

Universite Mah. Cat Yolu Cad. Ata Teknokent Sitesi
B Blok No: 74/113 Yakutiye Erzurum Turkiye
Tel: 0090 544 327 34 97
Fax: 0090 442 282 20 06 -124

Safety Data Sheet (SDS)

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifiers

Product Name: Acrylamide
Product Code: ACR01
CAS Number: 79-06-1
Molecular Formula: C₃H₅NO
Molar mass: 71.08 g/mol

1.2 Details of the supplier of the safety data sheet

Company: EcoTech Biotechnology
Address: Universite Mah. Cat Yolu Cad. Ata Teknokent Sitesi B Blok No: 74/113 Yakutiye Erzurum
Turkiye
Telephone: 0090 544 327 34 97
Fax: 0090 442 282 20 06 -124
Emergency
Phone Number: 0090 544 327 34 97

1.3 Product use

For research use only. Not intended for diagnostic or therapeutic use.

SECTION 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Carcinogen, 1B
Germ cell mutagenicity, 1B
Reproductive toxicity, 2
Acute toxicity Oral, 3
Acute toxicity Inhalation, 4
Acute toxicity Dermal, 3
Skin irritant 2
Eye irritant 2
Specific target organ toxicity-repeated, 1
Acute Aquatic toxicity, 2

The most important adverse physicochemical, human health and environmental effects

Delayed or immediate effects can be expected after short or long-term exposure.

2.2 Label elements

Signal word: Danger
Pictograms



Hazard statements
H301-Toxic 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
H361-Suspected of damaging fertility of the unborn
H402- Toxic to aquatic life

Precautionary statements

Precautionary statements - prevention

P201- Obtain special instructions before use.
P261- Avoid breathing dust/fume/gas/mist/vapors/spray
P280-wear protective gloves/protective clothing/eye protection/face protection.
P301+P310- IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P304-P340- IF INHALED remove to fresh air and keep at rest in a position comfortable for breathing.
P302+P352- IF ON SKIN: wash with plenty of soap and water.
P305+P351+P338- IF IN EYES: rinse cautiously with water for several minutes. remove contact lenses if present and easy to do. Continue rinsing.

Wear protective gloves/protective clothing

Potential Health Effects

Routes of entry: Eyes, skin, inhalation, ingestion.

Target Organs: Eyes, CNS, kidneys, reproductive system

Eyes: Toxic when in contact with eyes. Harmful. Causes irritation.

Skin: Toxic when in contact with skin. Readily absorbed through skin. Harmful. Can cause dermatitis. Effects can result from single exposure, or with repeated contact. Peeling and redness may occur at exposure sites.

Ingestion: Harmful if ingested. Initial symptoms, numbness, tingling and touch tenderness. Prolonged exposure leading to coldness of extremities, excessive sweating, bluish-red and peeling of palms, marked fatigue and limb weakness.

Inhalation: Can be absorbed through the lungs to produce the signs and symptoms of neurotoxicity as described above.

CHRONIC HEALTH HAZARDS; repeated exposure may cause dermatitis.

May cause cancer. May cause CNS disturbances.

For professional users only

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Name of substance:	Acrylamide
Molecular formula:	C ₃ H ₅ NO
Molar mass:	71.08 g/mol
CAS No:	79-06-1

SECTION 4. FIRST AID MEASURES

4.1 Description of first aid measures

Eye contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing, consult a physician. GET MEDICAL ATTENTION.
Skin Contact	Rinse skin with water/shower. In case of skin irritation, consult a physician. GET MEDICAL ATTENTION.
Inhalation	Provide fresh air. In all cases of doubt, or when symptoms persist, seek medical advice. GET MEDICAL ATTENTION.
Ingestion	Rinse mouth immediately and drink plenty of water. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). GET MEDICAL ATTENTION.

Self-protection of the first aider Use personal protective equipment as required. No special handling advices are necessary.

Most important symptoms and effects, both acute and delayed

Allergic reactions (such as skin rashes, hives, asthma or anaphylactic shock), Loss of righting reflex, and ataxia, Poisoning effect on central nervous system can cause convulsions, labored breathing and loss of consciousness

Indication of any immediate medical attention and special treatment needed

Give sodium sulfate as laxative (1 tablespoon in 1 glass of water).

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable Extinguishing Media

Water spray. Carbon dioxide (CO₂). Foam. Dry chemical.

Unsuitable Extinguishing

No information available

5.2 Special hazards arising from the substance or mixture

Specific hazards arising from the chemical

Combustible solid. When dealing with fire wear self-contained breathing apparatus. Avoid hazardous vapors and dust.

