours or spray mist. Avoid contact with skin and eyes.

Advice on protection against fire and explosion
Provide sufficient air exchange and/or exhaust in work rooms.

Storage
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Requirements for storage areas and containers
Keep containers tightly closed in a dry, cool and well-ventilated place.

8. Exposure controls / personal protection

Components with workplace control parameters

<table>
<thead>
<tr>
<th>NATIONAL OCCUPATIONAL EXPOSURE LIMITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Components</td>
</tr>
<tr>
<td>-------------</td>
</tr>
<tr>
<td>ACRYLIC ACID</td>
</tr>
</tbody>
</table>

no data available

EUROPEAN OCCUPATIONAL EXPOSURE LIMITS
no data available

Engineering measures
Provide sufficient air exchange and/or exhaust in work rooms.

Personal protective equipment
Respiratory protection suitable respiratory equipment:
Hand protection gloves suitable for permanent contact:
Material: butyl-rubber
Break through time: 4 h
Material thickness: 0.5 mm
unsuitable gloves
Material: Polyvinylchloride, leather, nitrile rubber/nitrile latex, natural rubber/natural latex
Eye protection Face-shield
Skin and body protection protective suit
Hygiene measures Wash hands before breaks and immediately after handling the product. Handle in accordance with good industrial hygiene and safety practice.
Protective measures Do not breathe vapours or spray mist. Avoid contact with the skin and the eyes. Wear suitable protective equipment.

9. Physical and chemical properties

Form liquid
Colour colourless
Odour
Melting point/range
Boiling point/range
Flash point
Autoignition temperature
Density
Water solubility

10. Stability and reactivity

Hazardous decomposition products

Stable under normal conditions.

11. Toxicological information

Acute oral toxicity
- acrylic acid; prop-2-enoic acid:
  LD50 mouse: 2,400 mg/kg; (literature value)
- acrylic acid; prop-2-enoic acid:
  LD50 rat: 2,590 mg/kg; (literature value)
- acrylic acid; prop-2-enoic acid:
  LD50 rabbit: 250 mg/kg; (literature value)

Acute inhalation toxicity
- acrylic acid; prop-2-enoic acid:
  LCLo rat: 4,000 mg/l; (literature value); 4 h
- acrylic acid; prop-2-enoic acid:
  LC50 rat: 1,200 mg/l; (literature value); 4 h

Acute dermal toxicity
- acrylic acid; prop-2-enoic acid:
  LD50 rabbit: 280 mg/kg; (literature value)

Skin irritation
- acrylic acid; prop-2-enoic acid:
  rabbit: Severe skin irritation; (literature value)

Eye irritation
- acrylic acid; prop-2-enoic acid:
  rabbit: highly irritating; (literature value)

12. Ecological information

Biodegradability
- acrylic acid; prop-2-enoic acid:
  > 60%; 28 d(literature value)

Ecotoxicity effects
Toxicity to fish
- acrylic acid; prop-2-enoic acid:
  LC50 Salmo gairdneri: 10 - 100 mg/l; 96 h; OECD Test Guideline 203; (literature value)
- acrylic acid; prop-2-enoic acid:
  Leuciscus idus melanotus: 315 mg/l; 48 h; (literature value)
Material Safety Data Sheet

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Toxicity to daphnia and other aquatic invertebrates.

Toxicity to algae

Toxicity to daphnia and prop-2-enoic acid:
EC50 Daphnia magna: 765 mg/l; 24 h; (literature value)

Toxicity to algae

acrylic acid; prop-2-enoic acid:
EC50 Scenedesmus subspicatus: < 1 mg/l; 72 h; (literature value)

13. Disposal considerations

<table>
<thead>
<tr>
<th>Product</th>
<th>Dispose of in accordance with local regulations.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contaminated packaging</td>
<td>Store containers and offer for recycling of material when in accordance with the local regulations.</td>
</tr>
</tbody>
</table>

14. Transport information

<table>
<thead>
<tr>
<th>ADR</th>
<th>UN-No.: 2218; Class: 8, (3); Packaging group: II; CF1; Description of the goods: ACRYLIC ACID, STABILIZED</th>
</tr>
</thead>
<tbody>
<tr>
<td>RID</td>
<td>UN-No.: 2218; Class: 8, (3); Packaging group: II; CF1; Description of the goods: ACRYLIC ACID, STABILIZED</td>
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<td>ADNR</td>
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</tr>
<tr>
<td>IMDG</td>
<td>UN-No.: 2218; Class: 8, (3); EmS: F-E, S-C; Packaging group: II; Description of the goods: ACRYLIC ACID, STABILIZED</td>
</tr>
<tr>
<td>ICAO/IATA</td>
<td>UN-No.: 2218; Class: 8, (3); Packaging group: II; Description of the goods: Acrylic acid, stabilized</td>
</tr>
</tbody>
</table>

15. Regulatory information

Labelling

Regulatory base

67/548/EEC

Symbol(s)

C: Corrosive
N: Dangerous for the environment

R-phrase(s)

R10: Flammable.

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R20/21/22: Harmful by inhalation, in contact with skin and if swallowed.  
R35: Causes severe burns.  
R50: Very toxic to aquatic organisms.

S-phrase(s)  
S 1/2: Keep locked up and out of the reach of children.  
S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
S36/37/39: Wear suitable protective clothing, gloves and eye/face protection.  
S45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).  
S61: Avoid release to the environment. Refer to special instructions/safety data sheets.

Hazardous components which must be listed on the label  
acrylic acid; prop-2-enoic acid

16. Other information

Full text of R-phrases referred to under sections 2 and 3

R10 Flammable.
R20/21/22 Harmful by inhalation, in contact with skin and if swallowed.
R35 Causes severe burns.
R50 Very toxic to aquatic organisms.

All reasonable efforts were exercised to compile this MSDS in accordance with ISO 11014 and ANSIZ400.1.1993. The MSDS provides information regarding the health, safety and environmental hazards, at the date of issue, to facilitate the safe receipt, use and handling of the product in the workplace. Since we cannot anticipate or control all conditions under which the product may be handled, used and received in the workplace, it remains the obligation of each user, receiver or handler to, prior to usage, review this MSDS in the context within which the product will be received, handled or used in the workplace. The user, handler or receiver must ensure that the necessary mitigating measures are in place as regards health and safety. This does not substitute the need or requirement for any relevant risk assessments to be conducted. It further remains the responsibility of the receiver, handler or user to communicate such information to all relevant parties that may be involved in the receipt, use or handling of the product.

Although all reasonable efforts were exercised in the compilation of this MSDS, we do not expressly warrant the accuracy or assume any liability for the incompleteness of the information contained herein or any advice given. The product is sold and risk passes in accordance with the specific terms and conditions of sale.

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