



# Allyl Bromide CAS No 106-95-6

## MATERIAL SAFETY DATA SHEET SDS/MSDS

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

1.1 Product identifiers

Product name : Allyl Bromide

CAS-No. : 106-95-6

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

Identified uses : Laboratory chemicals, Industrial & for professional use only.

1.3 Details of the supplier of the safety data sheet

Company : Central Drug House (P) Ltd

7/28 Vardaan House Ansari Road Daryaganj New Delhi-110002

**INDIA** 

Telephone : +91 11 49404040

Email : <u>care@cdhfinechemical.com</u>

1.4 Emergency telephone number

Emergency Phone # : +91 11 49404040 (9:00am - 6:00 pm) [Office hours]

**SECTION 2: Hazards identification** 

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Flammable liquids (Category 2), H225 Acute toxicity, Oral (Category 3), H301 Skin corrosion (Category 1B), H314

Germ cell mutagenicity (Category 1B), H340

Carcinogenicity (Category 1B), H350 Acute aquatic toxicity (Category 1), H400

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

Danger

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram



Highly flammable liquid and vapour.

Signal word

Hazard statement(s)

H225

H301 Toxic if swallowed.

Causes severe skin burns and eye damage.

H314 May cause genetic defects.

H340 May cause cancer. H350 Very toxic to aquatic life.

H400

Precautionary statement(s) Obtain special instructions before use.

P201 Keep away from heat, hot surfaces, sparks, open flames and other

P210 ignition sources. No smoking.

Wear protective gloves/ protective clothing/ eye protection/ face

P280 protection.

IF SWALLOWED: Immediately call a POISON CENTER/doctor. Rinse

P301 + P310 + P330 mouth

IF ON SKIN (or hair): Take off immediately all contaminated clothing.

P303 + P361 + P353 Rinse skin with water/shower.

IF INHALED: Remove person to fresh air and keep comfortable for

P304 + P340 + P310 breathing. Immediately call a POISON CENTER/doctor.

IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

IF exposed or concerned: Get medical advice/ attention.

none

Supplemental Hazard

P305 + P351 + P338

Statements

P308 + P313

Restricted to professional users.

## 2.3 Other hazards - none

## **SECTION 3: Composition/information on ingredients**

#### 3.1 Substances

Synonyms : 3-Bromo-1-propene

Formula : C<sub>3H5Br</sub>

Molecular weight : 120.98 g/mol

CAS-No. : 106-95-6

EC-No. : 203-446-6

## Hazardous ingredients according to Regulation (EC) No 1272/2008

Component Classification Concentration

3-Bromopropene

CAS-No. 106-95-6 Flam. Liq. 2; Acute Tox. 3; <= 100 %

EC-No. 203-446-6 Skin Corr. 1B; Aquatic Acute

1; H225, H301, H314, H400 M-Factor - Aquatic Acute: 10

**Methyloxirane** Included in the Candidate List of Substances of Very High Concern (SVHC) according to Regulation (EC) No. 1907/2006 (REACH)

CAS-No. 75-56-9 Flam. Liq. 1; Acute Tox. 4; <= 0.1 %

EC-No. 200-879-2 Acute Tox. 3; Acute Tox. 4; Index-No. 603-055-00-4 Skin Irrit. 2; Eye Irrit. 2; Muta. Registration number 01-2119480483-35-XXXX 1B; Carc. 1B; STOT SE 3;

H224, H302, H332, H331, H312, H315, H319, H340,

H350, H335

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

#### **SECTION 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.

#### If 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.

#### In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

#### 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

## **SECTION 5: Firefighting measures**

## 5.1 Extinguishing media

## Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

## 5.2 Special hazards arising from the substance or mixture

Carbon oxides, Hydrogen bromide gas

Flash back possible over considerable distance., Container explosion may occur under fire conditions.

#### 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.

## **SECTION 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. Discharge into the environment must be avoided.

## 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.

## **SECTION 7: Handling and storage**

#### 7.1 Precautions for safe handling

Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

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

Moisture sensitive. Light sensitive.

Storage class (TRGS 510): Flammable liquids

## 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

## 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.

## **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 (US) or type ABEK (EN 14387) respirator cartridges as a backup to enginee 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. Discharge into the environment must be avoided.

