



# n-PROPYLAMINE CAS NO 107-10-8

# MATERIAL SAFETY DATA SHEET SDS/MSDS

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

1.1 Product identifiers

Product name : n-Propylamine

CAS-No. : 107-10-8

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 New Delhi -110002

INDIA

Telephone : +91 11 49404040

Email : <a href="mailto:care@cdhfinechemical.com">care@cdhfinechemical.com</a>

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 4), H302 Acute toxicity, Inhalation (Category 3), H331 Acute toxicity, Dermal (Category 3), H311 Skin corrosion (Category 1B), H314

Chronic aquatic toxicity (Category 3), H412

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

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram

Signal word

GHS02 GHS Danger

Hazard statement(s)

H225 Highly flammable liquid and vapour.

H302 Harmful if swallowed.

H311 + H331 Toxic in contact with skin or if inhaled. Causes H314 severe skin burns and eye damage. Harmful to

H412 aguatic life with long lasting effects.

Precautionary statement(s)

P210 Keep away from heat, hot surfaces, sparks, open flames and other

ignition sources. No smoking.

P261 Avoid breathing vapours.

P273 Avoid release to the environment.

Wear protective gloves/ protective clothing/ eye protection/ face

protection.

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.

Supplemental Hazard

Statements

none

#### 2.3 Other hazards

P280

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

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

### 3.1 Substances

Synonyms : 1-Aminopropane

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

Component Classification Concentration

**Propylamine** 

CAS-No. 107-10-8 Flam. Liq. 2; Acute Tox. 4; <= 100 %

EC-No. 203-462-3 Acute Tox. 3; Skin Corr. 1B;

Aquatic Chronic 3; H225, H302, H331, H311, H314,

H412

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, Nitrogen oxides (NOx)

### 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 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

Handle and open container with care. Moisture 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 AXBEK (EN 14387) respirator cartridges as a backup to engine 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

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a)	Appearance	Form: clear, liquid Colour: colourless
b)	Odour	ammoniacal
c)	Odour Threshold	No data available
d)	рН	12.6 at 100 g/l at 20 °C
e)	Melting point/freezing point	Melting point/range: -83 °C - lit.
f)	Initial boiling point and	48 °C - lit.

g) Flash point -29.99 °C

boiling range

octanol/water

h) Evaporation rate No data availablei) Flammability (solid, gas) No data available

j) Upper/lower Upper explosion limit: 10.4 %(V) flammability or explosive limits

k) Vapour pressure 965.8 mmHg at 55 °C 247.6 mmHg at 20 °C 330 hPa at 19.6 °C

I) Vapour density 2.04 - (Air = 1.0)
 m) Relative density 0.719 g/cm3 at 25 °C
 n) Water solubility completely miscible
 o) Partition coefficient: n- log Pow: 0.28 at 23 °C

p) Auto-ignition No data available temperature

q) Decomposition No data available

temperature

r) Viscosity No data available
 s) Explosive properties No data available
 t) Oxidizing properties No data available

# 9.2 Other safety information

Dissociation constant 12.68 at 25 °C Relative vapour density 2.04 - (Air = 1.0)

## **SECTION 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

No data available

#### 10.4 Conditions to avoid

Heat, flames and sparks.

## 10.5 Incompatible materials

acids, Acid chlorides, Acid anhydrides, Strong oxidizing agents

# 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

## **SECTION 11: Toxicological information**

# 11.1 Information on toxicological effects

#### **Acute toxicity**

LD50 Oral - Rat - 370 mg/kg(Propylamine)

LC50 Inhalation - Rat - 4 h - 7,060

mg/m3(Propylamine) LD50 Dermal - Rabbit - 402.6

mg/kg(Propylamine)

## Skin corrosion/irritation Skin -

Rabbit(Propylamine) Result:

Open irritation test - 24 h Skin -

Rabbit(Propylamine) Result:

Corrosive

#### Serious eye damage/eye irritation

Eves -

Rabbit(Propylamine)

Result: Corrosive to eyes

#### Respiratory or skin sensitisation

No data available(Propylamine)

## Germ cell mutagenicity

Tests on bacterial or mammalian cell cultures did not show mutagenic effects. (Propylamine)

#### 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.

## Reproductive toxicity

No data available(Propylamine)

# Specific target organ toxicity - single exposure

No data available(Propylamine)

## Specific target organ toxicity - repeated exposure

No data available

## **Aspiration hazard**

No data available(Propylamine)

#### **Additional Information**

RTECS: UH9100000

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

## **SECTION 12: Ecological information**

## 12.1 Toxicity

Toxicity to fish LC50 - Leuciscus idus (Golden orfe) - 46 mg/l - 96 h(Propylamine)

Toxicity to daphnia and

EC50 - Daphnia magna (Water flea) - 70.7 mg/l - 48 h(Propylamine)

other aquatic invertebrates

Toxicity to algae - Scenedesmus quadricauda (Green algae) - 1.7 mg/l - 192 h(Propylamine)

- Scenedesmus quadricauda (Green algae) - 2.3 mg/l - 192 h(Propylamine)

Toxicity to bacteria LC50 - Pseudomonas putida - 17 h(Propylamine)

## 12.2 Persistence and degradability

Biodegradability Remarks: Expected to be biodegradable

## 12.3 Bioaccumulative potential

No data available

#### 12.4 Mobility in soil

No data available(Propylamine)

#### 12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

#### 12.6 Other adverse effects

Harmful to aquatic life with long lasting effects.

Neutralisation will reduce ecotoxic effects. May be harmful to aquatic organisms due to the shift of the pH.

# **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: 1277 IMDG: 1277 IATA: 1277

## 14.2 UN proper shipping name

ADR/RID: PROPYLAMINE IMDG: PROPYLAMINE Propylamine

14.3 Transport hazard class(es)

ADR/RID: 3 (8) IMDG: 3 (8) IATA: 3 (8)

14.4 Packaging group

ADR/RID: II IMDG: II IATA: II

14.5 Environmental hazards

ADR/RID: no IMDG Marine pollutant: no 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.

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.

H225 Highly flammable liquid and vapour.

H302 Harmful if swallowed. H311 Toxic in contact with skin.

H311 + H331 Toxic in contact with skin or if inhaled.

H314 Causes severe skin burns and eye damage.

H331 Toxic if inhaled.

H412 Harmful to aquatic life with long lasting effects.

#### **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.