



according to UK REACH Regulation

Propargyl amine

Revision date: 22.05.2024 Product code: PEG2755 Page 1 of 13

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

1.1. Product identifier

Propargyl amine

Further trade names

3-Amino 1-propyne 3-Amino-1-propyne 3-Aminoprop-1-in 2-Propynylamine

Substance name: Propargyl amine CAS No: 2450-71-7 EC No: 219-513-8

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

Use of the substance/mixture

Laboratory chemical. Manufacture of the substance.

Uses advised against

Do not use for private purposes (household). Restrictions on use: Pharmaceutical substance

1.3. Details of the supplier of the safety data sheet

Company name: Iris Biotech GmbH

Street: Adalbert-Zoellner-Straße 1
Place: D-95615 Marktredwitz, Germany

Post-office box: 568

D-95605 Marktredwitz, Germany

Telephone: +49 9231 97121 0 Telefax: +49 9231 97121 99

E-mail: info@iris-biotech.de

Contact person: Health & Safety Department Telephone: +49 9231 97121 0

E-mail: sds@iris-biotech.de Internet: www.iris-biotech.de

Responsible Department: Only available during office hours.

1.4. Emergency telephone +49 (0)89 19240 (POISON CENTER Munich: 24 h)

number:

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GB CLP Regulation

Flam. Liq. 2; H225 Acute Tox. 2; H310 Acute Tox. 4; H302 Skin Corr. 1B; H314 Eye Dam. 1; H318

Full text of hazard statements: see SECTION 16.

2.2. Label elements

GB CLP Regulation

Signal word: Danger





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Pictograms:







Hazard statements

H225 Highly flammable liquid and vapour.

H302 Harmful if swallowed. H310 Fatal in contact with skin.

H314 Causes severe skin burns and eye damage.

Precautionary statements

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P264 Wash hands thoroughly after handling.

P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing

protection.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with

water or shower.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER/doctor.

Additional advice on labelling

Warning - substance not yet tested completely.

Labelling of packages where the contents do not exceed 125 ml

Signal word: Danger

Pictograms:







Hazard statements

H310-H314

Precautionary statements

P260-P264-P280-P303+P361+P353-P305+P351+P338-P310

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.1. Substances

Chemical characterization

3-Amino 1-propyne

Sum formula: C3H5N

Molecular weight: 55,08 g/mol





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Relevant ingredients

CAS No	Chemical name				
	EC No	Index No	REACH No		
	Classification (GB CLP Regulation)				
2450-71-7	Propargyl amine			100 %	
	219-513-8				
	Flam. Liq. 2, Acute Tox. 2, Acute Tox. 4, Skin Corr. 1B, Eye Dam. 1; H225 H310 H302 H314 H318				

Full text of H and FUH statements: see section 16

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
	Specific Conc. Limits, M-factors and ATE		
2450-71-7	219-513-8	Propargyl amine	100 %
	dermal: LD50 = 77 mg/kg; oral: LD50 = 780 mg/kg		

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

First aider: Pay attention to self-protection! Remove affected person from the danger area and lay down. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

In all cases of doubt, or when symptoms persist, seek medical advice.

After inhalation

Provide fresh air. Medical treatment necessary. Remove casualty to fresh air and keep warm and at rest. In case of irregular breathing or respiratory arrest provide artificial respiration.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. Call a physician immediately. After contact with skin, wash immediately with plenty of water and soap.

After contact with eyes

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

After ingestion

Do NOT induce vomiting. Adverse human health effects and symptoms: Gastric perforation. Call a physician immediately. Rinse mouth thoroughly with water. Never give anything by mouth to an unconscious person or a person with cramps.

4.2. Most important symptoms and effects, both acute and delayed

No information available.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings. Water spray. alcohol resistant foam. Dry extinguishing powder. Carbon dioxide (CO2). Sand.

Unsuitable extinguishing media

High power water jet.



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5.2. Special hazards arising from the substance or mixture

Highly flammable. Vapours can form explosive mixtures with air.

Vapours are heavier than air and may spread along floors.

