OTTO CHEMIE PVT LTD

201, 51-53 Maroo Bhavan, Kalbadevi, Mumbai - 400002, India. Tel: + 91 22 2207 0099 / 6638 2599 Email: info@ottokemi.com, Web: www.ottokemi.com

---ISO 9001: 2015----

MATERIAL SAFETY DATA SHEET

1.Identification 1.1GHS Product identifier Diethylcarbamyl chloride, 99% Code D 1682

2.Hazard identification

2.1Classification of the substance or mixture

Acute toxicity - Oral, Category 4 Skin irritation, Category 2 Eye irritation, Category 2

Acute toxicity - Inhalation, Category 4

Specific target organ toxicity \u2013 single exposure, Category 3

Carcinogenicity, Category 2

2.2GHS label elements, including precautionary statements

Pictogram(s)

Signal word Hazard statement(s)

Precautionary statement(s)

Prevention

Response

Warning

H302 Harmful if swallowed

H315 Causes skin irritation

H319 Causes serious eye irritation

H332 Harmful if inhaled

H335 May cause respiratory irritation

H351 Suspected of causing cancer

P264 Wash ... thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

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

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P271 Use only outdoors or in a well-ventilated area.

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood. P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor/u2026if you feel unwell.

P330 Rinse mouth.

P302+P352 IF ON SKIN: Wash with plenty of water/...

P321 Specific treatment (see ... on this label).

P332+P313 If skin irritation occurs: Get medical advice/attention.

P362+P364 Take off contaminated clothing and wash it before reuse.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, i present and easy to do. Continue rinsing.

P337+P313 If eye irritation persists: Get medical advice/attention.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P312 Call a POISON CENTER/doctor/\u2026if you feel unwell. P308+P313 IF exposed or concerned: Get medical advice/ attention.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

P501 Dispose of contents/container to ... Disposal

2.3Other hazards which do not result in classification

Storage

3. Composition/information on ingredients

3.1Substances

Chemical name		CAS number	EC number	Concentration
Diethylcarbamyl chloride	Diethylcarbamyl chloride	88-10-8	none	100%

4.1Description of necessary 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 eve contact

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

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2Most important symptoms/effects, acute and delayed

no data available

4.3Indication of immediate medical attention and special treatment needed, if necessary

Basic treatment: Establish a patent airway. Suction if necessary. Watch for signs of respiratory insufficiency and assist ventilations if needed. Administer oxygen by nonrebreather mask at 10 to 15 L/min. Monitor for pulmonary edema and treat if necessary ... Monitor for shock and treat if necessary Anticipate seizures and treat if necessary For eye contamination, flush eyes immediately with water. Irrigate each eye continuously with normal saline during transport Do not use emetics. For ingestion, rinse mouth and administer 5 ml/kg up to 200 ml of water for dilution if the patient can swallow, has a strong gag reflex, and does not drool Cover skin burns with dry sterile dressings after decontamination /Poison A and B/

5.Fire-fighting measures 5.1Extinguishing media

Suitable extinguishing media

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

5.2Specific hazards arising from the chemical

no data available

5.3Special protective actions for fire-fighters

Wear self-contained breathing apparatus for firefighting if necessary.

6.Accidental release measures

6.1Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation.

Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

6.2Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

6.3Methods and materials for containment and cleaning up
Pick up and arrange disposal. Sweep up and shovel. Keep in suitable, closed containers for disposal.

7. Handling and storage

7.1Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Avoid exposure - obtain special instructions before use.Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.2.

7.2Conditions for safe storage, including any incompatibilities

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

8.Exposure controls/personal protection

8.1Control parameters

Occupational Exposure limit values

no data available

Biological limit values

no data available

8.2Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. 8.3Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection

Safety glasses with side-shields conforming to EN166. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Wear impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. 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. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Respiratory protection

Wear dust mask when handling large quantities.

Thermal hazards

no data available

9. Physical and chemical properties

Physical state Clear to slightly greyish liquid

Colour Liquid

Odour no data available Melting point/ freezing point 204\u00b0C(lit.) Boiling point or initial boiling point and boiling 236\u00b0C(lit.)

range

Flammability no data available Lower and upper explosion limit / flammability no data available

limit

Flash point 76\u00b0C(lit.) Auto-ignition temperature no data available Decomposition temperature no data available no data available рΗ Kinematic viscosity no data available Solubility In water:HYDROLYSIS Partition coefficient n-octanol/water (log value) no data available Vapour pressure no data available

Density and/or relative density 1 07 4.1 (Air= 1) Relative vapour density Particle characteristics no data available

10.Stability and reactivity 10.1Reactivity no data available 10.2Chemical stability

Stable under recommended storage conditions.

10.3Possibility of hazardous reactions

no data available 10.4Conditions to avoid no data available

10.5Incompatible materials

REACTS WITH WATER OR STEAM TO PRODUCE TOXIC & CORROSIVE FUMES.

10.6Hazardous decomposition products

WHEN HEATED TO DECOMP, EMITS HIGHLY TOXIC FUMES OF /HYDROGEN CHLORIDE AND NITROGEN OXIDES/.

11.Toxicological information

Acute toxicity
Oral: no data available Inhalation: no data available Dermal: no data available Skin corrosion/irritation no data available Serious eye damage/irritation no data available

Respiratory or skin sensitization

no data available Germ cell mutagenicity

no data available Carcinogenicity no data available Reproductive toxicity

no data available STOT-single exposure

no data available

STOT-repeated exposure

no data available Aspiration hazard

no data available

12. Ecological information

12.1Toxicity

Toxicity to fish: no data available

Toxicity to daphnia and other aquatic invertebrates: no data available

Toxicity to algae: no data available

Toxicity to microorganisms: no data available

12.2Persistence and degradability

no data available

12.3Bioaccumulative potential

no data available

12.4Mobility in soil

no data available 12.50ther adverse effects no data available

13.Disposal considerations

13.1Disposal methods

Product

The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems. Contaminated packaging

Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.

IMDG: 8

IATA: 8

IATA: III

IATA: no

14. Transport information

14.1UN Number

ADR/RID: UN3265 14.2UN Proper Shipping Name IMDG: UN3265 IATA: UN3265

ADR/RID: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. IMDG: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. IATA: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.

14.3Transport hazard class(es)

ADR/RID: 8 14.4Packing group, if applicable

ADR/RID: III IMDG: III

14.5Environmental hazards

ADR/RID: no IMDG: no

14.6Special precautions for user

no data available

14.7Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

no data available

15.Regulatory information

15.1Safety, health and environmental regulations specific for the product in question

Chemical name	Common names and synonyms	CAS number	EC number
Diethylcarbamyl chloride	Diethylcarbamyl chloride	88-10-8	none
European Inventory of Existing Commercial Chemical Substances (EINECS)			Listed.
EC Inventory			Listed.
United States Toxic Substances Control Act (TSCA) Inventory			Listed.
China Catalog of Hazardous chemicals 2015			Not Listed.
New Zealand Inventory of Chemicals (NZIoC)			Not Listed.
Philippines Inventory of Chemicals and Chemical Substances (PICCS)			Listed.
Vietnam National Chemical Inventory			Not Listed.
Chinese Chemical Inventory of Existing Chemical Substances (China IECSC)			Listed.

Section 16: Other Information

This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.