



Material Safety Data Sheet

SECTION 1.1 PRODUCT IDENTIFICATION

Product Name: Mandarin Essential Oil

CAS #: 8008-31-9

EINECS #: 284-521-0



SECTION 1.2 COMPANY INFORMATION

Company: Nature's Fusions

Address: 1405 W 820 N, Provo, UT, 84601

Telephone No: 801-872-9500

24 HOUR EMERGENCY TELEPHONE NUMBER: (800) 222-1222 POISON CONTROL

SECTION 2.1 HAZARDS CLASSIFICATION

GHS-US Classification: Flammable Liquid 3
Skin Corrosion/Irritation 2
Sensitization - Skin 1
Aspiration Toxicity 1
Aquatic Acute Environment 1
Aquatic Chronic Environment 1

SECTION 2.2 HAZARDS IDENTIFICATION

Signal Word: Danger

Hazard Pictograms:



Hazard Statement:

H226 Flammable liquid and vapor.
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statement:

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233 - Keep container tightly closed.
P240 - Ground/Bond container and receiving equipment.
P241 - Explosion-free electrical equipment and lighting with earth.
P242 - Use only non-sparking tools.
P243 - Take precautionary measures against static discharge.
P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.



- P264 - Wash hands thoroughly after handling.
- P272 - Contaminated work clothing must not be allowed out of the workplace.
- P273 - Avoid release to the environment.
- P280 - Wear protective gloves/protective clothing/eye protection.
- P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER/doctor.
- P302+P352 - IF ON SKIN: Wash with plenty of water/...
- P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
- P321 - Specific treatment (see supplemental first aid instruction on this label)
- P331 - Do NOT induce vomiting.
- P332+P313 - If skin irritation occurs: Get medical advice/attention.
- P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
- P362+P364 - Take off contaminated clothing and wash it before reuse.
- P363 - Wash contaminated clothing before reuse.
- P370+P378 - In case of fire: Use media other than water to extinguish.
- P391 - Collect spillage.
- P403+P235 - Store in a well-ventilated place. Keep cool.
- P405 - Store locked up.
- P501 - Dispose in a safe manner in accordance with local/national regulations.

SECTION 2.3 OTHER HAZARDS IDENTIFICATION

Other Hazards: No additional information available.

SECTION 3. COMPOSITION

Product Name	CAS #	EC#	Concentration
Mandarin	8008-31-9	284-521-0	100%

SECTION 4.1 NECESSARY FIRST AID MEASURES

- Eye Contact: Rinse opened eye for several minutes under running water.
- Inhalation: Supply fresh air and to be sure call for a doctor. In case of unconsciousness place patient stably in side position for transportation.
- Ingestion: If symptoms persist consult doctor.
- Skin Contact: Immediately wash with water and soap and rinse thoroughly.

SECTION 4.2 SYMPTOMS

- Eye Contact: No additional information available.
- Inhalation: No additional information available.
- Ingestion: No additional information available.
- Skin Contact: No additional information available.

SECTION 4.3 OTHER FIRST AID MEASURES

Medical Attention/Special Treatment: Treat symptomatically.

SECTION 5.1 EXTINGUISHING



Suitable Extinguishing media: CO₂, Extinguishing powder. Water Spray. Alcohol Resistant Foam.
Unsuitable Extinguishing media: No additional information available.

SECTION 5.2 SPECIAL HAZARDS

Special Hazards Arising from Chemical: No additional information available.

SECTION 5.3 FIRE FIGHTING MEASURES

Firefighter Instructions: No special measures required.
Protection during firefighting: No special measures required.

SECTION 6.1 ACCIDENTAL RELEASE MEASURES

Personal Precautions: Wear protective equipment. Keep unprotected persons away.
Protective equipment: No additional information available.
Environmental Precautions: Inform respective authorities in case of seepage into water course of sewage system.

SECTION 6.2 ACCIDENTAL RELEASE CLEANING MEASURES

Methods and Material for Cleaning Up: Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

SECTION 7.1 PRECAUTIONS FOR HANDLING

Precautions for handling: Wear gloves and eye protection. Avoid inhalation and contact with skin and eyes. Follow good manufacturing practices for housekeeping and personal hygiene. Wash any exposed skin immediately after any chemical contact, before breaks, and meals and at the end of each work period. Contaminated clothing and shoes should be thoroughly cleaned before re-use. May be irritating to the skin and eyes.