Beware of reignition.

Thermal decomposition can lead to the escape of irritating gases and vapours.

In case of fire may be liberated: Carbon dioxide (CO2), Carbon monoxide (CO), Nitrogen oxides (NOx),

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit.

Additional information

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

Usual measures for fire prevention.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

Remove all sources of ignition. Provide adequate ventilation. Avoid dust formation. Do not breathe dust. Avoid contact with skin, eyes and clothes. Use personal protection equipment. Provide adequate ventilation. Avoid breathing dust/fume/gas/mist/vapours/spray.

Avoid contact with skin, eyes and clothes.

Wear personal protection equipment.

In case of fire: Evacuate area.

For non-emergency personnel

Do not breathe gas/fumes/vapour/spray.

Avoid substance contact.

Provide adequate ventilation.

Keep away from sources of ignition - No smoking.

Evacuate the danger area, observe emergency procedures, consult an expert.

Personal protection equipment: see section 8

For emergency responders

Wear personal protection equipment (refer to section 8).

Cover drains.

Make sure spills can be contained, e.g. in sump pallets or kerbed areas.

Stop and contain spill/release if it can be done safely.

6.2. Environmental precautions

Do not allow uncontrolled discharge of product into the environment. Explosion risk. Do not allow to enter into soil/subsoil.

Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

For containment

Cover drains.

Stop and contain spill/release if it can be done safely.

For cleaning up

Take up mechanically. Treat the recovered material as prescribed in the section on waste disposal. Universal binder/ Binder

Other information

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Take up mechanically, placing in appropriate containers for disposal.

Clear contaminated areas thoroughly.





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6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

Treat the recovered material as prescribed in the section on waste disposal.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

If handled uncovered, arrangements with local exhaust ventilation have to be used. Avoid dust formation. Do not breathe dust. Provide adequate ventilation.

Avoid breathing dust/fume/gas/mist/vapours/spray.

Avoid contact with skin, eyes and clothes.

Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges. Vapours can form explosive mixtures with air. Usual measures for fire prevention.

Advice on general occupational hygiene

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat, drink, smoke, sniff. Take off contaminated clothing. Wash hands before breaks and after work. When using do not eat, drink, smoke, sniff. Avoid contact with skin, eyes and clothes. Provide adequate ventilation.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed. Keep locked up. Store in a place accessible by authorized persons only. Provide adequate ventilation as well as local exhaustion at critical locations. Keep in a cool, well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed in a cool, well-ventilated place.

Handle and store contents under inert gas. Protect from moisture.

storage temperature: +2°C - +8°C

Hints on joint storage

Do not store together with: Oxidizing agent. Pyrophoric or self-heating substances.

Further information on storage conditions

Product is hygroscopic. Photosensitive. Store under dry inert gas. Sensitive to carbon dioxide.

7.3. 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

8.1. Control parameters

Additional advice on limit values

To date, no national critical limit values exist.

8.2. Exposure controls









Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe dust. The receiver of our product is singularly responsible for adhering to existing laws and regulations.





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Individual protection measures, such as personal protective equipment

Eye/face protection

Suitable eye protection: goggles.

Tightly fitting safety goggles. Face shield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. Wear suitable gloves.

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. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it.

Skin protection

Use of protective clothing.

Respiratory protection

In case of inadequate ventilation wear respiratory protection. If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn.

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Thermal hazards

Flame-retardant protective clothing. Wear anti-static footwear and clothing

Environmental exposure controls

Boiling point or initial boiling point and

Discharge into the environment must be avoided.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: liquid

Colour: colourless/ yellow
Odour: No data available
Odour threshold: not determined

Test method

Melting point/freezing point: not determined

83 °C Lit.

boiling range:

Flammability: Highly flammable liquid and vapour.
Lower explosion limits: not determined
Upper explosion limits: not determined

Flash point: 6 °C closed cup

Auto-ignition temperature: not determined Decomposition temperature: not determined pH-Value: not determined Viscosity / kinematic: not determined





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Water solubility:

No data available

Solubility in other solvents

not determined

Dissolution rate: not determined Partition coefficient n-octanol/water: not determined Dispersion stability: not determined Vapour pressure: not determined 0.86 g/cm³ Density: Relative density: No data available Bulk density: not applicable Relative vapour density: not determined Particle characteristics: not applicable

9.2. Other information

Information with regard to physical hazard classes

Explosive properties

The product is not: Explosive.

