

EMS/F/02/01 w.e.f. 01.01.2013

Rev.: 02

Next Revision Due: Jan 2015

Material Safety Data Sheet

ISO OCTYL CHLORIDE

Section 1 - Product and Company Information

Substance : ISO OCTYL CHLORIDE

Trade Name : 2-Ethyl Hexyl Chloride, 3-(Chloromethy)-heptane

Chemical family : Alkyl Chloride

Company : Shiva Pharmachem Pvt. Ltd.

Plot No. 588,

Village Luna - 391440

Taluka Padra,

District: Vadodara, Gujarat,

India.

Phone No. : +91 2662-221021 / 224360

Fax No. : +91 2662 223314

Section 2 - Hazard Identification

2.1 Classification of the substance or mixture Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]

Flammable liquids (Category 3) Skin irritation (Category 2)

Chronic aquatic toxicity (Category 4)

Classification according to EU Directives 67/548/EEC or 1999/45/EC Irritating to skin.

2.2 Label elements

Labeling according Regulation (EC) No. 1272/2008 [CLP]

Pictogram





Signal word

Warning

Hazard statements(s)

H226 Flammable liquid and vapor. H315 Causes skin irritation.

H413 May cause long lasting harmful effects to aquatic life.

Precautionary statement(s) none

According to European Directive 67/548/EEC as amended.

R-phrase(s)

R 38 Irritating to skin



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S-phrase(s)

S 24 Avoid contact with skin S 37 Wear suitable gloves

2.3 Other Hazards None

Section 3 – Composition /Information on Ingredients

Substance

Formula : C₈H₁₇Cl Molecular Weight : 148.68 g/mol

Product Name	CAS No.	EC NO.	Hazard Class and Category Code(s)
2-Ethyl Hexyl Chloride	123-04-6	204-594-4	Flammable liquids (Category 3) Skin irritation (Category 2) Chronic aquatic toxicity (Category 4)

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, remove 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. Consult a physician.

In case of eye contact

Flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician

If swallowed

Do Not induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Section 5 – Fire Fighting Measures

Extinguishing Media

Suitable extinguishing media: For Small Fires, Use media such as "alcohol resistant" foam, dry chemical, or carbon dioxide. For large fires, apply water from as far as possible. Use very large quantities (flooding) of water applied as a mist or spray; solid streams of water may be ineffective. Cool all affected containers with flooding quantities of water.

Special hazards arising form the substance or mixture

Carbon oxides, Hydrogen chlorides gas

Precautions for fire-fighters

Wear self contained breathing apparatus for the fighting if necessary.



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Further information

Use water spray to cool unopened containers.

Section 6 - Accidental Release Measures

Personal precaution procedures to be followed in case of leak or spill

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

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).

Section 7 - Handling and Storage

Precautions for safe handling

Avoid inhalation of vapor or mist.

Keep away form sources of ignition-No smoking. Take measures to prevent the build up of lectrostatic charge.

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 care fully resealed and kept upright to prevent leakage.

Section 8 - Exposure Controls / Personal Protection

Control parameters

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

Exposure controls

Appropriate engineering controls

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

Personal protective equipment

Eye/face protection

Tightly fitting safety goggles. Face shield (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



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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.

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 a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of 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).

Section 9 - Physical and Chemical Properties

Physical state : Liquid

Odor : No data available

PH : 3 - 5

BP/BP Range : 174 °C at 1,013 hPa

MP/MP Range : - 70 °C

Flash Point : 52.4°C (open cup)
Flammability : Flammable, category 3
Auto ignition Temp : Data not available

SG/Density : 0.862

Partition Coefficient : log Pow: 4.541

Refractive index : 1.423

Viscosity : Data not available
Relative Density : 0.877 g/cm³ at 20°C
Bulk Density : Not applicable
Decomposition Temp. : Data not available

Solvent Content : Nil

Water solubility : $0.0503 \text{ g} / \text{I at } 20^{\circ}\text{C}$

Solubility : Miscible with toluene, methylene chloride

Section 10 - Stability and Reactivity

Reactivity

No data available

Chemical Stability

No data available

Possibility of hazardous reactions

No data available

Conditions to Avoid:

Heat, Flames and sparks



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Incompatible materials

Strong oxidizing agents.

Hazardous Decomposition Products

Other decomposition products-no data available

Section 11 - Toxicological Information

Information on toxicological effects Acute toxicity

LD₅₀ Dermal-rabbit – 15,800 mg/kg

Skin corrosion/irritation

Skin-rabbit

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitization

Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals.

Germ cell mutagenicity

No data available

Carcinogenicity

IARC: No components 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

Potential health effects

Inhalation May be harmful if inhaled. Causes respiratory tract irritation.

Ingestion May be harmful if swallowed.

Skin May be harmful if absorbed through skin. Causes skin burns.

Sign and Symptoms of Exposure

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



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Section 12 - Ecological Information

Toxicity

No data available

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

Results of PBT and vPvB assessment

No data available

Other adverse effects

No data available

Section 13 - Disposal Considerations

Waste treatment methods

Products

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to licensed disposal company. Contact licensed professional waste disposal service to dispose of this material. Observe all federal, state, and local environmental regulations.

Contaminated packaging

Dispose of as unused product.

Section 14 - Transport Information

RID/ADR

UN No. : 1993 Hazard Class : 3 PG : III

Proper Shipping Name : FLAMMABLE LIQUID, N.O.S Technical Name : ISO OCTYL CHLORIDE

IMDG

UN No. : 1993 Hazard Class : 3 PG : III

Proper Shipping Name : FLAMMABLE LIQUID, N.O.S Technical Name : ISO OCTYL CHLORIDE

Marine Pollutant : No



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IATA

UN No. : 1993 Hazard Class : 3 PG : III

Proper Shipping Name : FLAMMABLE LIQUID, N.O.S Technical Name : ISO OCTYL CHLORIDE

Section 15 - Regulatory Information

This safety datasheet complies with the requirement of Regulation (EC) No. 1907/2006.

Safety, health and environmental regulations/legislation specific for the substance or mixture

No data available

Chemical Safety Assessment

No data available

Section 16 - Additional Information

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Shiva Pharmachem Pvt. Ltd. be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incident, consequential or exemplary damages, howsoever arising, even if Shiva Pharmachem Pvt. Ltd has been advised of the possibility of such damages.