

ACRYLAMIDE

SECTION 1: PRODUCT IDENTIFICATION

Product Name: ACRYLAMIDE
Product Code: TMB 003
CAS#: 79-06-1
Synonym: Acrylic acid amide, 2-Propenamamide
Chemical Name: Not Available
Chemical Formula: C₃H₅NO
Formula Weight: 71.08

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

Composition:

Name: Not available

Toxicological Data on Ingredients:

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

Acute toxicity, Oral (Category 3), H301

Acute toxicity, Inhalation (Category 4), H332

Acute toxicity, Dermal (Category 4), H312

Skin irritation (Category 2), H315

Eye irritation (Category 2), H319

Skin sensitization (Category 1), H317

Germ cell mutagenicity (Category 1B), H340

Carcinogenicity (Category 1B), H350

Reproductive toxicity (Category 2), H361f

Specific target organ toxicity - repeated exposure, Oral (Category 1), Peripheral nervous system, H372

SECTION 3: HAZARDS IDENTIFICATION

Classification of the substance or mixture

Potential Acute Health Effects: Acute toxicity, Oral (Category 3), H301

Acute toxicity, Inhalation (Category 4), H332

Acute toxicity, Dermal (Category 4), H312

Skin irritation (Category 2), H315

Eye irritation (Category 2), H319

Skin sensitization (Category 1), H317

Potential Chronic Health Effects:

Carcinogenic Effects: Carcinogenicity (Category 1B), H350

Mutagenic Effects: Germ cell mutagenicity (Category 1B), H340

Teratogenic Effects: Reproductive toxicity (Category 2), H361f

Specific target organ toxicity - repeated exposure, Oral (Category 1), Peripheral nervous system, H372

Developmental Toxicity: Not Available

SECTION 4: FIRST AID MEASURES

Eye Contact: Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.



Skin Contact: Wash off immediately with soap and plenty of water. Cover the irritated skin with emollient. Immediate medical attention is required.

Serious Skin Contact: Not available.

Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Serious Inhalation: Not Available.

Ingestion: Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.

Serious Ingestion: Not available.

SECTION 5: FIRE FIGHTING MEASURES

Suitable extinguishing media

Water Foam Carbon dioxide (CO₂) Dry powder

Special hazards arising from the substance or mixture

Carbon oxides

Nitrogen oxides (NO_x)

Combustible.

Vapors 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.

Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

Environmental precautions

Do not let product enter drains.

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.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed.

Advice on safe handling

Work under hood. Do not inhale substance/mixture.

Storage conditions

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

Light sensitive. Store under inert gas.

Storage class

Not available.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION



Eye/face protection

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.

Respiratory protection

Respiratory protection is not required. If protection from nuisance levels of dusts are desired, use type N95 or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical state and appearance	:	Crystalline
Odor	:	Not available
Color	:	White
Molecular Weight	:	Not available
PH	:	5.2-6.0
Boiling Point	:	Not available
Melting Point	:	Not available
Critical Temperature	:	Not available
Specific Gravity	:	Not available
Vapor Pressure	:	Not applicable
Vapor Density	:	Not available
Volatility	:	Not available
Odor Threshold	:	Not available
Water/Oil Dist. Coeff.	:	Not available
Ionicity (in Water)	:	Not available
Dispersion Properties	:	Not available
Solubility	:	Not available

SECTION 10: STABILITY AND REACTIVITY DATA

Stability: The product is chemically stable under standard ambient conditions (room temperature).

Instability Temperature: Not available

Conditions of Instability: Strong heating.

Incompatibility with various substances: Strong oxidizing agents.

Special Remarks on Corrosivity: Non corrosive.

Special Remarks on Reactivity: Not available

Polymerization: Will Not occur.

Hazardous decomposition products: In the event of fire.

SECTION 11: TOXICOLOGICAL INFORMATION.

Routes of Entry: Inhalation, Ingestion

Toxicity to Animals:

LD₅₀: Oral Rat - female - 177 mg/kg

LC₅₀: Not available

Chronic Effects on Humans: Not available

Other Toxic Effects on Humans: Not available

Special Remarks on Toxicity to Animals: Not available



Special Remarks on other Toxic Effects on Humans:

May cause genetic defects.

Test Type: Ames test

Test system: Salmonella typhimurium

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 471

Result: negative

Test Type: Chromosome aberration test in vitro

Test system: Chinese hamster lung cells

Metabolic activation: without metabolic activation

Method: OECD Test Guideline 473

Result: positive

Test Type: In vitro mammalian cell gene mutation test

Test system: Chinese hamster ovary cells

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 476

Result: negative

Potential Health Effects: Suspected of damaging fertility.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity:

Toxicity to fish Static test LC50 - Oncorhynchus mykiss (rainbow trout) - 180 mg/l -96 h

Toxicity to daphnia and other aquatic invertebrates flow-through test EC50 - Daphnia magna (Water flea) - 98 mg/l - 48h

Toxicity to algae static test NOEC - Pseudokirchneriella subcapitata - 56 mg/l - 72 h

Toxicity to bacteria EC50 - Photobacterium phosphoreum - 13.500 mg/l

Remarks: (IUCLID)

BOD and COD:

Biodegradability aerobic - Exposure time 28 d

Result: 100 % - Readily biodegradable.

Products of Biodegradation: Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: Not Available.

Special Remarks on the Products of Biodegradation: Not Available

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal:

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

SECTION 14: TRANSPORT INFORMATION

UN number:

ADR/RID: 2074

IMDG: 2074

IATA: 2074

UN proper shipping name

ADR/RID: Acrylamide, solid

IMDG: Acrylamide, solid

IATA: Acrylamide, solid

Transport hazard class(es):

ADR/RID: 6.1

IMDG: 6.1

IATA: 6.1

Packaging group:



ADR/RID: III

IMDG: III

IATA: III

Environmental hazards:

ADR/RID: no

IMDG Marine pollutant: no

IATA: no

SECTION 15: REGULATORY INFORMATION

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

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

Authorisations and/or restrictions on use

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59).

: acrylamide

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles

: acrylamide

Chemical Safety Assessment: Not available.

SECTION 16: OTHER INFORMATION

References: Full text of H AND R-Statements.

H301 Toxic if swallowed.

H312 Harmful in contact with skin.

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.

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 if Swallowed

Other Special Considerations: Not available

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