OXFORD LAB FINE CHEM LLP

Regd Office: Unit no 12, 1st Floor,
Neminath Industrial Estate No.6,
Navghar, Vasai (East), Palghar - 410210.
Maharashtra, INDIA.

Tel: +91 250 2390032 / 2390989 / 2390990
Email: sales@oxfordlabchem.com /
info@oxfordlabchem.com
Web: www.oxfordlabchem.com

Oxford
Range of
Laboratory Chemicals

MATERIAL SAFETY DATA SHEET

CHLORO CHLOLINE CHLORIDE 97%

(2-Chloroethyl Trimethyl Ammonium Chloride)

MSDS CAS: 999-81-5

Section 1: Chemical Product and Company Identification

Section 1: Chemical Product

Product Name: CHLORO CHOLINE CHLORIDE
CAS#: 999-81-5
Synonym: 2-chloroethyl trimethyl ammonium chloride
Chemical Name: Not available.
Chemical Formula: $C_5H_{13}Cl_2N$

Brand : OXFORD

Details Of The Supplier Of The Safety Data Sheet :

Company identification:

OXFORD LAB FINE CHEM LLP
Unit. No. 12, 1st Floor, Neminath Industrial Estate No. 6,
Navghar, Vasai (East). Palghar - 401 210.
Mumbai, Maharashtra, INDIA.
Tel: 91-250-2390989
Tel/Fax: 91-250-2390032

Section 2: Composition and Information on Ingredients

Composition:

Name	CAS #	% by Weight	Hazardous
Chloro Choline Chloride	999-81-5	100	Yes

Section 3: Hazards Identification

Risk advice to man and the environment:
Harmful in contact with skin and if swallowed.st may produce respiratory tract irritation leading to frequent attacks of bronchial infection.

Section 4: 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:
Wash off with soap and plenty of water. 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:
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Section 5: Fire and Explosion Data

Suitable extinguishing media:
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special protective equipment for fire-fighters:
Wear self contained breathing apparatus for fire fighting if necessary.

Section 6: Accidental Release Measures

Personal precautions:
Use personal protective equipment. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation.

Section 6: Accidental Release Measures (Continued)

Environmental precautions: **Do not let product enter drains.**

Methods for cleaning up:
Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal.

Section 7: Handling and Storage

Handling:
Avoid contact with skin and eyes. Avoid formation of dust and aerosols.
Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

Storage:
Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Hygroscopic.

Section 8: Exposure Controls/Personal Protection

Personal protective equipment
Respiratory protection:
Where risk assessment shows air-purifying respirators are appropriate use a dust mask type N95 (US) or type P1 (EN 143) respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection:
The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. Handle with gloves.

Eye protection: **Face shield and safety glasses.**

Skin and body protection
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures:
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Section 9: Physical and Chemical Properties

Appearance

Form	**: Crystalline.**
Colour	**: Beige.**

Safety data

pH	**: No data available.**
Molecular Weight	**: 158.07g/mole**
Melting point	**: 239 - 243 °C**
Boiling point	**: No data available.**
Flash point	**: No data available.**
Ignition temperature	**: No data available.**
Lower explosion limit	**: No data available.**
Upper explosion limit	**: No data available.**
Water solubility	**: No data available.**

Section 10: Stability and Reactivity Data

Storage stability: Stable under recommended storage conditions.

Conditions to avoid: Hygroscopic.

Materials to avoid: Strong oxidizing agents.

Hazardous decomposition products:
Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NOx), Hydrogen chloride gas.

Section 11: Toxicological Information

Acute toxicity:
LD50 Oral - rat - 600 mg/kg
LC50 Inhalation - rat - 4 h - > 5.200 mg/m3
LD50 Dermal - rabbit - 232 mg/kg

Irritation and corrosion:
Skin - rabbit - Mild skin irritation - 24 h

Section 11: Toxicological Information (Continued)

Sensitisation: **No data available.**

Chronic exposure:
Carcinogenicity - mouse - Oral
Tumorigenic:Neoplastic by RTECS criteria. Liver:Tumors.
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.
Genotoxicity in vivo - mouse - Intravaginal
DNA inhibition.

Signs and Symptoms of Exposure:
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Potential Health Effects:
Inhalation **May be harmful if inhaled. May cause respiratory tract irritation.**
Skin **Harmful if absorbed through skin. May cause skin irritation.**
Eyes **May cause eye irritation.**
Ingestion **Harmful if swallowed.**
Target Organs **Nerves., Cardiovascular system.**

Section 12: Ecological Information

Elimination information (persistence and degradability) : No data available.

Ecotoxicity effects:
Toxicity to fish LC50 - Oncorhynchus mykiss (rainbow trout) - > 100 mg/l - 96 h
Toxicity to daphnia and other aquatic invertebrates.
EC50 - Daphnia magna (Water flea) - 16,7 mg/l - 48 h

Section 13: Disposal Considerations

Product:

Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging: Dispose of as unused product.

Section 14: Transport Information

Land transport (ADR-RID)

Proper shipping name : TOXIC SOLID, ORGANIC, N.O.S. (Clormequat chloride)
UN N° : 2811
ADR - Class : 6.1
ADR - Packing group : III

Sea transport (IMDG) [English only]

Proper shipping name : TOXIC SOLID, ORGANIC, N.O.S. (Clormequat chloride)
UN N° : 2811
IMO-IMDG - Class or division : 6.1
IMO-IMDG - Packing group : III

Air transport (ICAO-IATA) [English only]

Proper shipping name : Toxic solid, organic n.o.s. (Clormequat chloride)
UN N° : 2811
IATA - Class or division : 6.1
IATA - Packing group : III

Section 15: Other Regulatory Information

Federal and State Regulations:

California prop. 65 (no significant risk level): Chloroacetyl Chloride Rhode Island RTK hazardous substances: Chloroacetyl Chloride Pennsylvania RTK: Chloroacetyl Chloride Florida: Chloroacetyl Chloride Minnesota: Chloroacetyl Chloride Massachusetts RTK: Chloroacetyl Chloride
New Jersey: Chloroacetyl Chloride TSCA 8(b) inventory: Chloroacetyl Chloride

Section 15: Other Regulatory Information (Continued)

Other Regulations:

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.

Other Classifications:

Health Hazard: 3

Fire Hazard: 1

Reactivity: 0

Personal Protection:

National Fire Protection Association (U.S.A.):

Health: 3

Flammability: 0

Reactivity: 1

Specific hazard:

Protective Equipment:

Gloves. Full suit. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate. Face shield.

Section 16 - Additional Information

References: Not available.

Other Special Considerations: Not available.

OXFORD LAB FINE CHEM LLP

Regd Office: Unit no 12, 1st Floor,
Neminath Industrial Estate No.6,
Navghar, Vasai (East), Palghar - 410210.
Maharashtra, INDIA.

Tel: +91 250 2390032 / 2390989 / 2390990
Email: sales@oxfordlabchem.com /
info@oxfordlabchem.com
Web: www.oxfordlabchem.com

Oxford
Range of
Laboratory Chemicals

Disclaimer:

****

The information contained herein in good faith but makes no representations as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.

Oxford Lab Fine Chem LLP makes no representations or warranties, either express or implied, including without limitation any warranties of merchantability, fitness for a particular purpose with respect to the information set forth herein or the product to which the information refers. Accordingly, Oxford Lab Fine Chem LLP will not be responsible for damages resulting from use of or reliance upon this information.