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

1.1 Product identifier

Identification of the substance: Azomethine H hydrate
Article number: CP99
Registration number (REACH): It is not required to list the identified uses because the substance is not subject to registration according to REACH (< 1 t/a)
EC number: 227-698-1
CAS number: 206752-32-1

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses: laboratory chemical, laboratory and analytical use

1.3 Details of the supplier of the safety data sheet

Carl Roth GmbH + Co KG
Schoemperlenstr. 3-5
D-76185 Karlsruhe
Germany

Telephone: +49 (0) 721 - 56 06 0
Telefax: +49 (0) 721 - 56 06 149
e-mail: sicherheit@carlroth.de
Website: www.carlroth.de

Competent person responsible for the safety data sheet: Department Health, Safety and Environment

1.4 Emergency telephone number

Emergency information service: Poison Centre Munich: +49/(0)89 19240

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification acc. to GHS
This substance does not meet the criteria for classification in accordance with Regulation No 1272/2008/EC. This substance does not meet the criteria for classification.

2.2 Label elements

Labelling GHS: not required

Signal word: not required

2.3 Other hazards

There is no additional information.
SECTION 3: Composition/information on ingredients

3.1 Substances

<table>
<thead>
<tr>
<th>Name of substance</th>
<th>Azomethine H hydrate</th>
</tr>
</thead>
<tbody>
<tr>
<td>EC number</td>
<td>227-698-1</td>
</tr>
<tr>
<td>CAS number</td>
<td>206752-32-1</td>
</tr>
<tr>
<td>Molecular formula</td>
<td>( \text{C}<em>{17}\text{H}</em>{12}\text{NNaO}<em>{8}\text{S}</em>{2} \times \text{H}_{2}\text{O} )</td>
</tr>
<tr>
<td>Molar mass</td>
<td>445.4 g/mol</td>
</tr>
</tbody>
</table>

SECTION 4: First aid measures

4.1 Description of first aid measures

**General notes**
Take off contaminated clothing.

**Following inhalation**
Provide fresh air. In all cases of doubt, or when symptoms persist, seek medical advice.

**Following skin contact**
Rinse skin with water/shower. In all cases of doubt, or when symptoms persist, seek medical advice.

**Following eye contact**
Rinse cautiously with water for several minutes. In all cases of doubt, or when symptoms persist, seek medical advice.

**Following ingestion**
Rinse mouth. Call a doctor if you feel unwell.

4.2 Most important symptoms and effects, both acute and delayed
Irritant effects

4.3 Indication of any immediate medical attention and special treatment needed
none

SECTION 5: Firefighting measures

5.1 Extinguishing media

**Suitable extinguishing media**
Co-ordinate fire-fighting measures to the fire surroundings
water spray, foam, dry extinguishing powder, carbon dioxide (CO2)

**Unsuitable extinguishing media**
water jet
5.2 Special hazards arising from the substance or mixture
Combustible.

Hazardous combustion products
In case of fire may be liberated: nitrogen oxides (NOx), carbon monoxide (CO), carbon dioxide (CO2), sulphur oxides (SOx)

5.3 Advice for firefighters
Fight fire with normal precautions from a reasonable distance. Wear self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
For non-emergency personnel
Do not breathe dust. Avoid contact with skin and eyes.

6.2 Environmental precautions
Keep away from drains, surface and ground water.

6.3 Methods and material for containment and cleaning up
Advises on how to contain a spill
Covering of drains.
Advises on how to clean up a spill
Take up mechanically.
Other information relating to spills and releases
Place in appropriate containers for disposal. Ventilate affected area.

6.4 Reference to other sections

SECTION 7: Handling and storage

7.1 Precautions for safe handling
Avoid dust formation.
Advice on general occupational hygiene
Wash hands before breaks and after work.

7.2 Conditions for safe storage, including any incompatibilities
Keep container tightly closed. Store in a dry place.
Consideration of other advice
• Ventilation requirements
Use local and general ventilation.
• Specific designs for storage rooms or vessels
Recommended storage temperature: 15 – 25 °C.
7.3 Specific end use(s)
No information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

National limit values

Occupational exposure limit values (Workplace Exposure Limits)

<table>
<thead>
<tr>
<th>Country</th>
<th>Name of agent</th>
<th>CAS No</th>
<th>Notation</th>
<th>Identifier</th>
<th>TWA [mg/m³]</th>
<th>STEL [mg/m³]</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>JP</td>
<td>particulates not otherwise classified</td>
<td></td>
<td>dust</td>
<td>OEL</td>
<td>8</td>
<td></td>
<td>JSOH</td>
</tr>
<tr>
<td>JP</td>
<td>particulates not otherwise classified</td>
<td></td>
<td>r</td>
<td>OEL</td>
<td>2</td>
<td></td>
<td>JSOH</td>
</tr>
<tr>
<td>JP</td>
<td>dust</td>
<td></td>
<td>less3silica, dust</td>
<td>OEL</td>
<td>4</td>
<td>JSOH</td>
<td></td>
</tr>
<tr>
<td>JP</td>
<td>dust</td>
<td></td>
<td>less3silica, r</td>
<td>OEL</td>
<td>1</td>
<td>JSOH</td>
<td></td>
</tr>
</tbody>
</table>

Notation:
- dust: As dust
- less3silica: Containing less than 3% crystalline silica
- r: Respirable fraction

STEL: Short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period (unless otherwise specified)

TWA: Time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average (unless otherwise specified)

8.2 Exposure controls

Individual protection measures (personal protective equipment)

Eye/face protection

Use safety goggle with side protection.

