

SAFETY DATA SHEET

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

Product identifier

Catalogue No. 800830

Product name Acrylamide for synthesis

REACH Registration Number A registration number is not available for this substance as the substance or its use are exempted from registration according to Article 2 REACH Regulation (EC) No 1907/2006, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

CAS-No. 79-06-1

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

Identified uses Chemical for synthesis
For additional information on uses please refer to the Merck Chemicals portal (www.merckgroup.com).

Details of the supplier of the safety data sheet

Company :- Trader/Supplier: Sahastraa exports Pvt Ltd

Address:- Navkar plaza 6th floor, Bajaj road, vile Parle west , Mumbai-400056

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Product name Acrylamide for synthesis

1.4 Emergency telephone number Please contact the regional company representation in your country.

SECTION 2. Hazards identification

Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Acute toxicity, Category 3, Oral, H301
Acute toxicity, Category 4, Inhalation, H332
Acute toxicity, Category 4, Dermal, H312
Skin irritation, Category 2, H315
Eye irritation, Category 2, H319
Skin sensitisation, Category 1, H317
Germ cell mutagenicity, Category 1B, H340
Carcinogenicity, Category 1B, H350
Reproductive toxicity, Category 2, H361f
Specific target organ toxicity - repeated exposure, Category 1, Peripheral nervous system, H372
For the full text of the H-Statements mentioned in this Section, see Section 16.

Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms



Signal word

Danger

Hazard statements

H340 May cause genetic defects.
H350 May cause cancer.

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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.
H361f Suspected of damaging fertility.
H372 Causes damage to organs (Peripheral nervous system) through prolonged or repeated exposure.

Precautionary statements

Prevention

P201 Obtain special instructions before use.

P280 Wear protective gloves.

Response

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.

P308 + P310 IF exposed or concerned: immediately call a POISON CENTER or doctor/ physician.

Restricted to professional users.

Reduced labelling (≤125 ml)

Hazard pictograms



Signal word

Danger

Hazard statements

H340 May cause genetic defects.

H350 May cause cancer.

H301 Toxic if swallowed.

H317 May cause an allergic skin reaction.

H361f Suspected of damaging fertility.

H372 Causes damage to organs (Peripheral nervous system) through prolonged or repeated exposure.

Precautionary statements

Catalogue No. 800830
Product name Acrylamide for synthesis

P201 Obtain special instructions before use.
P280 Wear protective gloves.
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P308 + P310 IF exposed or concerned: immediately call a POISON CENTER or doctor/ physician.

CAS-No. 79-06-1

Other hazards

None known.

SECTION 3. Composition/information on ingredients

Substance

Formula	CH ₂ CHCONH ₂	C ₃ H ₅ NO (Hill)
EC-No.	201-173-7	
Molar mass	71.07 g/mol	

Hazardous components (REGULATION (EC) No 1272/2008)

Chemical name (Concentration)

CAS-No.	Registration number	Classification
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acrylamide (<= 100 %)

Substance does not meet the criteria for PBT or vPvB according to Regulation (EC) No 1907/2006, Annex XIII.

79-06-1	*)	
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Acute toxicity, Category 3, H301
Acute toxicity, Category 4, H332
Acute toxicity, Category 4, H312
Skin irritation, Category 2, H315
Eye irritation, Category 2, H319
Skin sensitisation, Category 1, H317
Germ cell mutagenicity, Category 1B, H340
Carcinogenicity, Category 1B, H350
Reproductive toxicity, Category 2, H361f
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Catalogue No. 800830
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*) A registration number is not available for this substance as the substance or its use are exempted from registration according to Article 2 REACH Regulation (EC) No 1907/2006, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

For the full text of the H-Statements mentioned in this Section, see Section 16.

Mixture

Not applicable

SECTION 4. First aid measures

Description of first aid measures

After inhalation: fresh air. Call in physician.

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/shower. Consult a physician.

After eye contact: rinse out with plenty of water. Call in ophthalmologist. Remove contact lenses.

If swallowed: give water to drink (two glasses at most). Seek medical advice immediately. In exceptional cases only, if medical care is not available within one hour, induce vomiting (only in persons who are wide awake and fully conscious), administer activated charcoal (20 - 40 g in a 10% slurry) and consult a doctor as quickly as possible.

Most important symptoms and effects, both acute and delayed

irritant effects, Allergic reactions

muscular weakness, ataxia (impaired locomotor coordination), CNS disorders, Tremors

Causes epileptic seizures.

Indication of any immediate medical attention and special treatment needed

Laxative: Sodium sulfate (1 tablespoon/1/4 l water).

SECTION 5. Firefighting measures

Extinguishing media

Suitable extinguishing media

Water, Foam, Carbon dioxide (CO₂), Dry powder

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Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

Special hazards arising from the substance or mixture

Combustible.

Risk of dust explosion.

Vapours are heavier than air and may spread along floors.

Forms explosive mixtures with air on intense heating.

Development of hazardous combustion gases or vapours possible in the event of fire.