5.3 Explosion data

Sensitivity to Mechanical Impact

No information available.

Sensitivity to Static Discharge

No information available.

5.4 Protective equipment and precautions for firefighters

Advice for firefighters

Standard procedure for chemical fires.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Ventilate the area. Wear appropriate protective equipment. Sweep and place in a closed container. In the event of a fire always wear self-contained breathing apparatus, NIOSH/MSHA approved or equivalent.

Leak and Spill Procedures: Ventilate the area. Wear appropriate protective equipment. Cover with dry lime or soda. Sweep and place in a closed container. Avoid generating dust.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid contact. Do not get in eyes, on skin, or clothing. Wash thoroughly after handling. Wash contaminated clothing before reuse. Minimize dust generation.

7.2 Conditions for safe storage, including any incompatibilities

Keep tightly closed. Store in a cool, dry, well-ventilated area away from incompatible substances.

Keep in properly labelled containers.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure limits:

ACGIH: 0.03 mg/m³ TWA

NIOSH: 0.03mg/m³ TWa 60 mg/m³ IDLH

OSHA: 0.3 mg/m³ TWA

Use adequate ventilation. AVOID DUST GENERATION.

Wear appropriate protective equipment to prevent eye and skin exposure.

Wear appropriate respirator to prevent lung irritation.

Personal Protection: Lab coat, safety goggles, rubber gloves.

Ventilation: Local exhaust systems. Use fume hood

Respiratory protection: Use NIOSH/MSHA approved respirator.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

a) Appearance:

White crystalline solid

b) Odor:

No odor

c) Odor Threshold:	No data available
d) pH:	No data available
e) Melting point/freezing point:	85°C
f) Initial boiling point and boiling range:	125°C
g) Flash point:	No data available
h) Evaporation rate:	No data available
i) Flammability (solid, gas):	No data available
j) Upper / lower flammability or explosive limits:	No data available
k) Vapor pressure:	No data available
l) Vapor density:	No data available
m) Relative density:	No data available
n) Solubility(ies):	water
o) Partition coefficient: <i>n</i> -octanol / water:	No data available
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

SECTION 10. STABILITY AND REACTIVITY

Stability:	Stable at normal room temperature and pressure. May polymerize if heated to the melting point. May polymerize on exposure to light. May form explosive dust –air mixtures.
Conditions to avoid:	dust generation. Excess heat
Incompatibility:	Metals, oxidizing agents, reducing agents, bases, and acids
Hazardous Decomposition Products:	carbon monoxide, carbon dioxide,
Hazardous Polymerization:	may occur see above

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Exposure Limits:

Exposure Limits:

LD50 / LC50:

SKN-RBT: 50 MG/3D MLD

SKN-RBT 500 MG /24HR MLD

EYE-RBT 10MG /30S RINSE MLD

EYE-RBT 100MG/24HR MOD

ORL-RAT LD50:124 MG/KG

IPR-RAT LD50:90 MG/KG

UNR-RAT LD50:208 MG/KG

ORL MUS LD50:107MG/KG

Teratogenicity: see entry for RTECS

Epidemiology: confirmed carcinogen in animals

Reproductive Effects: have occurred in experimental animals

Neurotoxicity: have occurred in humans

Mutagenicity: see RTECS

Carcinogenicity: Confirmed animal carcinogen ACGIH

NTP: suspected carcinogen

IARC: Group 2A carcinogen

SECTION 12. ECOLOGICAL INFORMATION

No information found.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste Disposal: Burn in chemical incinerator. Observe all Federal, provincial and local regulations.

Section 14. TRANSPORT INFORMATION

Shipping Information:

US DOT

Acrylamide, Hazard class, 6.1. UN number: UN 2074. Packing group: III

IATA:

Acrylamide, Hazard class, 6.1. UN number: UN 2074. Packing group: III

Canada TDG:

Acrylamide Hazard Class: 6.1, Packing Group: III, UN Number UN 2074

SECTION 15. REGULATORY INFORMATION

US : TSCA: listed

European/International:

Canada: WHMIS: D1B, D2A

Listed on DSL list. Controlled product.

Listed on the Canadian Ingredient Disclosure list.

SECTION 16. OTHER INFORMATION

Hazard Rating System

NFPA Health Fire Reactivity

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The information provided on this Material Safety Data Sheet is furnished in good faith and without warranty of any kind. The above information is believed to be correct and should be used only as a guide. Ecotech Biotechnology shall not be held liable for any damage resulting from the handling or from the contact with the above product. Observe all federal, provincial and state laws concerning health, safety and pollution.