Sustaining combustion: No data available

Self-ignition temperature

Solid: not applicable
Gas: not applicable

Oxidizing properties

No data available

Other safety characteristics

Solvent content:

Solid content:

Viscosity / dynamic:

Flow time:

No data available

not applicable

not determined

not determined

SECTION 10: Stability and reactivity

10.1. Reactivity

Highly flammable.

Vapours can form explosive mixtures with air.

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

No data available

10.4. Conditions to avoid

Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. Vapours can form explosive mixtures with air. Protect from moisture.

Keep away from heat.

10.5. Incompatible materials

Acids

Acid chlorides.

Oxidizing agents, strong.

Carbon dioxide (CO2)

10.6. Hazardous decomposition products

Thermal decomposition can lead to the escape of irritating gases and vapours.

In case of fire may be liberated: Carbon dioxide (CO2). Carbon monoxide (CO). Nitrogen oxides (NOx).

Further information

In case of fire: See chapter 5.





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SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in GB CLP Regulation

Toxicocinetics, metabolism and distribution

No data available

Acute toxicity

Fatal in contact with skin. Harmful if swallowed.

CAS No	Chemical name								
	Exposure route	Dose		Species	Source	Method			
2450-71-7	Propargyl amine								
		LD50 mg/kg	780	Rat	RTECS				
	dermal	LD50	77 mg/kg	Rabbit	RTECS				

Irritation and corrosivity

Skin corrosion/irritation: Causes severe skin burns and eye damage.

Serious eye damage/eye irritation: Causes serious eye damage.

Sensitising effects

Based on available data, the classification criteria are not met.

Carcinogenic/mutagenic/toxic effects for reproduction

Germ cell mutagenicity: Based on available data, the classification criteria are not met.

Carcinogenicity: Based on available data, the classification criteria are not met.

Reproductive toxicity: Based on available data, the classification criteria are not met.

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable,

possible or confirmed human carcinogen by IARC.

STOT-single exposure

Based on available data, the classification criteria are not met.

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

Specific effects in experiment on an animal

No data available

Practical experience

No data available

11.2. Information on other hazards

Endocrine disrupting properties

No data available

Other information

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin. Cough Dyspnoea Headache. Nausea.

Further information

RTECS: UK5250000

To our knowledge, the chemical, physical and toxicological properties have not been extensively studied. Other dangerous properties can not be excluded.

Handle in accordance with good industrial hygiene and safety practice.

SECTION 12: Ecological information





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12.1. Toxicity

Based on available data, the classification criteria are not met.

12.2. Persistence and degradability

No data available

12.3. Bioaccumulative potential

No data available

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

This substance does not meet the PBT/vPvB criteria of UK REACH.

The product has not been tested.

12.6. Endocrine disrupting properties

This substance does not have endocrine disrupting properties with respect to non-target organisms.

12.7. Other adverse effects

Warning - substance not yet tested completely.

Further information

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation.

Consult the appropriate local waste disposal expert about waste disposal.

Handle contaminated packages in the same way as the substance itself.

Contaminated packaging

Hazardous waste according to Directive 2008/98/EC (waste framework directive). Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number or ID number: UN 3286

14.2. UN proper shipping name: FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S. (3-Aminoprop-1-in)

14.3. Transport hazard class(es):314.4. Packing group:II

Hazard label: 3+6.1+8



Classification code: FTC
Special Provisions: 274
Limited quantity: 1 L
Excepted quantity: E2
Transport category: 2
Hazard No: 368
Tunnel restriction code: D/E

Inland waterways transport (ADN)

14.1. UN number or ID number: UN 3286



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14.2. UN proper shipping name: FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S. (3-Aminoprop-1-in)

