

MATERIAL SAFETY DATA SHEET

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: **Mandarin oil**

PRODUCT CODE: **111**

SUPPLIER: Original Swiss Aromatics, 602 Freitas Pkwy, San Rafael, CA 94903

Phone: (415) 4799120 Fax: (415) 479-0614

Emergency Tel No: **CHEMTREC 24-HOUR EMERGENCY RESPONSE**

TOLL FREE NUMBER: (800) 424-9300

CHEMTREC should only be contacted in the event of chemical emergencies involving spill, leak, fire, exposure, or accident involving chemicals

SECTION 2 - COMPOSITION / INFORMATION ON INGREDIENTS

DEFINITION/BOTANICAL ORIGIN: The volatile oil obtained by cold-pressing the peels of mandarin oranges, the fruits of *Citrus reticulata* (fam. *Rutaceae*)

CAS No: 8008-31-9
Status: natural
FEMA: 2657
Additives: none
INCI name: Citrus reticulata

SECTION 3 - HAZARDS IDENTIFICATION

R10. Flammable liquid

SECTION 4 - FIRST- AID MEASURES

INHALATION: Remove from exposure site to fresh air. Keep at rest. Obtain medical attention.

EYE CONTACT: Rinse immediately with plenty of water for at least 15 minutes. Contact a doctor if symptoms persist.

SKIN CONTACT: Remove contaminated clothes. Wash thoroughly with soap & water, flush with plenty of water. If irritation persists, seek medical advice.

INGESTION: Rinse mouth out with water. Seek medical advice immediately.

OTHER: When assessing action take Risk & Safety Phrases into account (Section 15)

SECTION 5 - FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: Use CO2, Dry Powder or Foam type Extinguishers, spraying extinguishing media to base of flames. Do not use direct water jet on burning material.

SPECIAL MEASURES: Avoid vapor inhalation. Keep away from sources of ignition. Do not smoke. Wear positive pressure self-contained breathing apparatus & protective clothing.

EXTINGUISHING PROCEDURES: Closed containers may build up pressure when exposed to heat and should be cooled with water spray.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: Avoid inhalation & direct contact with skin & eyes. Use individual protective equipment (safety glasses, waterproof-boots, suitable protective clothing) in case of major spillages.

ENVIRONMENT PRECAUTIONS: Keep away from drains, soils, surface and groundwater.

CLEANING UP METHODS: Remove all potential ignition sources. Contain spilled material.

FOR SPILLAGES: Cover with an inert or non-combustible inorganic absorbent material, sweep up and remove to an

approved disposal container. Observe state, federal & local disposal regulations.

SECTION 7- HANDLING & STORAGE

PRECAUTIONS IN HANDLING: Apply good manufacturing practice & industrial hygiene practices, ensuring proper ventilation. Observe good personal hygiene, and do not eat, drink or smoke whilst handling.

STORAGE CONDITIONS: Store in tightly closed original container, in a cool, dry & ventilated area away from heat sources & protected from light. Keep air contact to a minimum.

FIRE PROTECTION: Keep away from ignition sources & naked flames. Take precautions to avoid static discharges in working area.

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

RESPIRATORY PROTECTION: Avoid breathing product vapor. Apply local ventilation where possible.

VENTILATION: Ensure good ventilation of working area.

HAND PROTECTION: Avoid all skin contact. Use chemically resistant gloves if required.

EYE PROTECTION: Use safety glasses.

WORK/HYGIENE PRACTICES: Wash hands with soap & water after handling.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

COLOR: Palest yellow to yellow green.

APPEARANCE: Mobile liquid.

ODOR: Characteristic minty odor.

FLASH POINT °C: 48°C (114°F)

SOLUBILITY IN VEGETABLE OILS: Soluble

SOLUBILITY IN WATER: Insoluble

SECTION 10 - STABILITY & REACTIVITY

REACTIVITY: It presents no significant reactivity hazards, by itself or in contact with water. Avoid contact with strong acids, alkali or oxidizing agents.

DECOMPOSITION: Liable to cause smoke & acrid fumes during combustion: Carbon monoxide, carbon dioxide & other non-identified organic compounds may be formed.

SECTION 11 - TOXICOLOGICAL INFORMATION

Kligman (1974) found that an 8% solution of mandarin oil caused no irritation or skin sensitization to humans (report to RIFM). It was also found to be relatively non-toxic (LD50 orl >5g/kg).

SECTION 12 - ECOLOGICAL INFORMATION

BIODEGRADABILITY: Data not available

PRECAUTIONS: Prevent surface contamination of soil, ground & surface water.

SECTION 13 - DISPOSAL CONSIDERATIONS

Avoid disposing to drainage systems and into the environment. Seek expert advice.

SECTION 14 - TRANSPORT INFORMATION

Handle according to good safety procedures avoiding any unnecessary exposure. Store in full closed containers away from heat, light and source of ignition. Store in cool area

SECTION 15 - REGULATORY INFORMATION

HAZARDS:

SYMBOLS:

RISK PHRASES:

R10 Flammable liquid

SAFETY PHRASES:

S16 Keep away from sources of ignition; No Smoking

SECTION 16 - OTHER INFORMATION

Abbreviations used in preparation of MSDS:

CAS No.

CAS Registration number is an assigned number to identify a material. CAS stands for Chemical Abstracts Service

FEMA

Federal Emergency Management Center

INCI

International Nomenclature of Cosmetic Ingredients

N/A

Not Applicable

R-Phrases

Risk phrases

S-Phrases

Safety phrases

F/HDPE

High-density polyethylene

HPPE

Higher performance polyethylene

Q.C.

Quality Control

PACKAGING:

Type

Suitability

Glass

YES

Lacquer lined steel/tin

YES

Aluminum

YES

HPPE

NO

F/HDPE

YES

Other plastic

NO

SHELF LIFE

When stored within advised conditions, re-test after 12 months then at 3 monthly intervals up to a maximum life of 36 months.

Q.C. REQUIREMENTS.

In-line with general product specification. Always satisfy suitability for specific application.

The data provided in this material safety data sheet is meant to represent typical data/analysis for this product and is correct to the best of our knowledge. The data was obtained from current and reliable sources, but is supplied without warranty, expressed or implied, regarding its' correctness or accuracy. It is the user's responsibility to determine safe conditions for the use of this product, and to assume liability for loss, injury, damage or expense arising from improper use of this product. The information provided does not constitute a contract to supply to any specification, or for any given application, and buyers should seek to verify their requirements and product use.

Dated Prepared: 08/11/2005