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

1.1 Product identifier

**Trade name:** Acrylamide

- **Article number:** 0146
- **CAS Number:** 79-06-1
- **EC number:** 201-173-7
- **Index number:** 616-003-00-0
- **Registration number**
  A registration number is not available for this substance as the substance or its uses are exempted from registration or the annual tonnage does not require a registration.

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

No further relevant information available.

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

Biosolve Chimie
20 Rue Roger Husson, 57260 Dieuze, France
Tel: +33 3 878 675 80/81/82/83/84/85
Email: info@biosolvechimie.com

Biosolve B.V.
Leenderweg 78, 5555 CE Valkenswaard, the Netherlands.
Tel: +31-(0)40-2071300
Fax:+31-(0)40-2048537
Email: info@biosolve-chemicals.com

Further information obtainable from: Product safety department.

1.4 Emergency telephone number:

For emergency telephone numbers of the poisons centers in Europe please use this link: [http://www.eapcct.org/](http://www.eapcct.org/)

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**SECTION 2: Hazards identification**

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

GHS06 skull and crossbones

Acute Tox. 3 H301 Toxic if swallowed.

GHS08 health hazard

Muta. 1B H340 May cause genetic defects.
Carc. 1B H350 May cause cancer.
Repr. 2 H361f Suspected of damaging fertility.
STOT RE 1 H372 Causes damage to organs through prolonged or repeated exposure.

(Contd. on page 2)
Trade name: Acrylamide

2.2 Label elements

- Labelling according to Regulation (EC) No 1272/2008
  The substance is classified and labelled according to the CLP regulation.

- Hazard pictograms

  GHS07
  GHS06  GHS08

- Signal word Danger

- Hazard statements

  H301  Toxic if swallowed.
  H312  Harmful in contact with skin.
  Acute Tox. 4
  H312+H332  Harmful in contact with skin or if inhaled.
  Acute Tox. 4
  H315  Causes skin irritation.
  Skin Irrit. 2
  H317  May cause an allergic skin reaction.
  Skin Sens. 1
  H319  Causes serious eye irritation.
  Eye Irrit. 2
  H350  May cause genetic defects.
  H340  May cause cancer.
  H361f  Suspected of damaging fertility.
  H361f  Suspected of damaging fertility.
  H372  Causes damage to organs through prolonged or repeated exposure.

- Precautionary statements

  P301+P310  IF SWALLOWED: Immediately call a POISON CENTER/doctor.
  P330  Rinse mouth.
  P305+P351+P338  IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  P362+P364  Take off contaminated clothing and wash it before reuse.
  P405  Store locked up.
  P501  Dispose of contents/container in accordance with local/regional/national/international regulations.

- Additional information:
  Restricted to professional users.

2.3 Other hazards

- Results of PBT and vPvB assessment
  - PBT: Not applicable.
  - vPvB: Not applicable.
SECTION 3: Composition/information on ingredients

- 3.1 Chemical characterisation: Substances
  - CAS No. Description
    - 79-06-1 Acrylamide
  - Identification number(s)
    - EC number: 201-173-7
    - Index number: 616-003-00-0

SVHC
  - 79-06-1 Acrylamide

SECTION 4: First aid measures

- 4.1 Description of first aid measures
  - General information:
    - Immediately remove any clothing soiled by the product.
    - Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
    - In case of irregular breathing or respiratory arrest provide artificial respiration.
  - After inhalation:
    - Supply fresh air and be sure to call for a doctor.
    - In case of unconsciousness place patient stably in side position for transportation.
  - After skin contact:
    - Immediately wash with water and soap and rinse thoroughly.
  - After eye contact:
    - Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
  - After swallowing:
    - Do not induce vomiting; call for medical help immediately.
  - 4.2 Most important symptoms and effects, both acute and delayed
    - No further relevant information available.
  - 4.3 Indication of any immediate medical attention and special treatment needed
    - No further relevant information available.

SECTION 5: Firefighting measures

- 5.1 Extinguishing media
  - Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.
- 5.2 Special hazards arising from the substance or mixture
  - During heating or in case of fire poisonous gases are produced.
- 5.3 Advice for firefighters
  - Protective equipment: Mouth respiratory protective device.

SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures
  - Mount respiratory protective device.
- 6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- 6.3 Methods and material for containment and cleaning up:
  - Dispose contaminated material as waste according to item 13.
  - Ensure adequate ventilation.
 SECTION 7: Handling and storage

- 7.1 Precautions for safe handling
  Thorough dedusting.
  Ensure good ventilation/exhaustion at the workplace.
  Open and handle receptacle with care.
- Information about fire - and explosion protection: Keep respiratory protective device available.
- 7.2 Conditions for safe storage, including any incompatibilities
- Storage:
  Requirements to be met by storerooms and receptacles: No special requirements.
  Information about storage in one common storage facility: Not required.
- Further information about storage conditions: Keep container tightly sealed.
- 7.3 Specific end use(s) No further relevant information available.