14.3. Transport hazard class(es): 3
14.4. Packing group:

Hazard label: 3+6.1+8



Classification code: FTC
Special Provisions: 274 802
Limited quantity: 1 L
Excepted quantity: E2

Marine transport (IMDG)

14.1. UN number or ID number: UN 3286

14.2. UN proper shipping name: FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S. (3-Aminoprop-1-in)

14.3. Transport hazard class(es):314.4. Packing group:II

Hazard label: 3+6.1/8



Special Provisions: 274
Limited quantity: 1 L
Excepted quantity: E2
EmS: F-E, S-C

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number: UN 3286

14.2. UN proper shipping name: FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S. (3-Aminoprop-1-in)

14.3. Transport hazard class(es): 3
14.4. Packing group: II

Hazard label: 3+6.1 8



Limited quantity Passenger: 0.5 L
Passenger LQ: Y340
Excepted quantity: E2

IATA-packing instructions - Passenger:352IATA-max. quantity - Passenger:1 LIATA-packing instructions - Cargo:363IATA-max. quantity - Cargo:5 L

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

Warning: Combustible liquid. Acute Toxicity. strongly corrosive.

14.7. Maritime transport in bulk according to IMO instruments

not applicable

Other applicable information

Hazchem code: •3WE

SECTION 15: Regulatory information





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

EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 40

Directive 2004/42/EC on VOC in

100 %

paints and varnishes:

Information according to Directive

H2 ACUTE TOXIC

2012/18/EU (SEVESO III): Additional information:

P5c

Additional information

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)

National regulatory information

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile

work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or

nursing mothers.

Water hazard class (D): 3 - highly hazardous to water

Skin resorption/Sensitization: Permeates easily through outer skin and causes poisoning.

Additional information

German Chemicals Prohibition Ordinance (ChemVerbotsV):

15.2. Chemical safety assessment

For this substance a chemical safety assessment has not been carried out.

SECTION 16: Other information





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Abbreviations and acronyms

Flam. Liq: Flammable liquids Acute Tox: Acute toxicity Skin Corr: Skin corrosion Eye Dam: Eye damage

ADR: Accord relatif au transport international des marchandises dangereuses par route (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

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service LC50: Lethal concentration, 50%

LD50: Lethal dose, 50%

CLP: Classification, labelling and Packaging

REACH: Registration, Evaluation and Authorization of Chemicals

GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals

UN: United Nations

CAS: Chemical Abstracts Service
DNEL: Derived No Effect Level
DMEL: Derived Minimal Effect Level
PNEC: Predicted No Effect Concentration

ATE: Acute toxicity estimate LL50: Lethal loading, 50% EL50: Effect loading, 50%

EC50: Effective Concentration 50%

ErC50: Effective Concentration 50%, growth rate NOEC: No Observed Effect Concentration

BCF: Bio-concentration factor

PBT: persistent, bioaccumulative, toxic vPvB: very persistent, very bioaccumulative

RID: Regulations concerning the international carriage of dangerous goods by rail

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures)

EmS: Emergency Schedules MFAG: Medical First Aid Guide

IATA: International Air Transport Association ICAO: International Civil Aviation Organization

MARPOL: International Convention for the Prevention of Marine Pollution from Ships

IBC: Intermediate Bulk Container SVHC: Substance of Very High Concern

For abbreviations and acronyms, see table at http://abbrev.esdscom.eu EC/EEC: European Community/European Economic Community

EU: European Union M-factor: Multiplying factor

ADR: Accord européen sur le transport des marchandises dangereuses par Route

(European Agreement concerning the International Carriage of Dangerous Goods by Road)

IATA: International Air Transport Association

DGR: Dangerous Goods Regulations

ICAO: International Civil Aviation Organization

TI: Technical Instructions

VOC: volatile organic compound

For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety

assessment, chapter R.20 (Table of terms and abbreviations).





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Relevant H and EUH statements (number and full text)

H225 Highly flammable liquid and vapour.

H302 Harmful if swallowed. H310 Fatal in contact with skin.

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

Further Information

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.