

## Safety Data Sheet

according to Regulation (EC) No 1907/2006 (REACH)  
Classifications according to Regulation (EC) No 1272/2008.  
Printdate 10 Jan 2023

## 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1. Product name:

Acrylamide

### 1.1. Catalog No.:

675336

### 1.2. Relevant identified uses of the substance or mixture

Identified: Laboratory chemical  
uses: R&D

### 1.3. Uses advised against:

HPC Standards GmbH  
Am Wieseneck 7

04451 Cunnersdorf  
Deutschland

Tel. +49 34291 3372-36  
Fax. +49 34291 3372-39  
contact@hpc-standards.com

### 1.4. Emergency telephone number

HPC Standards Tel. +49 34291 3372-36  
This number is only available during office hours.

## 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture  
Classification according to Regulation (EC) No 1272/2008  
Carcinogenicity (Category 1B), H350  
Germ cell mutagenicity (Category 1B), H340  
Reproductive toxicity (Category 2), H361f  
Acute toxicity, Oral (Category 3), H301  
Specific target organ toxicity - repeated exposure (Category 1), H372  
Acute toxicity, Inhalation (Category 4), H332  
Acute toxicity, Dermal (Category 4), H312  
Eye irritation (Category 2), H319  
Skin irritation (Category 2), H315  
Skin sensitisation (Category 1), H317 Classification according to EU Directives 67/548/EEC or 1999/45/EC  
T Toxic R25, R48/23/24/25  
R45  
R46  
R62  
Xn Harmful R20/21  
Xi Irritant R36/38  
R43

### 2.2. Label elements

#### 2.2.1. Pictogram



## 2.2.2.

Signal word Danger  
Hazard statement(s)  
H301 Toxic if swallowed.  
H312 + H332 Harmful in contact with skin 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.  
P280 Wear protective gloves/ protective clothing.  
P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.  
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.  
2.3 Other hazards - none

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances  
Synonyms : Acrylic acid amide  
2-Propenamide  
Formula : C<sub>3</sub>H<sub>5</sub>NO  
Molecular Weight : 71,08 g/mol  
CAS-No. : 79-06-1  
EC-No. : 201-173-7  
Index-No. : 616-003-00-0  
Registration number : 01-2119463260-48-XXXX  
Hazardous ingredients according to Regulation (EC) No 1272/2008  
Component Classification Concentration  
Acrylamide Included in the Candidate List of Substances of Very High Concern (SVHC) according to Regulation (EC) No. 1907/2006 (REACH)  
CAS-No.  
EC-No.  
Index-No.  
Registration number  
79-06-1  
201-173-7  
616-003-00-0  
01-2119463260-48-XXXX  
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  
≤ 100 %  
Hazardous ingredients according to Directive 1999/45/EC  
Component Classification Concentration Acrylamide Included in the Candidate List of Substances of Very High Concern (SVHC) according to Regulation (EC) No. 1907/2006 (REACH)  
CAS-No.  
EC-No.  
Index-No.  
Registration number  
79-06-1  
201-173-7  
616-003-00-0  
01-2119463260-48-XXXX  
T, Carc.Cat.2, Mut.Cat.2,

Repr.Cat.3, R45 - R46 -  
R20/21 - R25 - R36/38 - R43 -  
R48/23/24/25 - R62  
≤ 100 %

#### 3.1.1. Formula

C<sub>3</sub>H<sub>5</sub>NO

#### 3.1.2. Molecular Weight (g/mol)

71.08

#### 3.1.3. CAS-No.

79-06-1

### 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

## 5. FIRE-FIGHTING 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)

### 5.3 Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

### 5.4 Further information

no data available

## 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

Wear respiratory protection. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

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

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

### 6.4 Reference to other sections

For disposal see section 13.

## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Avoid exposure - obtain special instructions before use.

Provide appropriate exhaust ventilation at places where dust is formed.

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.

Light sensitive. Store under inert gas.

### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

Components with workplace control parameters

### 8.2 Exposure controls

Appropriate engineering controls

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

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. 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 particle respirator type N100 (US) or type P3 (EN 143) 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.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

- a) Appearance Form: solid
  - b) Odour no data available
  - c) Odour Threshold no data available
  - d) pH 5,2 - 6 at 500 g/l
  - e) Melting point/freezing point  
Melting point/range: 82 - 86 °C - lit.
  - f) Initial boiling point and boiling range  
125 °C at 33 hPa - lit.
  - g) Flash point 138 °C - closed cup
  - h) Evaporation rate no data available
  - i) Flammability (solid, gas) no data available
  - j) Upper/lower flammability or explosive limits  
no data available
  - k) Vapour pressure 2,1 hPa at 84,50 °C  
0,04 hPa at 40 °C  
0,0900 hPa at 25 °C
  - l) Vapour density 2,45 - (Air = 1.0)
  - m) Relative density no data available
  - n) Water solubility 200 g/l at 20 °C
  - o) Partition coefficient: noctanol/  
water  
log Pow: -0,67
  - p) Auto-ignition temperature  
no data available
  - q) Decomposition temperature  
no data available
  - r) Viscosity no data available
  - s) Explosive properties no data available
  - t) Oxidizing properties no data available
- ### 9.2 Other safety information
- Relative vapour density 2,45 - (Air = 1.0)

## 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, Oxidizing agents, Iron and iron salts., Copper, Brass, Free radical initiators
- 10.6 Hazardous decomposition products  
Other decomposition products - no data available  
In the event of fire: see section 5

## 11. TOXICOLOGICAL INFORMATION

- 11.1 Information on toxicological effects
  - Acute toxicity
  - LD50 Oral - rat - 177 mg/kg
  - LC50 Inhalation - rat - 4 h - > 1.500 mg/m3
  - LD50 Dermal - rabbit - 1.141 mg/kg  
(OECD Test Guideline 402)
  - Skin corrosion/irritation
  - Skin - rabbit
  - Result: No skin irritation  
(OECD Test Guideline 404)
  - Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)
  - Serious eye damage/eye irritation
  - Eyes - rabbit
  - Result: Irritating to eyes.  
(OECD Test Guideline 405)
  - Respiratory or skin sensitisation
  - Maximisation Test - guinea pig
  - May cause allergic skin reaction.  
(OECD Test Guideline 406)
  - Germ cell mutagenicity
  - May alter genetic material. In vivo tests showed mutagenic effects
  - Carcinogenicity
  - This product is or contains a component that has been reported to be probably carcinogenic based on its IARC, OSHA, ACGIH, NTP, or EPA classification. Possible human carcinogen
  - IARC: 2A - Group 2A: Probably carcinogenic to humans (Acrylamide)
  - Reproductive toxicity
  - Animal testing did not show any effects on foetal development.
  - May cause reproductive disorders. Suspected human reproductive toxicant
  - Specific target organ toxicity - single exposure
  - no data available Specific target organ toxicity - repeated exposure
  - Oral - Causes damage to organs through prolonged or repeated exposure. - Peripheral nervous System Aspiration hazard
  - no data available
  - Additional Information
  - RTECS: AS3325000
  - Liver - Irregularities - Based on Human Evidence

## 12. ECOLOGICAL INFORMATION

- 12.1 Toxicity
  - Toxicity to fish LC50 - Pimephales promelas (fathead minnow) - 90 mg/l - 96 h
  - NOEC - Cyprinus carpio (Carp) - 5 mg/l - 28 d
  - Toxicity to daphnia and other aquatic

invertebrates  
mortality NOEC - Daphnia magna (Water flea) - 60 mg/l - 48 h  
EC50 - Daphnia magna (Water flea) - 160 mg/l - 48 h  
12.2 Persistence and degradability  
Biodegradability Result: 100 % - Readily biodegradable.  
(OECD Test Guideline 301D)  
12.3 Bioaccumulative potential  
Bioaccumulation Oncorhynchus mykiss (rainbow trout) - 72 h  
- 710 &#956;g/l  
Bioconcentration factor (BCF): 1,65  
12.4 Mobility in soil  
no data available  
12.5 Results of PBT and vPvB assessment  
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted  
12.6 Other adverse effects  
Harmful to aquatic life.  
no data available

### 13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods  
Product  
Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.  
Contaminated packaging  
Dispose of as unused product.

### 14. TRANSPORT INFORMATION

14.1 UN number  
ADR/RID: 2074 IMDG: 2074 IATA: 2074  
14.2 UN proper shipping name  
ADR/RID: ACRYLAMIDE, SOLID  
IMDG: ACRYLAMIDE, SOLID  
IATA: Acrylamide, solid  
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

### 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  
Candidate List of Substances of Very High Concern for Authorisation

Carcinogenic (article 57a)  
ED/68/2009  
Acrylamide CAS-No.: 79-06-1  
Candidate List of Substances of Very High Concern for Authorisation  
Carcinogenic (article 57a)  
ED/68/2009  
15.2 Chemical Safety Assessment  
For this product a chemical safety assessment was not carried out

## 16. OTHER INFORMATION

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. For lab use only!