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

1.1 Product identifiers

Product name: Acrylamide/Bis-acrylamide, 30% solution

Product Number: A3699
Brand: Sigma
REACH No.: A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

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

Identified uses: Laboratory chemicals, Manufacture of substances

1.3 Details of the supplier of the safety data sheet

Company: Sigma-Aldrich Chemie BV
Stationsplein 4
3331 LL ZWIJNDRECHT
NETHERLANDS

Telephone: +31 78-620-5411
Fax: +31 78-620-5421
E-mail address: eurtechserv@sial.com

1.4 Emergency telephone number

Emergency Phone #: +(31)-858880596 (CHEMTREC)
112 (Alarmnummer)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008
Acute toxicity, Oral (Category 4), H302
Acute toxicity, Inhalation (Category 4), H332
Skin irritation (Category 2), H315
Eye irritation (Category 2), H319
Skin sensitisation (Category 1), H317
Germ cell mutagenicity (Category 1B), H340
Carcinogenicity (Category 1B), H350
Reproductive toxicity (Category 2), H361f
Specific target organ toxicity - repeated exposure (Category 1), H372

For the full text of the H-Statements mentioned in this Section, see Section 16.

Classification according to EU Directives 67/548/EEC or 1999/45/EC
T Toxic R25, R48/23/24/25
T Toxic R45
T Toxic R46
Xn Harmful R20/21
Xn Harmful R62
Xi Irritant R43
Xi Irritant R36/38
For the full text of the R-phrases mentioned in this Section, see Section 16.

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram

Signal word | Danger
---|---

Hazard statement(s)
- H302 + H332: Harmful if swallowed or if inhaled
- H315: Causes skin irritation.
- H317: May cause an allergic skin reaction.
- H319: Causes serious eye irritation.
- H340: May cause genetic defects.
- H350: May cause cancer.
- H361f: Suspected of damaging fertility.
- H372: Causes damage to organs through prolonged or repeated exposure.

Precautionary statement(s)
- P201: Obtain special instructions before use.
- P261: Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
- P280: Wear protective gloves.
- P304 + P340 + P312: IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell.
- P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P308 + P313: IF exposed or concerned: Get medical advice/ attention.

Supplemental Hazard Statements
- none

Restricted to professional users.


Hazard symbol(s) | T Toxic
---|---

R-phrase(s)
- R45: May cause cancer.
- R46: May cause heritable genetic damage.
- R20/21: Also harmful by inhalation and in contact with skin.
- R25: Also toxic if swallowed.
- R48/23/24/25: Also toxic: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed.
- R36/38: Irritating to eyes and skin.
- R43: May cause sensitisation by skin contact.
- R62: Possible risk of impaired fertility.

S-phrase(s)
- S53: Avoid exposure - obtain special instructions before use.
- S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- S36/37: Wear suitable protective clothing and gloves.
- S45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Restricted to professional users.

2.3 Other hazards

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.
SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous ingredients according to Regulation (EC) No 1272/2008

<table>
<thead>
<tr>
<th>Component</th>
<th>Classification</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acrylamide</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAS-No.</td>
<td>79-06-1</td>
<td></td>
</tr>
<tr>
<td>EC-No.</td>
<td>201-173-7</td>
<td></td>
</tr>
<tr>
<td>Index-No.</td>
<td>616-003-00-0</td>
<td></td>
</tr>
<tr>
<td>Registration number</td>
<td>01-2119463260-48-XXXX</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Carc. 1B; Muta. 1B; Repr. 2; Acute Tox. 3; STOT RE 1; Acute Tox. 4; Eye Irrit. 2; Skin Irrit. 2; Skin Sens. 1; H372, H319, H315, H301, H312, H317, H332, H340, H350, H361f</td>
<td>&gt;= 30 - &lt; 50 %</td>
</tr>
</tbody>
</table>

| N,N’-Methylenediacylamide      |                |                 |
| CAS-No.                        | 110-26-9       |                 |
| EC-No.                         | 203-750-9      |                 |
|                                | Acute Tox. 4; H302, H332 | >= 1 - < 10 % |

Hazardous ingredients according to Directive 1999/45/EC

<table>
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<tr>
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</table>

| N,N’-Methylenediacylamide      |                |                 |
| CAS-No.                        | 110-26-9       |                 |
| EC-No.                         | 203-750-9      |                 |
|                                | Xn, R20/22     | < 10 %          |

For the full text of the H-Statements and R-Phrases mentioned in this Section, see Section 16

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice
Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact
Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

In case of eye contact
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 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

4.3 Indication of any immediate medical attention and special treatment needed
No data available
SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture
Carbon oxides, Nitrogen oxides (NOx), Ammonia
Carbon oxides, Nitrogen oxides (NOx)

5.3 Advice for firefighters
Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information
No data available

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation.
Evacuate personnel to safe areas.
For personal protection see section 8.

