

Material Safety Data Sheet

Acrylamide Molecular Biology Grade

1. Identity of the substance and manufacturer

- ✓ *Identification of the product*
Catalog Number: ACRBA500
Product Name: Acrylamide Molecular Biology Grade
- ✓ *Manufacturer/supplier identification*
BioAmerica, Inc.
13230 SW 132nd Ave Suite 33
Miami FL 33186 USA
Phone/Fax: (305) 395-7674 / 395-5215

2. Composition/information about the components

- ✓ Molar mass: 71.08 g/mol
Molecular formula: $\text{CH}_2\text{CHCONH}_2$

3. Hazards

- ✓ May cause cancer. May cause heritable genetic damage. Also harmful by inhalation and in contact with skin. Also toxic if swallowed. Irritating to eyes and skin. May cause sensitization by skin contact. Also toxic: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed. Possible risk of impaired fertility. Restricted to professional users. Attention – Avoid exposure – obtain special instructions.

4. First Aid

- ✓ Inhalation: fresh air. If breathing stops: immediately apply mechanical ventilation, if necessary oxygen mask. Immediately summon doctor.
- ✓ Skin contact: wash off with plenty of water. Dab with polyethylene glycol 400. Remove contaminated clothing.
- ✓ Eye contact: rinse out with plenty of water at least 10 minutes with the eyelid held wide open. Summon eye specialist.
- ✓ Swallowing: make victim drink plenty of water, Induce vomiting, summon doctor, clean skin of vomit.

5. Fire-fighting

- ✓ *Suitable extinguishing media*
Powder, foam, spray water. Fire extinguisher: powder for glowing fire, carbon dioxide.
- ✓ *Special risks*
Combustible. Danger of dust explosion. Development of hazardous combustion gases or vapors possible in the event of fire. The following may develop in event of fire: nitrogen oxides.
- ✓ *Special protective equipment for fire fighting*
Do not stay in dangerous zone without suitable chemical protection clothing and self-contained breathing apparatus.
- ✓ *Other information*
Contain escaping vapors with water. Prevent fire-fighting water from entering surface water or groundwater.

6. Accidental Release

- ✓ *Person-related precautionary measures*
Avoid substance contact. Avoid generation of dusts; do not inhale dusts. Ensure supply of fresh air in enclosed rooms.
- ✓ *Environmental-protection measures*
Do not allow to enter sewerage system.
- ✓ *Procedures for cleaning / absorption*
Carefully take up dry. Forward for disposal. Clean up affected area. Avoid generation of dusts.

7. Handling and storage

- ✓ *Handling*
Work under hood. Do not inhale substance.
- ✓ *Storage*
Tightly closed. Dry. In a well ventilated place. Protected from light. At +15°C to +25°C. Accessible only for authorized persons.

8. Exposure controls and protection

- ✓ *Specific control parameter*
Carcinogenic, should be regarded as if it is carcinogenic to man. Mutagenic, cause concern for humans owing possible developmental toxic effects
- ✓ *Personal protective equipment*
Respiratory protection: required when dusts are generated.



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Eye protection: required.
 Hand protection: required.
 Protective clothing should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled. The resistance of the protective clothing to chemicals should be ascertained with the respective supplier.

✓ *Industrial hygiene*

Change contaminated clothing. Application of skin-protective barrier cream recommended. Wash hands after working with substance. Under no circumstances eat or drink at workplace. Avoid generation of dusts.

9. Physical and chemical properties

Form:	solid
Color:	colorless
Odor:	odorless
pH value at 50g/l H ₂ O (20 °C):	5.0 – 6.5
Boiling point (33.3 hPa):	125 °C
Melting point:	84 °C
Ignition temperature:	not available
Flash point:	not applicable
Explosion limits:	lower not available upper not available
Vapor pressure (20 °C)	0.009hPa
Relative vapor density:	2.45
Density (25 °C):	1.127 g/cm ³
Bulk density:	~ 500 kg/m ³
Solubility in:	water (25 °C) 2040 g/l Ethanol (30 °C) 862 g/l Chloroform (30 °C) 26.6g/l

10. Stability and reactivity

- ✓ *Conditions to be avoided*
Strong heating.
- ✓ *Substances to be avoided*
Acids, alkalis, oxidizing agent, reducing agents.
- ✓ *Hazardous decomposition products*
In the event of fire: see chapter 5.
- ✓ *Further information*

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Dust explosion possible, highly reactive, tendency towards spontaneous polymerization. Polymerization initiator: warmth/heat and light.

11. Toxicological information

✓ *Acute toxicity*

LD50 (oral, rat): 124 mg/kg.

LD50 (dermal, rabbit): 252mg/kg

Specific symptoms in animal studies:

Skin irritation test (rabbit): irritations

Eye irritation test (rabbit): irritations

✓ *Subacute to chronic toxicity*

Animal experiments performed under conditions comparable with the workplace situation have shown the substance to be carcinogenic. A mutagenic effect has been demonstrated in animal studies on mammals, justifying the assumption that exposure to humans to the substance produces hereditary damage. Animal experiments suggest that the substance may lead to impairment of reproductive performance also in man. No teratogenic effect in animal experiments.

✓ *Further toxicological information*

After inhalation: Irritations of the mucous membranes, coughing, and dyspnoea.

Skin contact: Irritations. Danger of skin absorption. Risk of skin sensitization

Eye contact: Irritations.

Swallowing: Irritations of mucous membranes in the mouth, pharynx, oesophagus and gastrointestinal tract.

✓ *Further data*

The product should be handled with the care usual when dealing with chemicals.

12. Ecological information

✓ *Abiotic degradation:*

Air: rapid degradation

✓ *Biologic degradation:*



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(in analogy to similar compounds): Readily biodegradable.

Biodegradation 100 % /28 d (closed bottle test)

✓ *Ecotoxic effects:*

Harmfull effect on aquatic organisms.

✓ *Further ecologic data:*

Do not allow to enter waters, waste water, or soil!

13. Disposal considerations

No special requirements. It is the responsibility of the user to observe all laws, rules and regulations, whether local, regional or national.

14. Transport information

Possible national deviations in different countries may apply.

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For more information about Acrylamide and another products visit our website at www.bioamerica-inc.com

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