SECTION 7.2 CONDITIONS FOR SAFE STORAGE

Conditions for safe storage: It is recommended that this material be stored in a cool, dry, well ventilated area, in tightly sealed, full containers. Keep receptacle tightly sealed.

SECTION 8.1 EXPOSURE AND ENGINEERING CONTROLS

PEL, ACGIH, TLV exposure limit: No additional information available.
Appropriate engineering controls: Showers. Eyewash stations. Ventilation systems.

SECTION 8.2 PERSONAL PROTECTION/EQUIPMENT



- Eye/Face Protection: Chemical goggles or safety glasses.
Hand Protection: Wear protective gloves.
Skin and Body Protection: No special technical protective measures are necessary.
Respiratory Protection: Not required.
Environmental Exposure Control: No additional information available.

SECTION 8.3 ADDITIONAL INFORMATION

Other: No additional information available.

SECTION 9.1 PHYSICAL PROPERTIES

- Appearance: Thin, yellow orange to dark orange liquid.
Odor: Top note with a light aroma, Mandarin has an intense, fresh scent characteristic of sweet oranges.
Odor Threshold: No data available.
Physical State: Liquid.

SECTION 9.2 CHEMICAL PROPERTIES

- pH: No data available.
Melting Point/Freezing Point: No data available.
Boiling Point: No data available.
Flash Point: 45° C
Evaporation Rate: No data available.
Flammability (solid, gas): No data available.
Explosive limits: Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
Vapor Pressure: No data available.
Vapor Density: No data available.
Specific Gravity: 0.841 – 0.855 @ 20° C (68° F)
Solubility: No data available.
Partition coefficient:
(n-octanol/water) No data available.
Autoignition Temp: No data available.
Decomposition Temp: No data available.
Viscosity: No data available.

SECTION 10. STABILITY AND REACTIVITY

- Reactivity: No additional information available.
Chemical Stability: No additional information available.
Hazardous Reactions: No dangerous reactions known.
Incompatible Materials: No additional information available.
Hazardous Combustion
or Decomposition Products: No dangerous decomposition products known.



SECTION 11.1 ROUTES OF EXPOSURE

- Inhalation: No additional information available.
- Skin Contact: Irritant to skin and mucous membranes.
- Eye Contact: No irritating effect.
- Ingestion: No additional information available.

SECTION 11.2 RELATED SYMPTOMS

- Inhalation: Refer to section 4.2
- Skin Contact: Refer to section 4.2
- Eye Contact: Refer to section 4.2
- Ingestion: Refer to section 4.2

SECTION 11.3 OTHER TOXICOLOGICAL INFORMATION

- Delayed/Chronic Effects: May cause allergic reactions on skin, may result in difficulty breathing.
- Toxicity: Oral LD50 >5,000 mg/kg (Rat)
Dermal LD50 >5,000 mg/kg (Rabbit)
- Carcinogenic: Not Carcinogenic.

SECTION 12.1 ECOLOGICAL INFORMATION

- Eco-toxicity: Very toxic for fish.
- Persistence and Degradability: No additional information available.
- Bio-accumulative: No additional information available.
- Mobility in Soil: No additional information available.

SECTION 12.2 OTHER ECOLOGICAL INFORMATION

- Other Adverse Effects: No additional information available.

SECTION 13. DISPOSAL CONSIDERATION

- Waste Disposal Method: Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- Contaminated Packaging Disposal Method: Disposal must be made according to official regulations.

SECTION 14. TRANSPORT INFORMATION



DOT Shipping (Land): Not regulated
IATA Shipping (Air): Regulated
IMDG Shipping (Boat): Regulated. Marine Pollutant: Yes.
Proper Shipping Name: Extracts, Flavoring, Liquid
UN #: 1197
Hazard Class: 3
Packing Group: III

SECTION 15. REGULATORY INFORMATION

US Federal Regulations: Listed on the United States TSCA (Toxic Substances Control Act) inventory.
International Regulations: Listed on the Canadian DSL (Domestic Substances List)

SECTION 16. OTHER INFORMATION

Health Hazard (HMIS): 1 Slight Hazard
Flammability Hazard (HMIS): 2 Moderate Hazard
Physical Hazard (HMIS): 0 Minimal Hazard
Sara 313: None
California Proposition 65: Product contains Myrcene.

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