



TETRAMETHYL AMMONIUM HYDROXIDE 0.1 N IN METHANOL

MATERIAL SAFETY DATA SHEET SDS/MSDS

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

1.1 Product identifiers

Product name : Tetramethyl Ammonium Hydroxide 0.1 N in methanol

Product Code : 897000

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 : care@cdhfinechemical.com

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 3), H226 Acute toxicity, Oral (Category 2), H300 Acute toxicity, Inhalation (Category 3), H331 Acute toxicity, Dermal (Category 1), H310 Skin corrosion (Category 1B), H314

Specific target organ toxicity - single exposure (Category 1), H370

Specific target organ toxicity - repeated exposure (Category 1), thymus gland, Liver, H372

Chronic aquatic toxicity (Category 2), H411

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 Danger

Hazard statement(s)

H226 Flammable liquid and vapour.

H300 + H310 Fatal if swallowed or in contact with skin

H331 Toxic if inhaled.

H370 Causes damage to organs.

H372 Causes damage to organs (thymus gland, Liver) through prolonged or

repeated exposure.

H411 Toxic to aquatic life with long lasting effects.

Precautionary statement(s)

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

P264 Wash hands thoroughly after handling. P273 Avoid release to the environment.

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

protection.

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.

P302 + P350 IF ON SKIN: Gently wash with plenty of soap and water.

Supplemental Hazard

Statements

none

2.3 Other hazards

The substance does not fulfill the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH.

SECTION 3: Composition/information on ingredients

3.1 **Mixtures**

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

Classification Concentration Component

Methanol

CAS-No. > 75 - < 99 % 67-56-1 Flam. Liq. 2; Acute Tox. 3;

EC-No. 200-659-6 STOT SE 1; H225, H301, 603-001-00-X H331, H311, H370 Index-No. Registration number 01-2119433307-44-XXXX Concentration limits:

> >= 10 %: STOT SE 1, H370; 3 - < 10 %: STOT SE 2, H371;

Tetramethylammonium hydroxide

CAS-No. > 1 - < 5 % 75-59-2 Acute Tox. 2; Acute Tox. 1;

EC-No. 200-882-9 Skin Corr. 1B; STOT SE 1; STOT RE 1; Aquatic Chronic

2; H300, H310, H314, H370,

H372, H411

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.

Remove to fresh air and keep at rest in a position comfortable for breathing. Specific treatment (see on this label). Immediately call a POISON CENTER or doctor.

In case of skin contact

Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Wash with plenty of soap and water, Immediately call a POISON CENTER or doctor, Specific treatment (see on this label). Remove/Take off immediately all contaminated clothing. Wash contaminated clothing before reuse.

In case of eye contact

Obtain medical attention if pain, blinking or redness persist. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If swallowed

Immediately call a POISON CENTER or doctor. Specific treatment (see on this label). Do NOT induce vomiting. Rinse mouth.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms relating to use: Repeated exposure to this material can result in absorption through skin causing significant health hazard. Causes damage to organ. Danger of serious damage to health by prolonged exposure through inhalation. Swallowing a small quantity of this material will result in serious health hazard.

4.3 Indication of any immediate medical attention and special treatment needed

Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible). Call a POISON CENTER or doctor. Specific treatment (see on this label).

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media: Foam, Dry powder, Carbon dioxide, Water spray, Sand.

Unsuitable extinguishing media: Do not use a heavy water stream.

Surrounding fires: Use water spray or fog for cooling exposed containers.

5.2 Special hazards arising from the substance or mixture

Under fire conditions, hazardous fumes will be present.

5.3 Advice for firefighters

Protection against fire: Do not enter fire area without proper protective equipment, including respiratory protection.

Special procedures: Exercise caution when fighting any chemical fire. Avoid (reject) fire-fighting water to enter environment.

5.4 Further information

No data available

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For emergency responders: Equip cleanup crew with proper protection. Ventilate area.

For non-emergency personnel: Evacuate unnecessary personnel.

6.2 Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.

6.3 Methods and materials for containment and cleaning up

Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4 Reference to other sections

See section 8. Exposure controls/personal protection

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Handling: Use only outdoors or in a well-ventilated area. Do not breathe dust, fume, gas, mist, vapours, spray. Wash thoroughly after handling. Do not eat, drink or smoke when using this product.

Technical protective measures: Provide good ventilation in process area to prevent formation of vapour.

7.2 Conditions for safe storage, including any incompatibilities

Storage: Keep only in the original container in a cool, well ventilated place. Keep container closed when not in use.

Storage - away from: Strong bases, Strong acids, Sources of ignition, Direct sunlight.

7.3 Specific end use(s)

None.

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: liquid

Colour: Colourless

b) Odour Characteristic.

c) Odour Threshold 160 ppm

d) pH No data available

e) Melting point/freezing

point

-97.8°C

f) Initial boiling point and

boiling range

No data available

g) Flash pointh) Evaporation rateNo data availableNo data available

i) Flammability (solid, gas) No data available

flammability or explosive limits

Upper/lower

No data available

k) Vapour pressure 97.68 mm of Hg (@ 20°C

I) Vapour density 1.11

m) Relative density 1.014 g/ml

n) Water solubility Miscible with watero) Partition coefficient: n- No data available

octanol/water

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

No data available

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

Direct sunlight, Extremely high or low temperatures.

10.5 Incompatible materials

Strong acids, Strong bases.

10.6 Hazardous decomposition products

Hazardous decomposition products: Fumes, Carbon monoxide, Carbon dioxide.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute inhalation toxicity

Toxic if inhaled.

Acute Dermal toxicity

Toxic in contact with skin.

Acute ingestion toxicity

Toxic if swallowed.

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.

Reproductive toxicity

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

No data available

SECTION 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

The substance does not fulfill the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH.

12.6 Other adverse effects

Avoid release to the environment.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Avoid release to the environment. Dispose in a safe manner in accordance with local/national regulations. Dispose of this material and its container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

Contaminated packaging

Dispose of as unused product.

SECTION 14: Transport information

14.1 UN number

ADR/RID: 1992 IMDG: 1992 IATA: 1992

14.2 UN proper shipping name

ADR/RID: CORROSIVE LIQUID, FLAMMABLE, N.O.S. (Methanol, Tetramethylammonium hydroxide) IMDG: CORROSIVE LIQUID, FLAMMABLE, N.O.S. (Tetramethylammonium hydroxide, Methanol)

IATA: Corrosive liquid, flammable, n.o.s. (Tetramethylammonium hydroxide, Methanol)

14.3 Transport hazard class(es)

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

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.
H226	Flammable liquid and vapour.
H300	Fatal if swallowed.
H300 + H310	Fatal if swallowed or in contact with skin
H301	Toxic if swallowed.
H310	Fatal in contact with skin.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H331	Toxic if inhaled.
H370	Causes damage to organs.
H371	May cause damage to organs.
H372	Causes damage to organs (/\$/*_ORGAN_REPEAT/\$/) through prolonged or
	repeated exposure.
H411	Toxic 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.