Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 12.12.2012 Revision: 12.12.2012

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

· **Product identifier**

· **Trade name:** **Acrylamide, ultra pure**

· **Article number:** 814329
· **CAS Number:**
79-06-1
· **EC number:**
201-173-7
· **Index number:**
616-003-00-0
· **Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
· **Application of the substance / the preparation** Research Use Only

· **Details of the supplier of the safety data sheet**
· **Manufacturer/Supplier:**
MP Biomedicals Europe
Parc d'Innovation BP 50067
Rue Geiler de Kaysersberg
Illkirch Cedex 67402
France
tel: +33 3.88.67.54.25
www.mpbio.com

· **Further information obtainable from:** Product safety department
· **Emergency telephone number:** :n° ORFILA" (01-45-42-59-59)

2 Hazards identification

· **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.

GHS07

Acute Tox. 4	H312	Harmful in contact with skin.
Acute Tox. 4	H332	Harmful if inhaled.
Skin Irrit. 2	H315	Causes skin irritation.
Eye Irrit. 2	H319	Causes serious eye irritation.
Skin Sens. 1	H317	May cause an allergic skin reaction.

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· **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**

T; Toxic

Carc. Cat. 2, Muta. Cat. 2

R45-46-25-48/23/24/25: *May cause cancer. May cause heritable genetic damage. Toxic if swallowed. Toxic: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed.*

Xn; Harmful

R20/21-62: *Harmful by inhalation and in contact with skin. Possible risk of impaired fertility.*

Xi; Irritant

R36/38: *Irritating to eyes and skin.*

Xi; Sensitising

R43: *May cause sensitisation by skin contact.*

Repr. Cat. 3

· **Information concerning particular hazards for human and environment:** *Not applicable.*

· **Label elements**

· **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-determining components of labelling:**

acrylamide prop-2-enamide

· **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**

P101 *If medical advice is needed, have product container or label at hand.*
P102 *Keep out of reach of children.*
P103 *Read label before use.*
P260 *Do not breathe dust/fume/gas/mist/vapours/spray.*
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.*
P321 *Specific treatment (see on this label).*

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P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Other hazards**
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.

3 Composition/information on ingredients

· **Chemical characterization: Substances**
· **CAS No. Description**
79-06-1 acrylamide prop-2-enamide
· **Identification number(s)**
· **EC number:** 201-173-7
· **Index number:** 616-003-00-0

· **SVHC**	
79-06-1	acrylamide prop-2-enamide

4 First aid measures

· **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 to be sure 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.
· **Information for doctor:**
· **Most important symptoms and effects, both acute and delayed** No further relevant information available.
· **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Firefighting measures

· **Extinguishing media**
· **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.
· **Special hazards arising from the substance or mixture** No further relevant information available.
· **Advice for firefighters**
· **Protective equipment:** Mouth respiratory protective device.

6 Accidental release measures

· **Personal precautions, protective equipment and emergency procedures** Not required.

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· **Environmental precautions:** *Do not allow to enter sewers/ surface or ground water.*
· **Methods and material for containment and cleaning up:**
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
· **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

· **Handling:**
· **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.*

· **Conditions for safe storage, including any incompatibilities**
· **Storage:** *15-30°C*
· **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:**
This product is hygroscopic.
Store in dry conditions.
Keep container tightly sealed.
· **Specific end use(s)** *No further relevant information available.*

8 Exposure controls/personal protection

· **Additional information about design of technical facilities:** *No further data; see item 7.*

· **Control parameters**
· **Ingredients with limit values that require monitoring at the workplace:** *Not required.*
· **Additional information:** *The lists valid during the making were used as basis.*

· **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

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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.
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

9 Physical and chemical properties

· **Information on basic physical and chemical properties**	
· **General Information**	
· **Appearance:**	
Form:	Solid
Colour:	Not determined.
· **Odour:**	Characteristic
· **Odour threshold:**	Not determined.
· **pH-value:**	Not applicable.
· **Change in condition**	
Melting point/Melting range:	84-85°C
Boiling point/Boiling range:	125°C
· **Flash point:**	138°C
· **Flammability (solid, gaseous):**	Product is not flammable.
· **Ignition temperature:**	
Decomposition temperature:	Not determined.
· **Self-igniting:**	Not determined.
· **Danger of explosion:**	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:**	Insoluble.

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· **Partition coefficient (n-octanol/water):**	Not determined.
· **Viscosity:**	
Dynamic:	Not applicable.
Kinematic:	Not applicable.
· **Solvent content:**	
Organic solvents:	0,0 %
VOC (EC)	0,00 %
Solids content:	100,0 %
· **Other information**	No further relevant information available.

10 Stability and reactivity

· **Reactivity**
· **Chemical stability**
· **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
· **Possibility of hazardous reactions** No dangerous reactions known.
· **Conditions to avoid** No further relevant information available.
· **Incompatible materials:** No further relevant information available.
· **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

· **Information on toxicological effects**
· **Acute toxicity:**

· **LD/LC50 values relevant for classification:**

79-06-1 acrylamide prop-2-enamide

Oral	LD50	124 mg/kg (rat)
Dermal	LD50	400 mg/kg (rat)

· **Primary irritant effect:**
· **on the skin:** Irritant to skin and mucous membranes.
· **on the eye:** Irritating effect.
· **Sensitization:** Sensitization possible through skin contact.
· **CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)**
Muta. 1B, Carc. 1B, Repr. 2

12 Ecological information

· **Toxicity**
· **Aquatic toxicity:** No further relevant information available.
· **Persistence and degradability** No further relevant information available.
· **Behaviour in environmental systems:**
· **Bioaccumulative potential** No further relevant information available.
· **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.

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Danger to drinking water if even extremely small quantities leak into the ground.

· **Results of PBT and vPvB assessment**
· **PBT:** *Not applicable.*
· **vPvB:** *Not applicable.*
· **Other adverse effects** *No further relevant information available.*

13 Disposal considerations

· **Waste treatment methods**
· **Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.

· **Uncleaned packaging:**
· **Recommendation:** *Disposal must be made according to official regulations.*

14 Transport information

· **UN-Number**	
· **ADR, IMDG, IATA**	*UN2074*
· **UN proper shipping name**	
· **ADR**	*2074 ACRYLAMIDE, SOLID*
· **IMDG, IATA**	*ACRYLAMIDE, SOLID*
· **Transport hazard class(es)**	
· **ADR, IMDG, IATA**	
· **Class**	*6.1 Toxic substances.*
· **Label**	*6.1*
· **Packing group**	
· **ADR, IMDG, IATA**	*III*
· **Environmental hazards:**	
· **Marine pollutant:**	*No*
· **Special precautions for user**	*Warning: Toxic substances.*
· **Danger code (Kemler):**	*60*
· **EMS Number:**	*F-A,S-A*
· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**	*Not applicable.*
· **Transport/Additional information:**	
· **ADR**	
· **Limited quantities (LQ)**	*5 kg*
· **Transport category**	*2*
· **Tunnel restriction code**	*E*

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· **UN "Model Regulation":**	UN2074, ACRYLAMIDE, SOLID, 6.1, III

15 Regulatory information

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

· **National regulations:**

· **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 prop-2-enamide

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

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 MSDS:** Product safety department

· **Abbreviations and acronyms:**
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 Harmonized 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)
VOC: Volatile Organic Compounds (USA, EU)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent