

MATERIAL SAFETY DATA SHEET (MSDS)

MENTHOL CRYSTALS

1. Product Identification

Synonyms: I-p-Menthan-3-ol; (1R,2S,5R)-(-)-Menthol; (-)-Menthol; (-)-Menthol; (-)-Menthol; (-)-Menthol; (1R-(1-alpha,2-beta,5-alpha))-5-Methyl-

2-(1-methylethyl)cyclohexanol; U.S.P. Menthol

CAS No.: 2216-51-5

Product Coad: M0132500500

Molecular Weight: 156.27 Chemical Formula: C10H20O

2. Composition/Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
2216-51-5	MENTHOL CRYSTAL	99	218-690-9

3. Hazards Identification

EMERGENCY OVERVIEW

Appearance: white crystalline powder. Flash Point: 93 deg C.

Warning! Causes respiratory tract irritation. Irritant. Causes eye and skin irritation. May cause digestive tract irritation.

Target Organs: No data found.

Potential Health Effects

Eye: Causes eye irritation. May cause conjunctivitis and corneal inflammation.

Skin: Causes skin irritation.

Ingestion: May cause gastrointestinal irritation with nausea, vomiting and diarrhea. Inhalation: Causes respiratory tract irritation. Can produce delayed pulmonary edema. Chronic: Effects may be delayed.

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. Skin: Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse

Ingestion: Never give anything by mouth to an unconscious person. Get medical aid. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.

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

Notes to Physician: Treat symptomatically and supportively.

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. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

Extinguishing Media: Water may be ineffective. Use water spray, dry chemical, carbon dioxide, or appropriate foam.

Flash Point: 93 deg C (199.40 deg F) Autoignition Temperature: Not applicable.

Explosion Limits, Lower: Not available. Upper: Not available.

NFPA Rating: (estimated) Health: 2; Flammability: 1; Instability: 0

6. Accidental Release Measures

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

Spills/Leaks: Wash area with soap and water. Clean up spills immediately, observing precautions in the Protective Equipment section. Sweep up, then place into a suitable container for disposal. Avoid generating dusty conditions. Provide ventilation.

7. Handling and Storage

Handling: Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation. Use with adequate ventilation. Use only in a chemical fume hood. Storage: Store in a tightly closed container. Store in a cool, dry area away from incompatible substances.

8. Exposure Controls, Personal Protection



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Engineering Controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
L-(-)-Menthol	none listed	none listed	none listed

OSHA Vacated PELs: L-(-)-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 protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

9. Physical and Chemical Properties

Physical State: Crystalline powder

Appearance: white Odor: peppermint odor pH: Not available.

Vapor Pressure: Not available. Vapor Density: Not available. Evaporation Rate:Not available.

Viscosity: Not available.

Boiling Point: 216 deg C @ 760.00mmHg Freezing/Melting Point:43.00 - 45.00 deg C Decomposition Temperature:Not available. Solubility: Slightly soluble.

Specific Gravity/Density:.8900g/cm3
Molecular Formula:C10H20O

Molecular Weight:156.27

10. Stability and Reactivity

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

Conditions to Avoid: Incompatible materials, excess heat, strong oxidants.

Incompatibilities with Other Materials: Strong oxidizing agents, phenols, potassium permanganate, chromium trioxide, chloral hydrate, thymol, pyrogallol, resorcinol, camphor, butylchloral hydrate, betanaphthol, exalgine.

Hazardous Decomposition Products: Carbon monoxide, carbon dioxide, acrid smoke and fumes.

Hazardous Polymerization: Has not been reported.

11. Toxicological Information

RTECS#:

CAS# 2216-51-5: OT0700000

LD50/LC50: CAS# 2216-51-5:

Draize test, rabbit, eye: 1%; Oral, mouse: LD50 = 3400 mg/kg; Oral, rat: LD50 = 3300 mg/kg; Skin, rabbit: LD50 = >5 gm/kg;

Carcinogenicity:

CAS# 2216-51-5: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology: No information available. Teratogenicity: No information available. Reproductive Effects: No information available.

Mutagenicity: DNA repair: Bacillus subtilis = 10 mg/disc.

Neurotoxicity: No information available.

Other Studies:



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12. Ecological Information

Ecotoxicity: No data available. No information available.

Environmental: No data available. Physical: No data available.

Other: None.

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.

14. Transport Information

US DOT Canada TDG

Shipping Name: Not regulated as a hazardous material Hazard Class:

No information available.

UN Number:
Packing Group:

15. Regulatory Information

US FEDERAL

TSCA

CAS# 2216-51-5 is listed on the TSCA inventory.

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.

CERCLA Hazardous Substances and corresponding RQs

None of the chemicals in this material have an RQ.

SARA Section 302 Extremely Hazardous Substances

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 depletors.

This material does not contain any Class 2 Ozone depletors.

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

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CAS# 2216-51-5 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

European/International Regulations

European Labeling in Accordance with EC Directives Hazard Symbols:

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Risk Phrases:

R 36/37/38 Irritating to eyes, respiratory system and skin.

Safety Phrases:

S 24/25 Avoid contact with skin and eyes.



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WGK (Water Danger/Protection) CAS# 2216-51-5: 1 Canada - DSL/NDSL

CAS# 2216-51-5 is listed on Canada's DSL List.

Canada - WHMIS

This product has a WHMIS classification of D2B, B3.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

Canadian Ingredient Disclosure List

16. Other Information

Product Use: Laboratory Reagent.

In accordance with REACH Regulation (CE) No 1907/2006 and with CLP Regulation (CE) No 1272/2008

DISCLAIMER:

- SUVCHEM Products are to be used as Lab Chemicals for R&D only. Not for drug, medicinal, household or other uses.
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- SUVCHEM provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product.

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