Skin protection

- hand protection
Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374.
- type of material
NBR (Nitrile rubber)
- material thickness
>0.11 mm
- breakthrough times of the glove material
>480 minutes (permeation: level 6)
• other protection measures
Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended.

Respiratory protection

Respiratory protection necessary at: Dust formation. Particulate filter device (EN 143). P1 (filters at least 80% of airborne particles, colour code: White).

Environmental exposure controls
Keep away from drains, surface and ground water.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance
Physical state  solid (solid matter)
Colour  yellow - orange
Odour  characteristic
Odour threshold  No data available

Other physical and chemical parameters
pH (value)  This information is not available.
Melting point/freezing point  not determined
Initial boiling point and boiling range  This information is not available.
Flash point  not applicable
Evaporation rate  no data available
Flammability (solid, gas)  These information are not available

Explosive limits
• lower explosion limit (LEL)  this information is not available
• upper explosion limit (UEL)  this information is not available

Explosion limits of dust clouds  these information are not available

Vapour pressure  This information is not available.
Density  This information is not available.
Vapour density  This information is not available.
Relative density  Information on this property is not available.

Solubility(ies)
Water solubility  this information is not available

Partition coefficient
n-octanol/water (log KOW)  This information is not available.
Auto-ignition temperature  Information on this property is not available.
Azomethine H hydrate ≥ 95%, p.a.

article number: CP99

- Decomposition temperature: no data available
- Viscosity: not relevant (solid matter)
- Explosive properties: Shall not be classified as explosive
- Oxidising properties: none

9.2 Other information
There is no additional information.

SECTION 10: Stability and reactivity

10.1 Reactivity
Dust explosibility.

10.2 Chemical stability
The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

10.3 Possibility of hazardous reactions
Violent reaction with: Strong oxidiser

10.4 Conditions to avoid
There are no specific conditions known which have to be avoided.

10.5 Incompatible materials
There is no additional information.

10.6 Hazardous decomposition products
Hazardous combustion products: see section 5.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity
Shall not be classified as acutely toxic.

Skin corrosion/irritation
Shall not be classified as corrosive/irritant to skin.

Serious eye damage/eye irritation
Shall not be classified as seriously damaging to the eye or eye irritant.

Respiratory or skin sensitisation
Shall not be classified as a respiratory or skin sensitiser.

Summary of evaluation of the CMR properties
Shall not be classified as germ cell mutagenic, carcinogenic nor as a reproductive toxicant

- Specific target organ toxicity - single exposure
  Shall not be classified as a specific target organ toxicant (single exposure).

- Specific target organ toxicity - repeated exposure
  Shall not be classified as a specific target organ toxicant (repeated exposure).

Aspiration hazard
Shall not be classified as presenting an aspiration hazard.
Safety data sheet
JIS Z7253

Azomethine H hydrate ≥ 95%, p.a.

article number: CP99

Symptoms related to the physical, chemical and toxicological characteristics
• If swallowed
data are not available
• If in eyes
causes slight to moderate irritation
• If inhaled
Inhalation of dust may cause irritation of the respiratory system
• If on skin
Frequently or prolonged contact with skin may cause dermal irritation
Other information
Substance not yet fully tested

SECTION 12: Ecological information

12.1 Toxicity
acc. to 1272/2008/EC: Shall not be classified as hazardous to the aquatic environment.

12.2 Process of degradability
Theoretical Oxygen Demand with nitrification: Theoretical Oxygen Demand: Theoretical Carbon Dioxide:

12.3 Bioaccumulative potential
Data are not available.

12.4 Mobility in soil
Data are not available.

12.5 Results of PBT and vPvB assessment
Data are not available.

12.6 Other adverse effects
Data are not available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Consult the appropriate local waste disposal expert about waste disposal.

Sewage disposal-relevant information
Do not empty into drains.

Sewage disposal-relevant information
Do not empty into drains.

13.2 Relevant provisions relating to waste
The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.
13.3 Remarks
Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities. Please consider the relevant national or regional provisions.

SECTION 14: Transport information

14.1 UN number (not subject to transport regulations)
14.2 UN proper shipping name not relevant
14.3 Transport hazard class(es) not relevant
   Class -
14.4 Packing group not relevant
14.5 Environmental hazards none (non-environmentally hazardous acc. to the dangerous goods regulations)

14.6 Special precautions for user
There is no additional information.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code
The cargo is not intended to be carried in bulk.

