# **Material Safety Data Sheet**

Version 4.0 Revision Date 02/27/2010 Print Date 07/28/2010

### 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : 2-Methylcyclohexanol, mixture of *cis* and *trans* 

Product Number : 153087 Brand : Aldrich

Company : Sigma-Aldrich

3050 Spruce Street SAINT LOUIS MO 63103

USA

Telephone : +18003255832 Fax : +18003255052 Emergency Phone # : (314) 776-6555

# 2. HAZARDS IDENTIFICATION

# **Emergency Overview**

#### **OSHA Hazards**

Combustible Liquid, Target Organ Effect

# **Target Organs**

Liver, Kidney

### GHS Label elements, including precautionary statements

Pictogram



Signal word Warning

Hazard statement(s)

H226 Flammable liquid and vapour.

H332 Harmful if inhaled.

Precautionary statement(s)

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P233 Keep container tightly closed.

P240 Ground/bond container and receiving equipment.

P241 Use explosion-proof electrical/ventilating/lighting/equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P271 Use only outdoors or in a well-ventilated area.

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

P303 + P361 + P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse

skin with water/shower.

P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for

breathing.

P312 Call a POISON CENTER or doctor/physician if you feel unwell.

P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

P403 + P235 Store in a well-ventilated place. Keep cool.

P501 Dispose of contents/container to an approved waste disposal plant.

# **HMIS Classification**

Health hazard: 0 Chronic Health Hazard: \* Flammability: 2 Physical hazards: 0

**NFPA Rating** 

Health hazard: 0 Fire: 2 Reactivity Hazard: 0

#### **Potential Health Effects**

Inhalation May be harmful if inhaled. May cause respiratory tract irritation.Skin May be harmful if absorbed through skin. May cause skin irritation.

**Eyes** May cause eye irritation. **Ingestion** May be harmful if swallowed.

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms : Hexahydro-o-cresol

Formula : C<sub>7</sub>H<sub>14</sub>O Molecular Weight : 114.19 g/mol

CAS-No.	EC-No.	Index-No.	Concentration
2-Methylcyclohexanol, mixed isomers			
583-59-5	209-512-0	603-010-00-9	-

#### 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

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

#### 5. FIRE-FIGHTING MEASURES

# 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.

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

#### Personal precautions

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation.

# **Environmental precautions**

Do not let product enter drains.

### Methods and materials for containment and cleaning up

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

# 7. HANDLING AND STORAGE

Aldrich - 153087 Page 2 of 6

# Precautions for safe handling

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.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

# 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.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

#### **Appearance**

Form clear, viscous liquid

Colour light yellow

# Safety data

pH no data available

Melting point no data available

Boiling point 163 - 166 °C (325 - 331 °F) - lit. Flash point 58 °C (136 °F) - closed cup

Ignition temperature no data available
Lower explosion limit no data available
Upper explosion limit no data available

Density 0.93 g/cm3 at 25 °C (77 °F)

Water solubility no data available

### 10. STABILITY AND REACTIVITY

### **Chemical stability**

Stable under recommended storage conditions.

# Conditions to avoid

no data available

#### Materials to avoid

Strong oxidizing agents

Aldrich - 153087 Page 3 of 6

# Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides

# 11. TOXICOLOGICAL INFORMATION

#### **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.

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)

no data available

# Specific target organ toxicity - repeated exposure (GHS)

no data available

# **Aspiration hazard**

no data available

### Potential health effects

**Inhalation** May be harmful if inhaled. May cause respiratory tract irritation.

**Ingestion** 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

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

# **Additional Information**

RTECS: GW0220000

### 12. ECOLOGICAL INFORMATION

# **Toxicity**

no data available

# Persistence and degradability

no data available

# Bioaccumulative potential

no data available

# Mobility in soil

Aldrich - 153087 Page 4 of 6

no data available

#### PBT and vPvB assessment

no data available

#### Other adverse effects

no data available

#### 13. DISPOSAL CONSIDERATIONS

#### **Product**

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

# 14. TRANSPORT INFORMATION

DOT (US)

UN-Number: 2617 Class: 3 Packing group: III

Proper shipping name: Methylcyclohexanols

Marine pollutant: No

Poison Inhalation Hazard: No

**IMDG** 

UN-Number: 2617 Class: 3 Packing group: III EMS-No: F-E, S-D

Proper shipping name: METHYLCYCLOHEXANOLS

Marine pollutant: No

IATA

UN-Number: 2617 Class: 3 Packing group: III

Proper shipping name: Methylcyclohexanols

### 15. REGULATORY INFORMATION

#### **OSHA Hazards**

Combustible Liquid, Target Organ Effect

#### **DSL Status**

All components of this product are on the Canadian DSL list.

# **SARA 302 Components**

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

#### **SARA 313 Components**

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

#### SARA 311/312 Hazards

Fire Hazard, Chronic Health Hazard

# Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

# **Pennsylvania Right To Know Components**

CAS-No. Revision Date

2-Methylcyclohexanol, mixed isomers 583-59-5

**New Jersey Right To Know Components** 

CAS-No. Revision Date

2-Methylcyclohexanol, mixed isomers 583-59-5

#### California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Aldrich - 153087 Page 5 of 6

# **16. OTHER INFORMATION**

### **Further information**

Copyright 2010 Sigma-Aldrich Co. 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. Sigma-Aldrich Co., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale.

Aldrich - 153087 Page 6 of 6