# SIGMA-ALDRICH

# **Material Safety Data Sheet**

Version 4.1 Revision Date 01/17/2012 Print Date 05/25/2012

## **1. PRODUCT AND COMPANY IDENTIFICATION**

Product name	:	Menthol
Product Number Brand	:	M2772 Sigma-Aldrich
Supplier	:	Sigma-Aldrich 3050 Spruce Street SAINT LOUIS MO 63103 USA
Telephone	:	+1 800-325-5832
Fax	:	+1 800-325-5052
Emergency Phone # (For both supplier and manufacturer)	:	(314) 776-6555
Preparation Information	:	Sigma-Aldrich Corporation Product Safety - Americas Region 1-800-521-8956

# 2. HAZARDS IDENTIFICATION

#### **Emergency Overview**

## OSHA Hazards Irritant

## **GHS Classification**

Acute toxicity, Oral (Category 5) Skin irritation (Category 2) Serious eye damage (Category 1) Specific target organ toxicity - single exposure (Category 3)

## GHS Label elements, including precautionary statements

Pictogram



Signal word	Danger
Hazard statement(s) H303 H315 H318 H335	May be harmful if swallowed. Causes skin irritation. Causes serious eye damage. May cause respiratory irritation.
Precautionary statement(s) P261 P280 P305 + P351 + P338	Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. Wear protective gloves/ eye protection/ face protection. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
HMIS Classification Health hazard: Flammability: Physical hazards:	2 1 0
NFPA Rating Health hazard:	2

Fire: Reactivity Hazard:

**Potential Health Effects** 

Inhalation	May be harmful if inhaled. Causes respiratory tract irritation.
Skin	May be harmful if absorbed through skin. Causes skin irritation.
Eyes	Causes eye irritation.
Ingestion	May be harmful if swallowed.

## **3. COMPOSITION/INFORMATION ON INGREDIENTS**

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Synonyms	: 2-Isopropyl-5-methylcyclohexanol Hexahydrothymol	
Formula Molecular Weight	: C <sub>10</sub> H <sub>20</sub> O : 156.27 g/mol	
Component		Concentration
Menthol		
CAS-No.	89-78-1	-
EC-No.	201-939-0	

## **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. FIREFIGHTING MEASURES**

#### Suitable extinguishing media

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

#### Special protective equipment for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

#### Hazardous combustion products

Hazardous decomposition products formed under fire conditions. - Carbon oxides

# 6. ACCIDENTAL RELEASE MEASURES

## Personal precautions

Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

## **Environmental precautions**

Do not let product enter drains.

## Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

# 7. HANDLING AND STORAGE

## Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

## Conditions for safe storage

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

# 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 particle respirator type N100 (US) or type P3 (EN 143) 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

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.

### Eye protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

### Skin and body protection

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

## 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	solid
	Colour	white
Saf	fety data	
	рН	no data available
	Melting point/freezing point	Melting point/range: 34 - 36 °C (93 - 97 °F) - lit.
	Boiling point	216 °C (421 °F) - lit.
	Flash point	93.4 °C (200.1 °F) - closed cup
	Ignition temperature	no data available
	Autoignition temperature	no data available
	Lower explosion limit	no data available
	Upper explosion limit	no data available
	Vapour pressure	no data available
	Density	0.89 g/mL at 25 °C (77 °F)
	Water solubility	no data available
	Partition coefficient: n-octanol/water	no data available

Relative vapour density	no data available
Odour	no data available
Odour Threshold	no data available
Evaporation rate	no data available

## **10. STABILITY AND REACTIVITY**

## **Chemical stability**

Stable under recommended storage conditions.

# Possibility of hazardous reactions no data available

Conditions to avoid

no data available

# Materials to avoid

Strong oxidizing agents

## Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides Other decomposition products - no data available

## **11. TOXICOLOGICAL INFORMATION**

### Acute toxicity

**Oral LD50** LD50 Oral - rat - 3,180 mg/kg Remarks: Behavioral:Ataxia.

LD50 Oral - rat - 3,180 mg/kg Remarks: Behavioral:Ataxia.

#### Inhalation LC50 Dermal LD50 no data available

Other information on acute toxicity no data available

#### Skin corrosion/irritation Serious eye damage/eye irritation Eyes - rabbit - Severe eye irritation

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

## Teratogenicity

no data available

Specific target organ toxicity - single exposure (Globally Harmonized System) Inhalation - May cause respiratory irritation.

Specific target organ toxicity - repeated exposure (Globally Harmonized System) 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 eye irritation.

## Signs and Symptoms of Exposure

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

# Synergistic effects no data available

Additional Information RTECS: OT0350000

## **12. ECOLOGICAL INFORMATION**

#### Toxicity

no data available

# 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

no data available

# **13. DISPOSAL CONSIDERATIONS**

## Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

## Contaminated packaging

Dispose of as unused product.

## **14. TRANSPORT INFORMATION**

**DOT (US)** Not dangerous goods

IMDG

## IATA

Not dangerous goods

## **15. REGULATORY INFORMATION**

# **OSHA Hazards**

Irritant

## 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

Acute Health Hazard

## Massachusetts Right To Know Components

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

### Pennsylvania Right To Know Components

Menthol	CAS-No. 89-78-1	Revision Date
New Jersey Right To Know Components		Povision Data
Menthol	CAS-No. 89-78-1	Revision Date

## 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.

## **16. OTHER INFORMATION**

## **Further information**

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