

Safety Data Sheets

Revision Date: 03-Feb.-2015

Section 1. Identification of substance

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| Product Name : Methylcyclohexane |
| Synonyms: Hexahydrotoluene |
| CAS No.: 108-87-2 |
| Molecular Weight: 98.19 |
| Chemical Formula: C ₇ H ₁₄ |
| Manufacturer/Supplier : EXCEL CHEMICAL CORPORATION |
| Emergency Telephone Numbers : +886-07-6411122 /FAX : +886-07-6411125 |
| e-mail: kc-lai@tascogroup.com.tw |
| Address : 25-9A MORRISON PLAZA.SEC. 4 JEN-AI RD. TAIPEI, TAIWAN 10649, R.O.C. |

Section 2. Hazards identification

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| Hazard. Classification :  Signal Word : DANGER |
| Emergency Overview Danger! Harmful or fatal if swallowed. Flammable liquid and vapor. Harmful if inhaled. Causes irritation to skin, eyes and respiratory tract. Affects central nervous system. Health Rating: 1 - Slight Flammability Rating: 3 - Severe (Flammable) Reactivity Rating: 0 - None Contact Rating: 1 - Slight Lab Protective Equip: GOGGLES; LAB COAT; VENT HOOD; PROPER GLOVES; CLASS B EXTINGUISHER Storage Color Code: Red (Flammable) |
| Potential Health Effects Inhalation: Inhalation of vapors irritates the mucous membranes and upper respiratory tract. May cause lightheadedness, dizziness, drowsiness and nausea. High vapor concentrations may cause unconsciousness and death. Ingestion: May produce abdominal pain, nausea. Aspiration into lungs can produce severe lung damage and is a medical emergency. Other symptoms expected to parallel inhalation. Skin Contact: Causes irritation to skin. Symptoms include redness, itching, and pain. Eye Contact: Causes irritation, redness, and pain. Chronic Exposure: Chronic exposure may cause skin effects. Aggravation of Pre-existing Conditions: No information found. |

Section 3. Composition/information on ingredients

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|----------------------------------|
| Product Name : Methylcyclohexane |
| Synonyms: Hexahydrotoluene |
| CAS No.: 108-87-2 |

Section 4. First Aid Measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

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.

Section 5. Fire Fighting Measures

Suitable extinguishing media:

For small (incipient) fires, use media such as "alcohol" 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 protective equipment for fire-fighters

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

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 non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (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

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Store in cool place.

Section 8. Exposure Controls, Personal Protection

Personal protective equipment

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).

Hand protection

For prolonged or repeated contact use protective 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 /Chemical Properties

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| Appearance: colourless liquid | Melting point : -127 °C |
| Flash point : -4.0 °C - closed cup | Boiling point : 101 °C |
| explosion limit : 1.2-6.7% | Ignition temperature : 250 °C |
| Vapor Density : 3.4(air=1) | Vapor pressure:37.0 mmHg at 20.0 °C |
| Density:0.8 | |

Section 10. Stability and Reactivity

Chemical stability:

Stable under recommended storage conditions.

Possibility of hazardous reactions:

Vapours may form explosive mixture with air.

Conditions to avoid:

Heat, flames and sparks.

Materials to avoid:

Strong oxidizing agents

Hazardous decomposition products:

Hazardous decomposition products formed under fire conditions. - Carbon oxides

Hazardous decomposition products formed under fire conditions. - Nature of decomposition products not known.

Section 11. Toxicological Information

Acute toxicity

LD50 : 1200 mg/kg (rat)

LC50 : 15227 ppm/1 hour (rabbit)

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.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity

no data available

Specific target organ toxicity - single exposure (GHS)

May cause damage to organs.

Specific target organ toxicity - repeated exposure (GHS)

no data available

Aspiration hazard

May be fatal if swallowed and enters airways.

Potential health effects

Inhalation May be harmful if inhaled. May cause respiratory tract irritation. Vapours may cause drowsiness and dizziness.

Ingestion Aspiration hazard if swallowed - can enter lungs and cause damage. May be harmful if swallowed.

Skin May be harmful if absorbed through skin. May cause skin irritation.

Eyes May cause eye irritation.

Signs and Symptoms of Exposure

prolonged or repeated exposure can cause:, narcosis

Additional Information

RTECS: GV6125000

Section 12. Ecological Information

Toxicity

Toxicity to fish LC50 - other fish - 5.8 mg/l - 96.0 h

Toxicity to daphnia

and other aquatic

invertebrates.

Immobilization EC50 - Daphnia magna (Water flea) - 1.47 mg/l - 48 h

Persistence and degradability

no data available

Bioaccumulative potential

no data available

Mobility in soil

no data available

PBT and vPvB assessment

no data available

Other adverse effects

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Section 13. Disposal Considerations

Product

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

Contaminated packaging

Dispose of as unused product.

Section 14. Transport Information

DOT (US)

UN-Number: 2296

Class: 3

Packing group: II

Proper shipping name: Methylcyclohexane

Marine pollutant: No

Poison Inhalation Hazard: No

IMDG

UN-Number: 2296

Class: 3

Packing group: II

EMS-No: F-E, S-D

Proper shipping name: METHYLCYCLOHEXANE

Marine pollutant: No

IATA

UN-Number: 2296

Class: 3

Packing group: II

Proper shipping name: Methylcyclohexane

Section 15. Regulatory Information

Section 16. Additional Information

| | |
|--------|---|
| Remark | " - " means no data , and " / " means not suitable. |
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- ✘ This information is only suitable for this product, and It does not suit that if this product is to be a additive agent or mixed with other chemicals.
- ✘ 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.