14.8 Information for each of the UN Model Regulations

• Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN)
  Not subject to ADR, RID and ADN.
• International Maritime Dangerous Goods Code (IMDG)
  Not subject to IMDG.
• International Civil Aviation Organization (ICAO-IATA/DGR)
  Not subject to ICAO-IATA.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

National inventories
Substance is listed in the following national inventories:

<table>
<thead>
<tr>
<th>Country</th>
<th>National inventories</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU</td>
<td>ECSI</td>
<td>substance is listed</td>
</tr>
<tr>
<td>TW</td>
<td>TCSI</td>
<td>substance is listed</td>
</tr>
</tbody>
</table>

Legend
ECSI    EC Substance Inventory (EINECS, ELINCS, NLP)
TCSI    Taiwan Chemical Substance Inventory

15.2 Chemical Safety Assessment
No Chemical Safety Assessment has been carried out for this substance.
### SECTION 16: Other information

#### 16.1 Indication of changes (revised safety data sheet)

<table>
<thead>
<tr>
<th>Section</th>
<th>Former entry (text/value)</th>
<th>Actual entry (text/value)</th>
<th>Safety-relevant</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>Registration number (REACH): This information is not available.</td>
<td>Registration number (REACH): It is not required to list the identified uses because the substance is not subject to registration according to REACH (&lt; 1 t/a)</td>
<td>yes</td>
</tr>
<tr>
<td>1.1</td>
<td>CAS number: 5941-07-1</td>
<td>CAS number: 206752-32-1</td>
<td>yes</td>
</tr>
<tr>
<td>2.1</td>
<td>Classification according to Regulation (EC) No 1272/2008 (CLP): This substance does not meet the criteria for classification in accordance with Regulation No 1272/2008/EC.</td>
<td>Classification acc. to GHS: This substance does not meet the criteria for classification in accordance with Regulation No 1272/2008/EC. This substance does not meet the criteria for classification.</td>
<td>yes</td>
</tr>
<tr>
<td>8.1</td>
<td>Occupational exposure limit values (Workplace Exposure Limits): No data available.</td>
<td>Occupational exposure limit values (Workplace Exposure Limits)</td>
<td>yes</td>
</tr>
<tr>
<td>8.1</td>
<td>Occupational exposure limit values (Workplace Exposure Limits): change in the listing (table)</td>
<td></td>
<td>yes</td>
</tr>
<tr>
<td>14.8</td>
<td></td>
<td></td>
<td>yes</td>
</tr>
</tbody>
</table>

### Abbreviations and acronyms

<table>
<thead>
<tr>
<th>Abbr.</th>
<th>Descriptions of used abbreviations</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADN</td>
<td>Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)</td>
</tr>
<tr>
<td>ADR</td>
<td>Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)</td>
</tr>
<tr>
<td>CAS</td>
<td>Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)</td>
</tr>
<tr>
<td>CMR</td>
<td>Carcinogenic, Mutagenic or toxic for Reproduction</td>
</tr>
<tr>
<td>DGR</td>
<td>Dangerous Goods Regulations (see IATA/DGR)</td>
</tr>
<tr>
<td>EINECS</td>
<td>European Inventory of Existing Commercial Chemical Substances</td>
</tr>
<tr>
<td>ELINCS</td>
<td>European List of Notified Chemical Substances</td>
</tr>
<tr>
<td>GHS</td>
<td>&quot;Globally Harmonized System of Classification and Labelling of Chemicals&quot; developed by the United Nations</td>
</tr>
<tr>
<td>IATA</td>
<td>International Air Transport Association</td>
</tr>
<tr>
<td>IATA/DGR</td>
<td>Dangerous Goods Regulations (DGR) for the air transport (IATA)</td>
</tr>
<tr>
<td>ICAO</td>
<td>International Civil Aviation Organization</td>
</tr>
<tr>
<td>IMDG</td>
<td>International Maritime Dangerous Goods Code</td>
</tr>
<tr>
<td>JSOH</td>
<td>Japan Society of Occupational Health &quot;Journal of Occupational Health&quot;: Recommendation of Occupational Exposure Limits</td>
</tr>
<tr>
<td>MARPOL</td>
<td>International Convention for the Prevention of Pollution from Ships (abbr. of &quot;Marine Pollutant&quot;)</td>
</tr>
<tr>
<td>NLP</td>
<td>No-Longer Polymer</td>
</tr>
<tr>
<td>OEL</td>
<td>workplace exposure limit</td>
</tr>
<tr>
<td>PBT</td>
<td>Persistent, Bioaccumulative and Toxic</td>
</tr>
</tbody>
</table>
Abbr. | Descriptions of used abbreviations
--- | ---
REACH | Registration, Evaluation, Authorisation and Restriction of Chemicals
RID | Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)
STEL | short-term exposure limit
TWA | time-weighted average
vPvB | very Persistent and very Bioaccumulative

### Key literature references and sources for data
- UN Recommendations on the Transport of Dangerous Good
- Dangerous Goods Regulations (DGR) for the air transport (IATA)
- International Maritime Dangerous Goods Code (IMDG)

### List of relevant phrases (code and full text as stated in chapter 2 and 3)
not relevant.

### Disclaimer
The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.