

MATERIAL SAFETY DATA SHEET

МЕНТОЛ КРИСТАЛИ

1. PRODUCT NAME AND COMPANY IDENTIFICATION

Product Name: MENTHOL CRYSTALS
Product Use: Personal Care Formulations

2. COMPOSITION/INGREDIENT INFORMATION

Chemical Identity: L-Menthol, 5-methyl-2-(1-methylethyl) cyclohexanol
Formula: $C_{10}H_{20}O$
Molecular Weight: 156.3 g/mole
Hazardous Components: None
CAS #: 89-78-1

3. HAZARDS IDENTIFICATION

DANGER! MAY BE FATAL IF SWALLOWED. HARMFUL IF INHALED. CAUSES IRRITATION TO SKIN, EYES AND RESPIRATORY TRACT. MAY CAUSE ALLERGIC REACTION. KEEP CONTAINER TIGHTLY CLOSED WHEN NOT IN USE. KEEP OUT OF REACH OF CHILDREN.

Routes of Entry:

- Eyes
- Skin
- Ingestion
- Inhalation

Eye Contact: Irritant due to its phenolic character. Can cause reddening and tearing.

Skin Contact: Mild irritant but may cause pain or inflammation on sensitive areas of the skin.

Ingestion: **TOXIC:** If ingested, may cause nausea, vomiting, pain, drowsiness, convulsions, coma or death.

Inhalation: Breathing of vapors can irritate mucous membranes/respiratory system.

4. FIRST AID MEASURES

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention if irritation persists.

Skin: Immediately flush skin with plenty of soap and water. Remove contaminated clothing and shoes. Wash clothing before reuse. Get medical attention if irritation persists.

Ingestion:	Rinse mouth and seek medical attention immediately. Do NOT induce vomiting. Loosen tight clothing such as collars, ties, belts etc. If the victim is not breathing, perform mouth to mouth resuscitation.
Inhalation:	Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Medical Conditions Generally Aggravated by Exposure:	Persons with pre-existing skin disorders, eye problems or impaired respiratory function may be more susceptible to the effects of this substance.

5. FIRE FIGHTING MEASURES

Flash Point (Method Used):	93 °C (199.4 °F) Closed Cup
Flammable Limits	LEL: Not Established UEL: Not Established
Hazardous Combustion Products:	When heated to decomposition, produces carbon oxides and acrid smoke & fumes.
Conditions Under Which Flammability Could Occur:	May be combustible at high temperatures.
Extinguishing Media:	<ul style="list-style-type: none"> • Dry Chemical • Carbon Dioxide • Foam
Special Firefighting Procedures:	<p>Note: Do not use water except to cool containers.</p> <ul style="list-style-type: none"> • Use positive pressure, self-contained breathing apparatus. • Cool fire exposed containers with water spray. Do not use water to extinguish burning materials. • Spray extinguishing media directly at the base of the flames.
Unusual Fire & Explosion Hazards:	Combustible

6. ACCIDENTAL RELEASE MEASURES (STEPS FOR SPILLS)

Personal Protection:	Wear suitable protective clothing.
Environmental Protection:	Notify authorities if large amounts of product enters sewer.
Methods for Cleaning Up:	<ul style="list-style-type: none"> • Sweep up solid material. Absorb liquid material onto an inert, absorbent substrate and sweep up. • Place contaminated waste materials in a closed metal waste container. • Wash area with soap and water

7. HANDLING AND STORAGE

Handling	
Safe Handling:	<ul style="list-style-type: none"> • Wear protective eyewear, clothing and respiratory devices as needed. • Keep away from oxidizing agents, excessive heat and sources of ignition.
Storage	
Requirements for Storage Areas and Containers:	<ul style="list-style-type: none"> • Store in a cool, dry location, in a sealed container in a well ventilated area. • Do not expose to temperatures above 35 ° C.

