# **SAFETY DATA SHEET**

Version 4.4 Revision Date 09/13/2017 Print Date 10/20/2018

## 1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifiers

Product name : Propargylamine

Product Number : P50900 Brand : Aldrich

CAS-No. : 2450-71-7

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

Identified uses : Laboratory chemicals, Synthesis of substances

1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich

3050 Spruce Street SAINT LOUIS MO 63103

USA

Telephone : +1 800-325-5832 Fax : +1 800-325-5052

1.4 Emergency telephone number

Emergency Phone # : +1-703-527-3887 (CHEMTREC)

### 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

# GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Flammable liquids (Category 2), H225 Acute toxicity, Oral (Category 4), H302 Acute toxicity, Dermal (Category 2), H310 Skin corrosion (Category 1B), H314 Serious eye damage (Category 1), H318

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

## 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word Danger

Hazard statement(s)

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 statement(s)

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P233 Keep container tightly closed.

P240 Ground/bond container and receiving equipment.

P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge. P262 Do not get in eyes, on skin, or on clothing. P264 Wash skin thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P301 + P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower. P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor. P310 Specific measures (see supplemental first aid instructions on this label). P322 Remove/Take off immediately all contaminated clothing. P361 P363 Wash contaminated clothing before reuse. P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction. P403 + P235 Store in a well-ventilated place. Keep cool. P405 Store locked up. Dispose of contents/ container to an approved waste disposal plant. P501

# 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

Rapidly absorbed through skin.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substances

Synonyms : 2-Propynylamine

3-Amino-1-propyne

 $\begin{tabular}{lll} Formula & : & $C_3H_5N$ \\ Molecular weight & : & 55.08 g/mol \\ CAS-No. & : & 2450-71-7 \\ EC-No. & : & 219-513-8 \\ \end{tabular}$ 

### Hazardous components

Component	Classification	Concentration
Prop-2-ynylamine		
	Flam. Liq. 2; Acute Tox. 4;	-
	Acute Tox. 2; Skin Corr. 1B;	
	Eye Dam. 1; H225, H302,	
	H310, H314	

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

# 4. FIRST AID MEASURES

## 4.1 Description of first aid measures

# General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

### lf inhaled

If breathed in, move person into fresh air, If not breathing, give artificial respiration, Consult a physician,

## In case of skin contact

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

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## In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Continue rinsing eyes during transport to hospital.

### If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

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

No data available

### 5. FIREFIGHTING MEASURES

## 5.1 Extinguishing media

## Suitable extinguishing media

For small (incipient) fires, use media such as "alcohol" foam, dry chemica as far as possible. Use very large quantities (flooding) of water applied ineffective. Cool all affected containers with flooding quantities of wat

## 5.2 Special hazards arising from the substance or mixture

No data available

## 5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

### 5.4 Further information

Use water spray to cool unopened containers.

## 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

Wear respiratory protection. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

For personal protection see section 8.

### 6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

## 6.3 Methods and materials for containment and cleaning up

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

### 6.4 Reference to other sections

For disposal see section 13.

## 7. HANDLING AND STORAGE

# 7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

Use explosion-proof equipment. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

For precautions see section 2.2.

## 7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Recommended storage temperature 2 - 8 °C

hygroscopic Light sensitive. Store under 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

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### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

### Components with workplace control parameters

Contains no substances with occupational exposure limit values.

## 8.2 Exposure controls

### Appropriate engineering controls

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

# Personal protective equipment

## Eye/face protection

Tightly fitting safety goggles. Faceshield (8-inch minimum). 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. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm Break through time: 480 min

Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm Break through time: 480 min

Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

## **Body Protection**

Complete suit protecting against chemicals, Flame retardant antistatic protective clothing., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

### Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multipurpose 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).

## Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

## 9.1 Information on basic physical and chemical properties

a) Appearance Form: clear, liquid Colour: light vellow

b) Odourc) Odour Thresholdd) pHNo data availableNo data availableNo data available

e) Melting point/freezing No data available

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point

Initial boiling point and boiling range

83 °C (181 °F) - lit.

g) Flash point

6 °C (43 °F) - closed cup

h) Evaporation rate

No data available

Flammability (solid, gas) No data available

Upper/lower

No data available

flammability or explosive limits

k) Vapour pressure

No data available

Vapour density

No data available

m) Relative density

0.86 g/mL at 25 °C (77 °F)

n) Water solubility

No data available

Partition coefficient: noctanol/water

No data available

**Auto-ignition** 

temperature

No data available

q) Decomposition temperature

No data available

Viscosity

No data available

s) Explosive properties

No data available

Oxidizing properties

No data available

#### 9.2 Other safety information

No data available

## 10. STABILITY AND REACTIVITY

#### 10.1 Reactivity

No data available

#### 10.2 **Chemical stability**

Stable under recommended storage conditions.

#### 10.3 Possibility of hazardous reactions

Vapours may form explosive mixture with air.

# 10.4 Conditions to avoid

Heat, flames and sparks. Extremes of temperature and direct sunlight.

#### 10.5 Incompatible materials

acids, Acid chlorides, Acid anhydrides, Strong oxidizing agents, Carbon dioxide (CO2)

#### 10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Nitrogen oxides (NOx)

Other decomposition products - No data available

In the event of fire: see section 5

### 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

# Acute toxicity

LD50 Oral - Rat - 780 mg/kg

Inhalation: No data available

LD50 Dermal - Rabbit - 66 mg/kg

No data available

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## Skin corrosion/irritation

No data available

### Serious eye damage/eye irritation

No data available

### Respiratory or skin sensitisation

No data available

## Germ cell mutagenicity

No data available

### Carcinogenicity

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.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a

carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a

known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a

carcinogen or potential carcinogen by OSHA.

### Reproductive toxicity

No data available

No data available

## Specific target organ toxicity - single exposure

No data available

# Specific target organ toxicity - repeated exposure

No data available

## **Aspiration hazard**

No data available

# **Additional Information**

RTECS: UK5250000

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

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

No data available

## 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

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

### 12.6 Other adverse effects

No data available

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### 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

### **Product**

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

### Contaminated packaging

Dispose of as unused product.

## 14. TRANSPORT INFORMATION

DOT (US)

UN number: 3286 Class: 3 (6.1, 8) Packing group: II

Proper shipping name: Flammable liquid, toxic, corrosive, n.o.s. (Prop-2-ynylamine)

Poison Inhalation Hazard: No

**IMDG** 

UN number: 3286 Class: 3 (6.1, 8) Packing group: II EMS-No: F-E, S-C Proper shipping name: FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S. (Prop-2-ynylamine)

**IATA** 

UN number: 3286 Class: 3 (6.1, 8) Packing group: II

Proper shipping name: Flammable liquid, toxic, corrosive, n.o.s. (Prop-2-ynylamine)

### 15. REGULATORY INFORMATION

### **SARA 302 Components**

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

### **SARA 313 Components**

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

### SARA 311/312 Hazards

Fire Hazard, Acute Health Hazard

# **Massachusetts Right To Know Components**

No components are subject to the Massachusetts Right to Know Act.

## Pennsylvania Right To Know Components

CAS-No. Revision Date

Prop-2-ynylamine 2450-71-7

**New Jersey Right To Know Components** 

CAS-No. Revision Date

Prop-2-ynylamine 2450-71-7

### California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

## **16. OTHER INFORMATION**

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

Acute Tox. Acute toxicity
Eye Dam. Serious eye damage
Flam. Liq. Flammable liquids

H225 Highly flammable liquid and vapour.

H302 Harmful if swallowed.

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H310 Fatal in contact with skin.

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

Skin Corr. Skin corrosion

## **HMIS Rating**

Health hazard: 3
Chronic Health Hazard:
Flammability: 3
Physical Hazard 0

# **NFPA Rating**

Health hazard: 3
Fire Hazard: 3
Reactivity Hazard: 0

## **Further information**

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# **Preparation Information**

Sigma-Aldrich Corporation Product Safety – Americas Region 1-800-521-8956

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