

Material Safety Data Sheet

Menthol

ACC# 23818

Section 1 - Chemical Product and Company Identification

MSDS Name: Menthol

Catalog Numbers: S80073

Synonyms: Peppermint Camphor

Company Identification:

Fisher Scientific

1 Reagent Lane

Fair Lawn, NJ 07410

For information, call: 201-796-7100

Emergency Number: 201-796-7100

For CHEMTREC assistance, call: 800-424-9300

For International CHEMTREC assistance, call: 703-527-3887

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
15356-70-4	Dl-menthol	>99	239-388-3

Hazard Symbols: None listed.

Risk Phrases: None listed.

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: white. Caution! Sensitizer. May cause eye and skin irritation. May cause respiratory and digestive tract irritation. May cause allergic respiratory reaction. May cause allergic skin reaction. The toxicological properties of this material have not been fully investigated.

Target Organs: None.

Potential Health Effects

Eye: May cause severe eye irritation.

Skin: May cause skin irritation. May cause skin sensitization, an allergic reaction, which becomes evident upon re-exposure to this material.

Ingestion: May cause irritation of the digestive tract. The toxicological properties of this substance have not been fully investigated. May cause allergic reactions (urticaria).

Inhalation: May cause respiratory tract irritation. May cause methemoglobinemia, cyanosis, convulsions, tachycardia, dyspnea (labored breathing), and death. The toxicological properties of

this substance have not been fully investigated.

Chronic: Not available.

Section 4 - First Aid Measures

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

Skin: Get medical aid. Immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes.

Ingestion: If victim is conscious and alert, give 2-4 cupfuls of milk or water. Get medical aid immediately.

Inhalation: Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to Physician: No specific antidote exists. Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Combustion generates toxic fumes.

Extinguishing Media: For small fires, use water spray, dry chemical, carbon dioxide or chemical foam.

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Sweep up or absorb material, then place into a suitable clean, dry, closed container for disposal. Avoid generating dusty conditions.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with skin and eyes. Avoid ingestion and inhalation.

Storage: Store in a cool, dry, well-ventilated area away from incompatible substances.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Use adequate ventilation to keep airborne concentrations low.

Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Dl-menthol	none listed	none listed	none listed

OSHA Vacated PELs: Dl-menthol: No OSHA Vacated PELs are listed for this chemical.

Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear appropriate gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: Follow the OSHA respirator regulations found in 29CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

Section 9 - Physical and Chemical Properties

Physical State: Solid

Appearance: white

Odor: none reported

pH: Not available.

Vapor Pressure: Not applicable.

Vapor Density: Not available.

Evaporation Rate: Not applicable.

Viscosity: Not available.

Boiling Point: 216 deg C

Freezing/Melting Point: > 28 deg C

Autoignition Temperature: Not applicable.

Flash Point: Not applicable.

Decomposition Temperature: Not available.

NFPA Rating: Not published.

Explosion Limits, Lower: Not available.

Upper: Not available.

Solubility: Not available.

Specific Gravity/Density: 0.89 (water=1)

Molecular Formula: C₁₀H₂₀O

Molecular Weight: 156.1394

Section 10 - Stability and Reactivity

Chemical Stability: Stable at room temperature in closed containers under normal storage and handling conditions.

Conditions to Avoid: High temperatures, incompatible materials.

Incompatibilities with Other Materials: Strong oxidizers.

Hazardous Decomposition Products: Carbon monoxide, carbon dioxide.

Hazardous Polymerization: Has not been reported

Section 11 - Toxicological Information

RTECS#:
 CAS# 15356-70-4: OT0525000
 LD50/LC50:
 CAS# 15356-70-4:
 Draize test, rabbit, skin: 500 mg/24H Mild;
 Oral, mouse: LD50 = 3100 mg/kg;
 Oral, rat: LD50 = 2900 mg/kg;
 Skin, rabbit: LD50 = >5 gm/kg;

 Carcinogenicity:
 CAS# 15356-70-4: Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.
 Epidemiology: No information available.
 Teratogenicity: No information available.
 Reproductive Effects: No information available.
 Neurotoxicity: No information available.
 Mutagenicity: Please refer to RTECS# OT0525000 for specific information.
 Other Studies: None.

Section 12 - Ecological Information

Ecotoxicity: No data available. No information available.
 Environmental: No information reported.
 Physical: No information available.
 Other: No information available.

Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.
 RCRA P-Series: None listed.
 RCRA U-Series: None listed.

Section 14 - Transport Information

	US DOT	IATA	RID/ADR	IMO	Canada TDG
Shipping Name:	No information available.				No information available.
Hazard Class:					
UN Number:					
Packing Group:					

Section 15 - Regulatory Information

US FEDERAL

TSCA

CAS# 15356-70-4 is not listed on the TSCA inventory. It is for research and development use only.

Health & Safety Reporting List

None of the chemicals are on the Health & Safety Reporting List.

Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

Section 12b

None of the chemicals are listed under TSCA Section 12b.

TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

SARA

Section 302 (RQ)

None of the chemicals in this material have an RQ.

Section 302 (TPQ)

None of the chemicals in this product have a TPQ.

Section 313

No chemicals are reportable under Section 313.

Clean Air Act:

This material does not contain any hazardous air pollutants. This material does not contain any Class 1 Ozone depleters. This material does not contain any Class 2 Ozone depleters.

Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances under the CWA. None of the chemicals in this product are listed as Priority Pollutants under the CWA. None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

STATE

CAS# 15356-70-4 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

California No Significant Risk Level: None of the chemicals in this product are listed.

European / International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols:

Not available.

Risk Phrases:

Safety Phrases:

WGK (Water Danger / Protection)

CAS# 15356-70-4: 1

Canada

CAS# 15356-70-4 is listed on Canada's DSL List. CAS# 15356-70-4 is listed on Canada's DSL List.

This product has a WHMIS classification of D2B.

CAS# 15356-70-4 is not listed on Canada's Ingredient Disclosure List.

Exposure Limits

Section 16 - Additional Information

MSDS Creation Date: 12/12/1997

Revision # 1 Date: 8/02/2000

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 Fisher be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Fisher has been advised of the possibility of such damages.