8. EXPOSURE CONTROL/PERSONAL PROTECTION

Engineering Controls:	None
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Eye:	OSHA approved safety glasses should be worn. Maintain eye wash fountain and quick-drench facilities in work area.
Skin/Body:	Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.
Respiratory:	Use adequate ventilation or NIOSH-approved respiratory devices.
Ventilation:	Handle in well ventilated areas.
Other:	Evaluate need based on application.
Work/Hygiene Practice:	Follow good manufacturing practice

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Solid crystalline
Color:	White/Clear
Odor:	Characteristic of menthol, camphorous
Specific Gravity (H₂O = 1):	0.89
Vapor Pressure (mm Hg.):	Not available
Vapor Density (AIR = 1):	5.38
Flash Point:	93 °C; 199.4 °F
Boiling Point:	212 °C; 413.6 °F
Melting Point:	42 °C; 107.6 °F
Solubility in Water:	Slightly soluble

10. STABILITY AND REACTIVITY

Stability:	Stable
Conditions to Avoid:	Excessive heat
Incompatibility (Materials to Avoid):	Avoid strong oxidizers
Hazardous Decomposition or Byproducts:	Forms CO and/or CO ₂ upon burning
Hazardous Polymerization:	Will Not Occur

11. TOXICOLOGICAL INFORMATION

Toxicity to Animals:	Acute Oral LD ₅₀ : 3300 mg/kg [Rat] Acute Dermal LD ₅₀ : 5001 mg/kg [Rabbit]
Chronic Effects on Humans:	Not Available
Other Toxic Effects on Humans:	Hazardous in case of skin contact (irritant), of ingestion, of inhalation. Slightly hazardous in case skin contact (permeator).

12. ECOLOGICAL INFORMATION

Ecotoxicity:	No data available
Persistence and Degradability:	No information available on persistence/degradability for this product.
Bioaccumulative Potential:	No information available on bioaccumulation for this product.
Products of Degradation:	Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.
Toxicity of Products of Degradation:	The products of degradation are more toxic.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods:	Do not put into sewer lines. Dispose of according to local, state and federal regulations.
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14. TRANSPORT INFORMATION

DOT Classification:	Not regulated
Class/Division:	Not restricted
Proper Shipping Name:	Menthol Crystals
Label:	None
Packing Group:	NA
ID Number:	NA
Hazard:	NA

15. REGULATORY INFORMATION

WHMIS Classification:	D2B: Material causing other toxic effects (TOXIC).
DSCL (EEC):	R36/38 - Irritating to eyes and skin
HMIS (USA):	Health: 2 Fire: 2 Reactivity: 0 Protection: E
Protective Equipment:	Gloves, Lab coat, Dust respirator (approved/certified), Splash goggles

16. ADDITIONAL INFORMATION

This information is provided for documentation purposes only.

The complete range of conditions or methods of use are beyond our control therefore we do not assume any responsibility and expressly disclaim any liability for any use of this product. Information contained herein is believed to be true and accurate however, all statements or suggestions are made without warranty, expressed or implied, regarding accuracy of the information, the hazards connected with the use of the material or the results to be obtained from the use thereof. Compliance with all applicable federal, state, and local laws and local regulations remains the responsibility of the user.

This safety sheet cannot cover all possible situations which the user may experience during processing. Each aspect of your operation should be examined to determine if, or where, additional precautions may be necessary. All health and safety information contained in this bulletin should be provided to your employees or customers.



MATERIAL SAFETY DATA SHEET

ЛАНОЛИН

1. Product Identification

Synonyms: Wool fat; Agnin; Anhydrous lanolin (0.25% water); Hydrous lanolin (25-35% water)

CAS No.: 8006-54-0

Molecular Weight: Not applicable to mixtures.

Chemical Formula: Not applicable.

Product Codes: 2252

2. Composition/Information on Ingredients

Ingredient	CAS No	Percent	Hazardous
Lanolin	8006-54-0	65 - 100%	Yes
Water	7732-18-5	0.25 - 35%	No

3. Hazards Identification

Emergency Overview

As part of good industrial and personal hygiene and safety procedure, avoid all unnecessary exposure to the chemical substance and ensure prompt removal from skin, eyes and clothing.