 SECTION 8: Exposure controls/personal protection

- Additional information about design of technical facilities: No further data; see item 7.
- 8.1 Control parameters
  Ingredients with limit values that require monitoring at the workplace:
  79-06-1 Acrylamide
  BOELV Long-term value: 0.1 mg/m³
  Skin
  Additional information: The lists valid during the making were used as basis.
- 8.2 Exposure controls
  Personal protective equipment:
  General protective and hygienic measures:
  Keep away from foodstuffs, beverages and feed.
  Immediately remove all soiled and contaminated clothing
  Wash hands before breaks and at the end of work.
  Store protective clothing separately.
  Avoid contact with the eyes and skin.
  Respiratory protection:
  In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer
  exposure use self-contained respiratory protective device.
  Protection of hands:
  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.
Trade name: Acrylamide

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

- **Material of gloves**
  The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

- **Penetration time of glove material**
  The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **Eye protection:**

  Tightly sealed goggles

## SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**

  **General Information**

  - **Appearance:**
    - Form: Solid
    - Colour: White
  - **Odour:** Characteristic
  - **Odour threshold:** Not determined.

  - **pH-value:** 5-7

  - **Change in condition**
    - Melting point/freezing point: 84-85 °C
    - Initial boiling point and boiling range: 125 °C

  - **Flash point:** 138 °C

  - **Flammability (solid, gas):** Product is not flammable.

  - **Ignition temperature:** 424 °C

  - **Decomposition temperature:** Not determined.

  - **Auto-ignition temperature:** Not determined.

  - **Explosive properties:** Product does not present an explosion hazard.

  - **Explosion limits:**
    - Lower: Not determined.
    - Upper: Not determined.

  - **Vapour pressure at 20 °C:** 0.009 hPa

  - **Density at 20 °C:** 1.03 g/cm³
  - **Relative density** Not determined.
  - **Vapour density** Not applicable.
  - **Evaporation rate** Not applicable.

  - **Solubility in / Miscibility with water at 25 °C:** 2040 g/l
Trade name: Acrylamide

- Partition coefficient: n-octanol/water: Not determined.
- Viscosity:
  - Dynamic: Not applicable.
  - Kinematic: Not applicable.
- 9.2 Other information
  - No further relevant information available.

SECTION 10: Stability and reactivity

- 10.1 Reactivity
  - No further relevant information available.
- 10.2 Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- 10.3 Possibility of hazardous reactions
  - No dangerous reactions known.
- 10.4 Conditions to avoid
  - No further relevant information available.
- 10.5 Incompatible materials
  - No further relevant information available.
- 10.6 Hazardous decomposition products
  - No dangerous decomposition products known.

SECTION 11: Toxicological information

- 11.1 Information on toxicological effects
- Acute toxicity
  - Toxic if swallowed.
  - Harmful in contact with skin or if inhaled.
- LD/LC50 values relevant for classification:

<table>
<thead>
<tr>
<th>Route</th>
<th>LD50</th>
<th>LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
<td>124 mg/kg (rat)</td>
<td></td>
</tr>
<tr>
<td>Dermal</td>
<td>400 mg/kg (rat)</td>
<td></td>
</tr>
<tr>
<td>Inhalative</td>
<td>LC50/4 h 11 mg/l (ATE)</td>
<td></td>
</tr>
</tbody>
</table>

- Primary irritant effect:
- Skin corrosion/irritation
  - Causes skin irritation.
- Serious eye damage/irritation
  - Causes serious eye irritation.
- Respiratory or skin sensitisation
  - May cause an allergic skin reaction.
- CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)
- Germ cell mutagenicity
  - May cause genetic defects.
- Carcinogenicity
  - May cause cancer.
- Reproductive toxicity
  - Suspected of damaging fertility.
- STOT-single exposure
  - Based on available data, the classification criteria are not met.
- STOT-repeated exposure
  - Causes damage to organs through prolonged or repeated exposure.
- Aspiration hazard
  - Based on available data, the classification criteria are not met.
SECTION 12: Ecological information

- 12.1 Toxicity
  - Aquatic toxicity: No further relevant information available.
- 12.2 Persistence and degradability No further relevant information available.
- 12.3 Bioaccumulative potential No further relevant information available.
- 12.4 Mobility in soil No further relevant information available.
- Additional ecological information:
  - General notes:
    Water hazard class 3 (German Regulation) (Assessment by list): extremely hazardous for water
    Do not allow product to reach ground water, water course or sewage system, even in small quantities.
    Danger to drinking water if even extremely small quantities leak into the ground.
- 12.5 Results of PBT and vPvB assessment
  - PBT: Not applicable.
  - vPvB: Not applicable.
- 12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

- 13.1 Waste treatment methods
  - Recommendation
    Must not be disposed together with household garbage. Do not allow product to reach sewage system.
  - European waste catalogue
    | HP 4 | Irritant - skin irritation and eye damage |
    | HP 5 | Specific Target Organ Toxicity (STOT)/Aspiration Toxicity |
    | HP 6 | Acute Toxicity |
    | HP 7 | Carcinogenic |
    | HP 10 | Toxic for reproduction |
    | HP 11 | Mutagenic |
    | HP 13 | Sensitising |
  - Uncleaned packaging:
    - Recommendation: Disposal must be made according to official regulations.
    - Recommended cleansing agents: Water, if necessary together with cleansing agents.