## **SECTION 9: Physical and chemical properties**

## 9.1 Information on basic physical and chemical properties

a) Appearance Form: clear, liquid

Colour: colourless

b) Odour unpleasant

c) Odour Threshold No data availabled) pH No data available

e) Melting point/freezing

point

Melting point/range: -119 °C

f) Initial boiling point and boiling range

70 - 71 °C

g) Flash point -0.99 °C - closed cup
 h) Evaporation rate No data available
 i) Flammability (solid, gas) No data available

j) Upper/lower flammability or explosive limits Upper explosion limit: 7.3 %(V) Lower explosion limit: 4.3 %(V)

k) Vapour pressure No data availablel) Vapour density No data available

m) Relative density 1.427-1.430 g/mL at 20 °C

n) Water solubility soluble

o) Partition coefficient: noctanol/water log Pow: 1.79 at 20 °C

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

9.2 Other safety information

No data available

## **SECTION 10: Stability and reactivity**

## 10.1 Reactivity

No data available

## 10.2 Chemical stability

Stable under recommended storage conditions. Contains the following stabiliser(s):

(<=0.1%)

## 10.3 Possibility of hazardous reactions

No data available

## 10.4 Conditions to avoid

May polymerize on exposure to light. Exposure to moisture Exposure to air. Heat, flames and sparks.

#### 10.5 Incompatible materials

Oxidizing agents, Alkali metals, Alkaline earth metals, Light metals, Amides, Amines, Powdered metals

## 10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Hydrogen bromide gas Other decomposition products - No data available

In the event of fire: see section 5

## **SECTION 11: Toxicological information**

## 11.1 Information on toxicological effects

## **Acute toxicity**

LD50 Oral - Rat - 120 mg/kg(3-Bromopropene)

LC50 Inhalation - Rat - 30 min - 10,000 mg/l(3-Bromopropene)

LD50 Intraperitoneal - Rat - 48 mg/kg(3-Bromopropene)

## Skin corrosion/irritation

No data available(3-Bromopropene)

## Serious eye damage/eye irritation

No data available(3-Bromopropene)

## Respiratory or skin sensitisation

No data available(3-Bromopropene)

## Germ cell mutagenicity

S. typhimurium

Result: positive

Other mutation test systems

## Carcinogenicity

IARC: 2B - Group 2B: Possibly carcinogenic to humans (Methyloxirane)

## Reproductive toxicity

No data available(3-Bromopropene)

## Specific target organ toxicity - single exposure

No data available(3-Bromopropene)

## Specific target organ toxicity - repeated exposure

No data available

## Aspiration hazard

No data available(3-Bromopropene)

## **Additional Information**

RTECS: UC7090000

burning sensation, Cough, wheezing, laryngitis, Shortness of breath, spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin.(3-Bromopropene)

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.(3-Bromopropene)

## **SECTION 12: Ecological information**

## 12.1 Toxicity

Toxicity to fish mortality LC50 - Carassius auratus (goldfish) - < 0.8 mg/l - 24.0 h(3-

Bromopropene)

## 12.2 Persistence and degradability

No data available

Biochemical Oxygen 0.82 mg/g(3-Bromopropene)

Demand (BOD)

0.82 mg/g(3-Bromopropene)

Chemical Oxygen Demand (COD)

## 12.3 Bioaccumulative potential

No data available

## 12.4 Mobility in soil

No data available(3-Bromopropene)

## 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

Very toxic to aquatic life.

Additional ecological

No data available

information

## **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

#### **Product**

Burn in a chemical incinerator equipped with an afterburner and scrubber b highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company.

## Contaminated packaging

Dispose of as unused product.

## **SECTION 14: Transport information**

## 14.1 UN number

ADR/RID: 1099 IMDG: 1099 IATA: 1099

## 14.2 UN proper shipping name

ADR/RID: ALLYL BROMIDE IMDG: ALLYL BROMIDE IATA: Allyl bromide

Passenger Aircraft: Not permitted for transport

## 14.3 Transport hazard class(es)

ADR/RID: 3 (6.1) IMDG: 3 (6.1) IATA: 3 (I)

14.4 Packaging group

ADR/RID: I IMDG: I IATA: I

14.5 Environmental hazards

ADR/RID: no IMDG Marine pollutant: yes IATA: no

## 14.6 Special precautions for user

No data available

## **SECTION 15: Regulatory information**

## 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

#### Authorisations and/or restrictions on use

## 15.2 Chemical safety assessment

For this product a chemical safety assessment was not carried out

## **SECTION 16: Other information**

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

H224	Extremely flammable liquid and vapour.
H225	Highly flammable liquid and vapour.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H340	May cause genetic defects.
H350	May cause cancer.
H400	Very toxic to aquatic life.

#### Further information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Central Drug House (P) Ltd and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.cdhfinechemical.com for additional terms and conditions of sale.