

MATERIAL SAFETY DATA SHEET
ACCORDING TO EC LEGISLATION 91/155/E EC

Date created: August 2002

Date revised: February 2006

1. Identification:

Commercial name: *Orange Sweet essential oil*

Botanical Nomenclature: *Citrus aurantium*.

INCI name: *Citrus aurantium var. amara*.

CAS number: 8028-42-6

EINECS/ELINCS number: 232-433-8

2. Composition:

Main components: *Limonene*.

Additives (e.g. carriers, preservatives, antioxidants): *Nil*.

3. Potential Health Hazards:

Inhalation: *None identified*.

Skin: *Concentrated liquid and vapours irritating to skin by prolonged exposure*.

Eyes: *Irritating to eyes with possible damage*.

Ingestion: *Harmful if swallowed*.

4. First aid:

Inhalation: *If discomfort is felt, remove person to a well-ventilated area with plenty of fresh air*.

Skin: *Remove contaminated clothing. Wash affected area with plenty of soap and water*.

Eyes: *Flush immediately with plenty of cool water for 10 to 20 minutes. Seek medical advice from a Medical Doctor*.

Ingestion: *Seek immediate medical care*.

5. In case of fire:

Extinguishing Media: *Foam, Carbon dioxide*.

Do not use: *Water*.

Special precautions: *Wear breathing apparatus as toxic vapours may be released during fire*.

6. Spill and Leak Procedure:

Individual precautions: *Eliminate sources of ignition. Keep area well ventilated and isolate the spill*.

Environmental protection: *Prevent the liquid from entering the drains and sewers*.

Cleaning methods: *Soak up the spill using inert absorbents. For large spills, use pumps*.

7. Handling and storage:

Store in a cool, dry and dark place in suitable containers (aluminium cans or lacquer lined steel drums).

Handle in a well-ventilated area.

Keep away from sources of heat and ignition.

8. Personal Protection / Exposure control:

Respiratory protection: *Wear breathing apparatus when working in an area of high vapour concentration*.

Skin protection: *Use protective gloves. Wear protective clothing when possibility exists of contact.*

Eye protection: *Goggles should be worn.*

General precautions: *Use good industrial hygiene practise.*

9. Physiochemical properties:

Appearance:	<i>Brown-yellow liquid</i>
Odour:	<i>characteristic</i>
pH:	<i>Neutral</i>
Boiling point:	<i>not tested</i>
Flash point:	<i>45°C</i>
Autoignition Temperature:	<i>not tested</i>
Explosion Limits:	<i>not tested</i>
Vapour pressure (25°C):	<i>not tested</i>
Vapour Density:	<i>not tested</i>
Specific Gravity (20°C):	<i>0.842 to 0.848</i>
Optical Rotation (20°C):	<i>+94° to 99°</i>
Refractive Index (20°C):	<i>1.472 to 1.476</i>
Solubility in water (20°):	<i>Negligible</i>
Partition Coefficient log P o/w:	<i>not tested</i>
Evaporation rate:	<i>not tested</i>

10. Stability and Reactivity:

Chemical Stability: *Stable.*

Conditions to avoid: *Normally stable. Not reactive with water.*

Hazardous Decomposition Products: *Not available.*

11. Sensitisers:

Citral 0.1%, Limonene 95%, Linalool 0.4%, total 95.5%

12. Toxicological Information:

According to RIFM- Monograph:

Acute Toxicity: *Oral LD₅₀: 5 g/kg in rats.*

Dermal LD₅₀: 5 g/kg in rabbits.

Irritation: *Reported to be non-irritating up to 10%.*

Sensitisation: *Reported to be non-sensitising up to 10%.*

Phototoxicity: *Reported to be non-phototoxic.*

13. Ecotoxicological information:

Fish Toxicity: LCO/EC₅₀: *Not available.*

Bacteriotocity: ECO/EC₅₀: *Not available.*

14. Disposal Method:

Check Federal, State and Local Regulations.

15. Transport Information:

UN Number 1993: Proper shipping name: Flammable Liquid N.O.S.

Hazard Class: 3.3 Packing group: III

Transport Safety: Air (ATA/ICAO)

2/PAX309/CA310/III

Sea (IMDG-Code): 3.3/III

Rail (RID): 3.31c

Road (ADR): 3.31c

Symbol: Risk-Phrase IO, 22, 38

Safety-Phrase: 24/25

16. Legislation:

Meets IFRA and RIFM guidelines.

DISCLAIMER: THE INFORMATION CONTAINED IN THIS MSDS IS OBTAINED FROM CURRENT AND RELIABLE SOURCES. HOWEVER, THE DATA IS PROVIDED WITHOUT WARRANTY, EXPRESSES OR IMPLIED, REGARDING ITS CORRECTNESS OR ACCURACY. IT IS THE USER'S RESPONSIBILITY TO DETERMINE SAFE CONDITIONS FOR USE AND TO ASSUME LIABILITY FOR LOSS, INJURY, DAMAGE OR EXPENSE RESULTING FROM IMPROPER USE OF THIS PRODUCT.

FOR AND ON BEHALF OF PHOENIX NATURAL PRODUCTS:

J.S. CHANA..... (MANAGING DIRECTOR)

DATE:.....