

## 1,6-Dichlorohexane 2163-00-0 MSDS

### Section 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE

#### Product identifiers

Product name : 1,6-Dichlorohexane

CAS-No. : 2163-00-0

#### Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Manufacture of substances

### Section 2. HAZARDS IDENTIFICATION

#### Classification of the substance or mixture

##### Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]

Skin irritation (Category 2)

Eye irritation (Category 2)

Specific target organ toxicity - single exposure (Category 3)

##### Classification according to EU Directives 67/548/EEC or 1999/45/EC

Irritating to eyes, respiratory system and skin. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

#### Label elements

##### Labelling according Regulation (EC) No 1272/2008 [CLP]

Pictogram

Signal word Warning

Hazard statement(s)

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

Precautionary statement(s)

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

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes.

Remove

contact lenses, if present and easy to do. Continue rinsing.

Supplemental Hazard none

Statements

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

Hazard symbol(s)

R-phrases

R36/37/38 Irritating to eyes, respiratory system and skin.

R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S-phrases

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S36 Wear suitable protective clothing.

S61 Avoid release to the environment. Refer to special instructions/ Safety data sheets.

**Other hazards - none**

### Section 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Substances

Synonyms : Hexamethylene dichloride

Formula : C<sub>6</sub>H<sub>12</sub>Cl<sub>2</sub>

Molecular Weight : 155,07 g/mol

Component Concentration

#### 1,6-Dichlorohexane

CAS-No. 2163-00-0 -

EC-No. 218-491-7

### Section 4. FIRST AID MEASURES

#### 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

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

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

##### Most important symptoms and effects, both acute and delayed

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

##### Indication of any immediate medical attention and special treatment needed

no data available

### Section 5. FIREFIGHTING MEASURES

#### Extinguishing media

##### Suitable extinguishing media

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

##### Special hazards arising from the substance or mixture

Carbon oxides, Hydrogen chloride gas

##### Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

### **Further information**

Use water spray to cool unopened containers.

## **Section 6. ACCIDENTAL RELEASE MEASURES**

### **Personal precautions, protective equipment and emergency procedures**

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 vapours accumulating to

form explosive concentrations. Vapours can accumulate in low areas.

### **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.

### **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). Keep in suitable, closed

containers for disposal.

### **Reference to other sections**

For disposal see section 13.

## **Section 7. HANDLING AND STORAGE**

### **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.

### **Conditions for safe storage, including any incompatibilities**

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

### **Specific end uses**

no data available

## **Section 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

### **Control parameters**

### **Components with workplace control parameters**

### **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**

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**

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.

#### **Body Protection**

impervious 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**

### **Information on basic physical and chemical properties**

- a) Appearance      Form: clear, liquid  
Colour: light yellow
- b) Odour      no data available
- c) Odour Threshold      no data available
- d) pH      no data available
- e) Melting point/freezing point      no data available
- f) Initial boiling point and boiling range      87 - 90 °C at 20 hPa - lit.
- g) Flash point      77 °C - closed cup
- h) Evaporation rate      no data available
- i) Flammability (solid, gas)      no data available
- j) Upper/lower flammability or explosive limits      no data available
- k) Vapour pressure      no data available
- l) Vapour density      no data available
- m) Relative density      1,068 g/mL at 25 °C
- n) Water solubility      no data available
- o) Partition coefficient: n- log Pow: 3,5 octanol/water
- p) Autoignition      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

**Other safety information**

no data available

**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.

**Incompatible materials**

Strong bases

**Hazardous decomposition products**

Other decomposition products - no data available

**Section 11. TOXICOLOGICAL INFORMATION**

**Information on toxicological effects**

**Acute toxicity**

no data available

**Skin corrosion/irritation**

no data available

**Serious eye damage/eye irritation**

no data available

**Respiratory or skin sensitization**

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**

Inhalation - May cause respiratory irritation.

**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 irritation.

**Eyes** Causes serious eye irritation.

**Signs and Symptoms of Exposure**

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

**Additional Information**

RTECS: Not available

**Section 12. ECOLOGICAL INFORMATION**

**Toxicity**

Toxicity to fish LC50 - Leuciscus idus (Golden orfe) - 100 - 220 mg/l - 96 h

**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**

Harmful to aquatic life.

**Section 13. DISPOSAL CONSIDERATIONS**

**Waste treatment methods**

**Product**

This combustible material may be burned in a chemical incinerator equipped with an afterburner and

scrubber. Offer surplus and non-recyclable solutions to a licensed disposal company.

**Contaminated packaging**

Dispose of as unused product.

**Section 14. TRANSPORT INFORMATION**

**UN number**

ADR/RID: 3082    IMDG: 3082    IATA: 3082

**UN proper shipping name**

ADR/RID: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (1,6-Dichlorohexane)

IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (1,6-Dichlorohexane)

IATA: Environmentally hazardous substance, liquid, n.o.s. (1,6-Dichlorohexane)

**Transport hazard class(es)**

ADR/RID: 9      IMDG: 9      IATA: 9

**Packaging group**

ADR/RID: III      IMDG: III      IATA: III

**Environmental hazards**

ADR/RID: yes      IMDG Marine pollutant: yes      IATA: yes

**Special precautions for user**

no data available

**Section 15. REGULATORY INFORMATION**

This safety datasheet complies with the requirements 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. OTHER INFORMATION****Further information**

Copyright 2012 Co. LLC. License granted to make unlimited paper copies for internal use only.

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. Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.