Fire may cause evolution of:

nitrogen oxides

Advice for firefighters

Special protective equipment for firefighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

Further information

Suppress (knock down) gases/vapours/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Avoid generation and inhalation of dusts in all circumstances. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.

Advice for emergency responders:

Protective equipment see section 8.

Environmental precautions Do

not let product enter drains.

Methods and materials for containment and cleaning up

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Product name Acrylamide for synthesis

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up carefully. Dispose of properly. Clean up affected area. Avoid generation of dusts.

Reference to other sections

Indications about waste treatment see section 13.

SECTION 7. Handling and storage

Precautions for safe handling

Advice on safe handling

Work under hood. Do not inhale substance/mixture.

Observe label precautions.

Hygiene measures

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

Conditions for safe storage, including any incompatibilities

Storage conditions

Tightly closed. Dry. Protected from light. Keep in a well-ventilated place. Keep locked up or in an area accessible only to qualified or authorised persons.

Recommended storage temperature see product label.

Specific end use(s)

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

SECTION 8. Exposure controls/personal protection

Control parameters

Contains no substances with occupational exposure limit values.

Exposure controls

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Engineering measures

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.

See section 7.1.

Individual protection measures

Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled. The chemical resistance of the protective equipment should be enquired at the respective supplier.

Eye/face protection

Safety glasses

Hand protection

full contact:

Glove material:	Nitrile rubber
Glove thickness:	0.11 mm
Break through time:	> 480 min

splash contact:

Glove material:	Nitrile rubber
Glove thickness:	0.11 mm
Break through time:	> 480 min

The protective gloves to be used must comply with the specifications of EC Directive 89/686/EEC and the related standard EN374, for example KCL 741 Dermatril® L (full contact), KCL 741 Dermatril® L (splash contact).

The breakthrough times stated above were determined by KCL in laboratory tests acc. to EN374 with samples of the recommended glove types.

This recommendation applies only to the product stated in the safety data sheet(>,<)> supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Other protective equipment

protective clothing

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Product name Acrylamide for synthesis

Respiratory protection

required when dusts are generated.

Recommended Filter type: Filter A-(P3)

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

Environmental exposure controls

Do not let product enter drains.

SECTION 9. Physical and chemical properties

Information on basic physical and chemical properties

Form	solid
Colour	colourless
Odour	odourless
Odour Threshold	Not applicable
pH	5.0 - 7.0 at 50 g/l 20 °C
Melting point	84 °C
Boiling point/boiling range	125 °C at 33.3 hPa
Flash point	138 °C

Catalogue No. 800830
Product name Acrylamide for synthesis

Evaporation rate	No information available.
Flammability (solid, gas)	No information available.
Lower explosion limit	Not applicable
Upper explosion limit	Not applicable
Vapour pressure	0.009 hPa at 25 °C Method: OECD Test Guideline 104
Relative vapour density	2.45
Density	1.127 g/cm ³ at 25 °C
Relative density	No information available.
Water solubility	2,040 g/l at 25 °C
Partition coefficient: n-octanol/water	log Pow: -0.9 (20 °C) OECD Test Guideline 117 Bioaccumulation is not expected.
Auto-ignition temperature	No information available.
Decomposition temperature	175 - 300 °C
Viscosity, dynamic	No information available.
Explosive properties	Not classified as explosive.

Catalogue No. 800830
Product name Acrylamide for synthesis

Oxidizing properties none

Other data

Ignition temperature 424 °C

Bulk density ca.500 kg/m³

SECTION 10. Stability and reactivity

Reactivity

polymerisation initiator

highly reactive

Risk of dust explosion.

Forms explosive mixtures with air on intense heating.

A range from approx. 15 Kelvin below the flash point is to be rated as critical.

Chemical stability

Sensitivity to light

tendency towards spontaneous polymerisation

Possibility of hazardous reactions

Violent reactions possible with:

alkalines, Oxidizing agents, Reducing agents, Bases, Metals, Peroxides, acids

Conditions to avoid Heating

(decomposition).

Incompatible materials no

information available

Hazardous decomposition products in the

event of fire: See section 5.

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Product name Acrylamide for synthesis

SECTION 11. Toxicological information

Information on toxicological effects

Acute oral toxicity

LD50 Rat: 177 mg/kg

OECD Test Guideline 401

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

Acute inhalation toxicity

Acute toxicity estimate: 1.6 mg/l; dust/mist

Expert judgement

Symptoms: Possible damages:, mucosal irritations

Acute dermal toxicity

LD50 Rabbit: 1,141 mg/kg

OECD Test Guideline 402

Skin irritation

Causes skin irritation.

Eye irritation

Rabbit

Result: Eye irritation

OECD Test Guideline 405

Causes serious eye irritation.

Sensitisation

Maximisation Test Guinea pig

Result: positive

Method: OECD Test Guideline 406

May cause an allergic skin reaction.