SECTION 14: Transport information

- 14.1 UN-Number
  - ADR, IMDG, IATA UN2074
- 14.2 UN proper shipping name
  - ADR UN2074 ACRYLAMIDE, SOLID
  - IMDG, IATA ACRYLAMIDE, SOLID
Safety data sheet according to 1907/2006/EC, Article 31

Printing date 20.04.2018
Revision: 29.01.2018

Trade name: Acrylamide

14.3 Transport hazard class(es)
- ADR
  - Class 6.1 (T2) Toxic substances.
  - Label 6.1

IMDG, IATA
- Class 6.1 Toxic substances.
- Label 6.1

14.4 Packing group
- ADR, IMDG, IATA
  - Packing group III

14.5 Environmental hazards:
- Marine pollutant: No

14.6 Special precautions for user
- Warning: Toxic substances.
- Danger code (Kemler): 60
- EMS Number: F-A,S-A
- Stowage Category A
- Stowage Code SW1 Protected from sources of heat.
- Handling Code H2 Keep as cool as reasonably practicable

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code
- Not applicable.

Transport/Additional information:
- ADR
  - Limited quantities (LQ) 5 kg
  - Excepted quantities (EQ) Code: E1
    Maximum net quantity per inner packaging: 30 g
    Maximum net quantity per outer packaging: 1000 g
  - Transport category 2
  - Tunnel restriction code E

- IMDG
  - Limited quantities (LQ) 5 kg
  - Excepted quantities (EQ) Code: E1
    Maximum net quantity per inner packaging: 30 g
    Maximum net quantity per outer packaging: 1000 g

- UN "Model Regulation": UN 2074 ACRYLAMIDE, SOLID, 6.1, III
SECTION 15: Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- Labelling according to Regulation (EC) No 1272/2008
  The substance is classified and labelled according to the CLP regulation.
- Hazard pictograms

GHS06  GHS08

- Signal word Danger
- Hazard statements
  H301  Toxic if swallowed.
  H312+H332  Harmful in contact with skin or if inhaled.
  H315  Causes skin irritation.
  H319  Causes serious eye irritation.
  H317  May cause an allergic skin reaction.
  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 statements
  P301+P310  IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
  P330  Rinse mouth.
  P305+P351+P338  IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  P362+P364  Take off contaminated clothing and wash it before reuse.
  P405  Store locked up.
  P501  Dispose of contents/container in accordance with local/regional/national/international regulations.
- Directive 2012/18/EU
- Named dangerous substances - ANNEX I Substance is not listed.
- REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 28, 29, 60
- National regulations:
  - Additional classification according to Decree on Hazardous Materials, Annex II:
    Carcinogenic hazardous material group I (extremely dangerous).
    Carcinogenic hazardous material group II (very dangerous).
    Carcinogenic hazardous material group III (dangerous).
- Information about limitation of use:
  Workers are not allowed to be exposed to this hazardous material. Exceptions can be made by the authorities in certain cases.
- Other regulations, limitations and prohibitive regulations
  - Substances of very high concern (SVHC) according to REACH, Article 57
    79-06-1  Acrylamide
- 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.
SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Department issuing SDS:** Product safety department
- **Contact:** Product safety department

**Abbreviations and acronyms:**
- RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
- IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
- ICAO: International Civil Aviation Organisation
- ICAO-TI: Technical Instructions by the "International Civil Aviation Organisation" (ICAO)
- ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
- IMDG: International Maritime Code for Dangerous Goods
- IATA: International Air Transport Association
- GHS: Globally Harmonised System of Classification and Labelling of Chemicals
- EINECS: European Inventory of Existing Commercial Chemical Substances
- CAS: Chemical Abstracts Service (division of the American Chemical Society)
- LC50: Lethal concentration, 50 percent
- LD50: Lethal dose, 50 percent
- PBT: Persistent, Bioaccumulative and Toxic
- SVHC: Substances of Very High Concern
- vPvB: very Persistent and very Bioaccumulative
- Acute Tox. 3: Acute toxicity – Category 3
- Acute Tox. 4: Acute toxicity – Category 4
- Skin Irrit. 2: Skin corrosion/irritation – Category 2
- Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
- Skin Sens. 1: Skin sensitisation – Category 1
- Mut. 1B: Germ cell mutagenicity – Category 1B
- Carc. 1B: Carcinogenicity – Category 1B
- Repr. 2: Reproductive toxicity – Category 2
- STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1

- **Data compared to the previous version altered.**