SAF-T-DATA^(tm) Ratings (Provided here for your convenience)

Health Rating: 1 - Slight

Flammability Rating: 1 - Slight

Reactivity Rating: 1 - Slight

Contact Rating: 2 - Moderate

Lab Protective Equip: GOGGLES; LAB COAT; PROPER GLOVES

Storage Color Code: Green (General Storage)

Potential Health Effects

Inhalation:

Not expected to be a health hazard.

Ingestion:

Large oral dosages may produce gastrointestinal disturbances.

Skin Contact:

May cause allergic reaction in sensitive individuals.

Eye Contact:

No adverse health effects expected, but material may cause mild irritation.

Chronic Exposure:

No information found.

Aggravation of Pre-existing Conditions:

Persons with allergies or eczema may be more susceptible to the effects of the substance.

4. First Aid Measures

Inhalation:

Not expected to require first aid measures.

Ingestion:

If large amounts were swallowed, give water to drink and get medical advice.

Skin Contact:

Not expected to require first aid measures.

Eye Contact:

Wash thoroughly with running water. Get medical advice if irritation develops.

5. Fire Fighting Measures

Fire:

Flash point: 238C (460F)

Autoignition temperature: 445C (833F)

Slight fire hazard when exposed to heat or flame.

Explosion:

Above the flash point, explosive vapor-air mixtures may be formed.

Fire Extinguishing Media:

Dry chemical, foam or carbon dioxide. Water spray may be used to keep fire exposed containers cool. Water or foam may cause frothing.

Special Information:

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

6. Accidental Release Measures

Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Contain and recover liquid when possible. Collect liquid in an

appropriate container or absorb with an inert material (e. g., vermiculite, dry sand, earth), and place in a chemical waste container. Do not use combustible materials, such as saw dust. Do not flush to sewer!

7. Handling and Storage

Keep in a tightly closed container. Protect from physical damage. Store in a cool, dry, ventilated area away from sources of heat, moisture and incompatibilities. Containers of this material may be hazardous when empty since they retain product residues (vapors, liquid); observe all warnings and precautions listed for the product.

8. Exposure Controls/Personal Protection

Airborne Exposure Limits:

None established.

Ventilation System:

In general, dilution ventilation is a satisfactory health hazard control for this substance. However, if conditions of use create discomfort to the worker, a local exhaust system should be considered.

Personal Respirators (NIOSH Approved):

Not expected to require personal respirator usage.

Skin Protection:

Wear protective gloves and clean body-covering clothing.

Eye Protection:

Use chemical safety goggles. Maintain eye wash fountain and quick-drench facilities in work area.

9. Physical and Chemical Properties

Appearance:

Yellow, ointment like mass.

Odor:

Slight characteristic odor.

Solubility:

Insoluble in water.

Specific Gravity:

0.932 - 0.945 @ 15C

pH:

No information found.

% Volatiles by volume @ 21C (70F):

No information found.

Boiling Point:

Decomposes.

Melting Point:

36 - 42C (97 - 108F)

Vapor Density (Air=1):

No information found.

Vapor Pressure (mm Hg):

No information found.

Evaporation Rate (BuAc=1):

No information found.

10. Stability and Reactivity

Stability:

Stable under ordinary conditions of use and storage. Discolors on exposure to light. Heat will contribute to instability.

Hazardous Decomposition Products:

May produce acrid smoke and irritating fumes when heated to decomposition.

Hazardous Polymerization:

Will not occur.

Incompatibilities:

Strong oxidizers.

Conditions to Avoid:

Heat, incompatibles.

11. Toxicological Information

No LD50/LC50 information found relating to normal routes of occupational exposure.

-----\Cancer Lists\-----

Ingredient	Known	---NTP Carcinogen---	
		Anticipated	IARC Category
Lanolin (8006-54-0)	No	No	None
Water (7732-18-5)	No	No	None

12. Ecological Information

Environmental Fate:

No information found.

Environmental Toxicity:

No information found.

13. Disposal Considerations

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

14. Transport Information

Not regulated.

15. Regulatory Information

---\Chemical Inventory Status - Part 1\-----				
Ingredient	TSCA	EC	Japan	Australia
Lanolin (8006-54-0)	Yes	Yes	No	Yes
Water (7732-18-5)	Yes	Yes	Yes	Yes

16. Other Information

NEPA Ratings: Health: 0 Flammability: 1 Reactivity: 0

Label Hazard Warning:

As part of good industrial and personal hygiene and safety procedure, avoid all unnecessary exposure to the chemical substance and ensure prompt removal from skin, eyes and clothing.