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Product name Acrylamide for synthesis

Germ cell mutagenicity

Genotoxicity in vivo

Rat

male

Result: positive

Method: OECD Test Guideline 478

Genotoxicity in vitro

Ames test

Salmonella typhimurium

Result: negative

Method: OECD Test Guideline 471

Mutagenicity (mammal cell test): chromosome aberration.

Result: positive

Method: OECD Test Guideline 473

Mutagenicity (mammal cell test):

Result: negative

Method: OECD Test Guideline 476

Carcinogenicity

This information is not available.

Reproductive toxicity

This information is not available.

Teratogenicity

Did not show teratogenic effects in animal experiments.

CMR effects

Carcinogenicity:

May cause cancer.

Mutagenicity:

May cause genetic defects.

Reproductive toxicity:

Suspected of damaging fertility.

Catalogue No. 800830
Product name Acrylamide for synthesis

Specific target organ toxicity - single exposure

This information is not available.

Specific target organ toxicity - repeated exposure

Causes damage to organs through prolonged or repeated exposure.

Target Organs: Peripheral nervous system

Aspiration hazard

This information is not available.

Further information

Systemic effects:

After absorption:

CNS disorders, muscular weakness, Tremors, ataxia (impaired locomotor coordination), Causes epileptic seizures.

Damage to:

Liver

Other dangerous properties can not be excluded.

This substance should be handled with particular care.

SECTION 12. Ecological information

Toxicity

Toxicity to daphnia and other aquatic invertebrates

flow-through test EC50 Daphnia magna (Water flea): 98 mg/l; 48 h

US-EPA

Toxicity to algae

static test IC50 Pseudokirchneriella subcapitata (green algae): 67.7 mg/l; 72 h

OECD Test Guideline 201

(50% solution)

Growth inhibition NOEC Selenastrum capricornutum (green algae): 16 mg/l

(External MSDS)

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Product name Acrylamide for synthesis

Toxicity to bacteria

EC50 Photobacterium phosphoreum: 13,500 mg/l
(IUCLID)

Toxicity to fish (Chronic toxicity)

NOEC Cyprinus carpio (Carp): 5 mg/l; 28 d

(ECHA)

Persistence and degradability

Biodegradability

100 %; 28 d; aerobic

OECD Test Guideline 301D

Readily biodegradable

Bioaccumulative potential *Partition*

coefficient: n-octanol/water log

Pow: -0.9 (20 °C)

OECD Test Guideline 117

Bioaccumulation is not expected.

Mobility in soil

No information available.

Results of PBT and vPvB assessment

Substance does not meet the criteria for PBT or vPvB according to Regulation (EC) No 1907/2006, Annex XIII.

Other adverse effects

Discharge into the environment must be avoided.

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Product name Acrylamide for synthesis

SECTION 13. Disposal considerations

Waste treatment methods

Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

See www.retrologistik.com for processes regarding the return of chemicals and containers, or contact us there if you have further questions.

SECTION 14. Transport information

Land transport (ADR/RID)

14.1 UN number	UN 2074
14.2 Proper shipping name	ACRYLAMIDE, SOLID
14.3 Class	6.1
14.4 Packing group	III
14.5 Environmentally hazardous	--
14.6 Special precautions for user	yes
Tunnel restriction code	E

Inland waterway transport (ADN)

Not relevant

Air transport (IATA)

14.1 UN number	UN 2074
14.2 Proper shipping name	ACRYLAMIDE, SOLID
14.3 Class	6.1
14.4 Packing group	III
14.5 Environmentally hazardous	--

Catalogue No. 800830
Product name Acrylamide for synthesis

14.6 Special precautions for user no

Sea transport (IMDG)

14.1 UN number UN 2074

14.2 Proper shipping name ACRYLAMIDE, SOLID

14.3 Class 6.1

14.4 Packing group III

14.5 Environmentally hazardous --

14.6 Special precautions for user yes

EmS F-A S-A

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not relevant

SECTION 15. Regulatory information

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

National legislation

Storage class 6.1C

Chemical safety assessment

A Chemical Safety Assessment has been carried out according to regulation (EC) No. 1907/2006 (REACH) for this substance.

Catalogue No. 800830
Product name Acrylamide for synthesis

SECTION 16. Other information

Full text of H-Statements referred to under sections 2 and 3.

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.
H361f	Suspected of damaging fertility.
H372	Causes damage to organs through prolonged or repeated exposure.

Training advice

Provide adequate information, instruction and training for operators.

Labelling

Hazard pictograms



Signal word

Danger

Hazard statements

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.

Catalogue No. 800830
Product name Acrylamide for synthesis

H319 Causes serious eye irritation.

H340 May cause genetic defects.

H350 May cause cancer.

H361 Suspected of damaging fertility or the unborn child.

H372 Causes damage to organs (Peripheral nervous system) through prolonged or repeated exposure.

Precautionary statements

Prevention

P201 Obtain special instructions before use.

P280 Wear protective gloves.

Response

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.

P308 + P310 IF exposed or concerned: immediately call a POISON CENTER or doctor/ physician.

End of msds