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

Product identifier

Product name: AICAR
CBnumber: CB1675294
CAS: 2627-69-2
EINECS Number: 220-097-5
Synonyms: AICAR, AAKG

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

Relevant identified uses: For R&D use only. Not for medicinal, household or other use.
Uses advised against: none

Company Identification

Company: Chemicalbook
Address: Building 1, Huihuang International, Shangdi 10th Street, Haidian District, Beijing
Telephone: 400-158-6606

SECTION 2: Hazards identification

GHS Label elements, including precautionary statements

Symbol(GHS)

Signal word: Danger

Precautionary statements
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P304+P340 IF INHALED: 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.
P405 Store locked up.

Hazard statements
H315 Causes skin irritation
H319 Causes serious eye irritation
H335 May cause respiratory irritation
SECTION 3: Composition/information on ingredients

Substance

Product name : AICAR
Synonyms : AICAR, AAKG
CAS : 2627-69-2
EC number : 220-097-5
MF : C9H14N4O5
MW : 258.23

SECTION 4: First aid measures

Description of first aid measures

If inhaled
After inhalation: fresh air.

In case of skin contact
In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/shower.

In case of eye contact
After eye contact: rinse out with plenty of water. Remove contact lenses.

If swallowed
After swallowing: make victim drink water (two glasses at most). Consult doctor if feeling unwell.

Most important symptoms and effects, both acute and delayed
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5: Firefighting measures

Extinguishing media

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

Unsuitable extinguishing media
For this substance/mixture no limitations of extinguishing agents are given.

Special hazards arising from the substance or mixture
Carbon oxides Nitrogen oxides (NOx) Combustible.
Development of hazardous combustion gases or vapours possible in the event of fire.

Advice for firefighters
In the event of fire, wear self-contained breathing apparatus.
Further information
Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Avoid inhalation of dusts. Evacuate the danger area, observe emergency procedures, consult an expert.
For personal protection see section 8.

Environmental precautions

Do not let product enter drains.

Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

Precautions for safe handling
For precautions see section 2.2.

Conditions for safe storage, including any incompatibilities

Storage conditions
Tightly closed. Dry.

Storage stability
Recommended storage temperature
-20 °C

Specific end use(s)
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: Exposure controls/personal protection

control parameter
Hazard composition and occupational exposure limits

Does not contain substances with occupational exposure limits.

Exposure controls

Personal protective equipment

Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses

Skin protection

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0,11 mm Break through time: 480 min

Material tested: KCL 741 Dermatril? L

Splash contact Material: Nitrile rubber

Minimum layer thickness: 0,11 mm Break through time: 480 min

Material tested: KCL 741 Dermatril? L

Respiratory protection required when dusts are generated.

Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

Recommended Filter type: Filter type P1

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer.

These measures have to be properly documented.

Control of environmental exposure

Do not let product enter drains.

SECTION 9: Physical and chemical properties

Information on basic physicochemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Form: powder</td>
</tr>
<tr>
<td>Odour</td>
<td>No data available</td>
</tr>
<tr>
<td>Odour Threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>Melting point/range: 214 - 215 °C</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>726.3±60.0 °C(Predicted)</td>
</tr>
<tr>
<td>Flash point</td>
<td>No data available</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
</tr>
</tbody>
</table>
Upper/lower flammability or explosive limits  
Vapour pressure  
Vapour density  
Relative density  
Water solubility  
Partition coefficient: n-octanol/water  
Autoignition temperature  
Decomposition temperature  
Viscosity  
Explosive properties  
Oxidizing properties  
$\lambda_{\text{max}}$  

**Other safety information**

No data available

**SECTION 10: Stability and reactivity**

**Reactivity**

The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.

**Chemical stability**

The product is chemically stable under standard ambient conditions (room temperature).

**Possibility of hazardous reactions**

No data available

**Conditions to avoid**

no information available

**Incompatible materials**

No data available

**Hazardous decomposition products**

In the event of fire: see section 5

**SECTION 11: Toxicological information**

**Information on toxicological effects**

**Acute toxicity**
Skin corrosion/irritation
Serious eye damage/eye irritation Respiratory or skin sensitization
Germ cell mutagenicity
Carcinogenicity
No data available
Reproductive toxicity
Specific target organ toxicity - single exposure Specific target organ toxicity - repeated exposure Aspiration hazard

SECTION 12: Ecological information

Toxicity

Persistence and degradability

Bioaccumulative potential

Mobility in soil

Results of PBT and vPvB assessment
This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Other adverse effects

SECTION 13: Disposal considerations

Waste treatment methods

Product
See www.retrologistik.com for processes regarding the return of chemicals and containers, or contact us there if you have further questions.

SECTION 14: Transport information

UN number
ADR/RID: - IMDG: - IATA: -

UN proper shipping name
ADR/RID: Not dangerous goods IMDG: Not dangerous goods IATA: Not dangerous goods

Transport hazard class(es)
ADR/RID: - IMDG: - IATA: -
Packaging group
ADR/RID: - IMDG: - IATA: -

Environmental hazards
ADR/RID: no IMDG Marine pollutant: no IATA: no

Special precautions for user

Further information
Not classified as dangerous in the meaning of transport regulations.

SECTION 15: Regulatory information

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

Regulations on the Safety Management of Hazardous Chemicals

Measures for Environmental Management of New Chemical Substances
EC Inventory: Listed.
European Inventory of Existing Commercial Chemical Substances (EINECS): Listed. website: https://echa.europa.eu/
United States Toxic Substances Control Act (TSCA) Inventory: Listed. website: https://www.epa.gov/
Chinese Chemical Inventory of Existing Chemical Substances (China IECSC): Not Listed. website: https://www.mee.gov.cn/
Korea Existing Chemicals List (KECL): Not Listed. website: http://ncis.nier.go.kr
New Zealand Inventory of Chemicals (NZIoC): Not Listed. website: https://www.epa.govt.nz/
Philippines Inventory of Chemicals and Chemical Substances (PICCS): Not Listed. website: https://emb.gov.ph/
Vietnam National Chemical Inventory: Not Listed. website: https://chemicaldata.gov.vn/

SECTION 16: Other information

Abbreviations and acronyms
ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
CAS: Chemical Abstracts Service
EC50: Effective Concentration 50%
IATA: International Air Transportation Association
IMDG: International Maritime Dangerous Goods
LC50: Lethal Concentration 50%
LD50: Lethal Dose 50%
RID: Regulation concerning the International Carriage of Dangerous Goods by Rail
STEL: Short term exposure limit
TWA: Time Weighted Average

References
1. CAMEO Chemicals, website: http://cameochemicals.noaa.gov/search/simple
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