6.2 Environmental precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

6.3 Methods and materials for containment and cleaning up
Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections
For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling
Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.
For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities
Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Recommended storage temperature 2 - 8 °C
Light sensitive. Store under inert gas.
Storage class (TRGS 510): Non-combustible, acute toxic Cat.3 / toxic hazardous materials or hazardous materials causing chronic effects

7.3 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

8.1 Control parameters

Components with workplace control parameters

8.2 Exposure controls

Appropriate engineering controls
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.
Personal protective equipment

Eye/face protection
Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

- Full contact
  - Material: Nitrile rubber
  - Minimum layer thickness: 0,11 mm
  - Break through time: 480 min
  - Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)

- Splash contact
  - Material: Nitrile rubber
  - Minimum layer thickness: 0,11 mm
  - Break through time: 480 min
  - Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374
If used in solution, or mixed with other substances, and under conditions which differ from EN 374, consult the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Body Protection
Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection
Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

| a) Appearance | Form: liquid |
| b) Odour      | No data available |
| c) Odour Threshold | No data available |
| d) pH         | No data available |
| e) Melting point/freezing point | No data available |
| f) Initial boiling point and boiling range | No data available |
9.2 Other safety information
No data available

SECTION 10: Stability and reactivity

10.1 Reactivity
No data available

10.2 Chemical stability
Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions
No data available

10.4 Conditions to avoid
No data available

10.5 Incompatible materials
Acids, Bases, Oxidizing agents, Reducing agents, Iron and iron salts., Copper, Aluminum, Brass, Free radical initiators

10.6 Hazardous decomposition products
Other decomposition products - No data available
In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity
No data available

Skin corrosion/irritation
No data available

Serious eye damage/eye irritation
No data available
Respiratory or skin sensitisation
May cause sensitisation by skin contact.

Germ cell mutagenicity
No data available

Carcinogenicity
IARC: 2A - Group 2A: Probably carcinogenic to humans (Acrylamide)

Reproductive toxicity
No data available

Specific target organ toxicity - single exposure
No data available

Specific target organ toxicity - repeated exposure
No data available

Aspiration hazard
No data available

Additional Information
RTECS: Not available

Acrylamide toxicity is manifested as a sensorimotor peripheral neuropathy.
Liver - Irregularities - Based on Human Evidence (Acrylamide)

SECTION 12: Ecological information

12.1 Toxicity
No data available

12.2 Persistence and degradability
No data available

12.3 Bioaccumulative potential
No data available

12.4 Mobility in soil
No data available

12.5 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.

12.6 Other adverse effects
Harmful to aquatic life.

SECTION 13: Disposal considerations

13.1 Waste treatment methods
Product
Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging
Dispose of as unused product.

SECTION 14: Transport information

14.1 UN number
ADR/RID: 3426  IMDG: 3426  IATA: 3426

14.2 UN proper shipping name
ADR/RID: ACRYLAMIDE SOLUTION
IMDG: ACRYLAMIDE SOLUTION
IATA: Acrylamide solution
14.3 Transport hazard class(es)
ADR/RID: 6.1  
IMDG: 6.1  
IATA: 6.1

14.4 Packaging group
ADR/RID: III  
IMDG: III  
IATA: III

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

14.6 Special precautions for user
No data available

SECTION 15: Regulatory information
This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
Authorisations and/or restrictions on use
Acrylamide  
CAS-No.: 79-06-1  
REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59).  
Carcinogenic (article 57a)  
ED/68/2009

Acrylamide  
CAS-No.: 79-06-1  
REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59).  
Carcinogenic (article 57a)  
ED/68/2009

15.2 Chemical Safety Assessment
For this product a chemical safety assessment was not carried out

SECTION 16: Other information
Full text of H-statements referred to under sections 2 and 3.
Acute Tox.  Acute toxicity  
Carc.  Carcinogenicity  
Eye Irrit.  Eye irritation  
H301  Toxic if swallowed.  
H302  Harmful if swallowed.  
H312  Harmful in contact with skin.  
H315  Causes skin irritation.  
H317  May cause an allergic skin reaction.  
H319  Causes serious eye irritation.  
H332  Harmful if inhaled.  
H340  May cause genetic defects.  
H350  May cause cancer.  
H361f  Suspected of damaging fertility.  
H372  Causes damage to organs through prolonged or repeated exposure.  
Muta.  Germ cell mutagenicity  
Repr.  Reproductive toxicity  
Skin Irrit.  Skin irritation  
Skin Sens.  Skin sensitisation  
STOT RE  Specific target organ toxicity - repeated exposure

Full text of R-phrases referred to under sections 2 and 3
T  Toxic  
R20/21  Harmful by inhalation and in contact with skin.  
R20/22  Harmful by inhalation and if swallowed.  
R25  Toxic if swallowed.  
Xn  Harmful
R36/38 Irritating to eyes and skin.
R43 May cause sensitisation by skin contact.
R45 May cause cancer.
R46 May cause heritable genetic damage.
R48/23/24/25 Toxic: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed.
R62 Possible risk of impaired fertility.
Repr.Cat.3 Toxic to Reproduction Category 3

Further information
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