Label Precautions:

None.

Label First Aid:

Not applicable.

Product Use:

Laboratory Reagent.

Revision Information:

No Changes.



MATERIAL SAFETY DATA SHEET

CAMPHOR

Section 1 — Chemical Product and Company Identification

Camphor

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Section 2 — Composition, Information on Ingredients

d Camphor

CAS# 76-22-2

Section 3 — Hazards Identification

Colorless or white crystals with a penetrating aromatic odor.
Body tissue irritant. Moderately toxic by ingestion and inhalation. Vapor harmful.
Combustible solid.

FLINN AT-A-GLANCE
Health-2
Flammability-2
Reactivity-1
Exposure-1
Storage-3

0 is low hazard, 3 is high hazard

Section 4 — First Aid Measures

Call a physician, seek medical attention for further treatment, observation and support after first aid.
Inhalation: Remove to fresh air at once. If breathing has stopped give artificial respiration immediately.
Eye: Immediately flush with fresh water for 15 minutes.
External: Wash continuously with fresh water for 15 minutes.
Internal: Induce vomiting. After vomiting, give mixture of 2 Tbs. of activated charcoal mixed with one cup of water. Call a physician or poison control at once.

Section 5 — Fire Fighting Measures

Combustible solid.
Vapor is explosive when exposed to heat, flame or CrO_3 .
Fire Fighting Instructions: Use triclass, dry chemical fire extinguisher. Firefighters should wear PPE and SCBA with full facepiece operated in positive pressure mode.

NFPA Coors
H-0
F-3
R-0

Section 6 — Accidental Release Measures

Restrict unprotected personnel from area. Remove all ignition sources and water. Sweep up, place in sealed bag or container and dispose. Ventilate area and wash spill site after material pickup is complete. See Sections 8 and 13 for further information.

Section 7 — Handling and Storage

Flinn Suggested Chemical Storage Pattern: Organic #4. Store with ethers, ketones, halogenated hydrocarbons and ethylene oxide. Store in a dedicated flammables cabinet. If a flammables cabinet is not available, store in Flinn Saf-Stor Can. Use and dispense in a hood.

Section 8 — Exposure Controls, Personal Protection

Avoid contact with eyes, skin and clothing. Wear chemical splash goggles, chemical-resistant gloves and chemical-resistant apron. Use ventilation to keep airborne concentrations below exposure limits. Always wear a NIOSH-approved respirator with proper cartridges or a positive pressure, air-supplied respirator when handling this material in emergency situations (spill or fire).
Exposure guidelines: TWA 2 mg/m³, STEL 3 ppm (OSHA, ACGIH)

Section 9 — Physical and Chemical Properties

Colorless or white crystals with a penetrating aromatic odor
Solubility: Slight water soluble. Soluble in many organic solvents. Sublimes slowly at room temperature.
Formula: C₁₀H₁₆O
Formula Weight: 152.25

Specific Gravity: 0.99
Melting Point: 176 C
Boiling Point: 399 F

Section 10 — Stability and Reactivity

Avoid contact with strong oxidizers
Shelflife: Indefinite

Section 11 — Toxicological Information

Acute effects: Irritant, nausea, vomiting, diarrhea, dizziness
Chronic effects: N.A.
Target organs: Central nervous system, eyes, skin and respiratory system.

ORL-RAT LD50: N.A.
IHL-RAT LC50: N.A.
SKN-RBT LD50: N.A.

N.A. = Not available, not all health aspects of this substance have been fully investigated

Section 12 — Ecological Information

Data not yet available

Section 13 — Disposal Considerations

Please consult with state and local regulations.
Finn Suggested Disposal Method 13b is one option.

Section 14 — Transport Information

Shipping Name: Camphor
Hazard Class: 4.1, Flammable solid
UN Number: UN2717
N/A = Not applicable

Section 15 — Regulatory Information

Not listed

Section 16 — Other Information

