



MATERIAL SAFETY DATA SHEET

1. Product Identification:

Product Name: **Orange oil – Sweet (Dark)**
Botanical Name: *Citrus sinensis* L.
Synonyms: *Citrus aurantium* var. *sinensis*; *Citrus macracantha*, *Citrus sinensis* x *Poncirus trifoliata*, *Citrus aurantium* L. var. *sinensis* L., *Aurantium sinense* (L.) Mill., *Citrus aurantium* L. subsp. *sinensis* (L.) P. Fourn., *Citrus aurantium* L., *Citrus sinensis* var. *dulcis*
INCI Name: Citrus sinensis dulcis (orange) peel oil
CAS #: 8008-57-9
County of Origin: USA

2. Classification:

Chemical Identification: Oils, orange sweet
UN No. 1197: Liquid flavoring extract. Packaging Group: III Class: 3
EINECS# 232-433-8 FEMA# 2825 WHMIS D2B/B3 Combustible liquid
24 HOUR EMERGENCY TELEPHONE NUMBER: (613)-996-6666 CANUTEC

3. Hazardous Ingredients Information:

Slightly hazardous.

4. Physical & Chemical Properties:

Odor: Orange to dark orange liquid.
Characteristic sweet orange citrus odor.
Solubility: Soluble in alcohol and oils. Insoluble in water.
Specific Gravity: 0.8430 – 0.8455 @ 20°C
Optical Rotation: +95 - +99 @ 20°C
Refractive Index: 1.4730 – 1.4740 @ 20°C
d-Limonene: > 90 %
Extraction Method: Cold-pressed of the ripe orange peel.
Contents: d-limonene, α -pinene, sabinene, myrcene, linalool, d-careen, decanal, geranial
46 °C

5. Fire/Explosion Hazard:

Flash Point: 46 °C
Flammable liquid. Will ignite if moderately heated.

6. Reactivity/Stability Data:

Reactivity: Stable.

Decomposition: When heated to decomposition produces toxic fumes/carbon monoxide smoke.

7. Toxicological Properties/Information:

Oral (rats), LD₅₀ > 5 g/kg

Dermal (rabbits), LD₅₀ > 5 g/kg

May be irritating to eyes and skin due to its high limonene content. Possibly permeable to skin.

8. Preventive Data:

Spillage: Absorb spills, cover with an inert, non-combustible, inorganic absorbent material, and remove to an approved disposal container.

Fire: Recommended extinguishing media – CO₂, foam and dry chemicals. DO NOT use direct water jet on burning material.

Environment: Keep away from drains, surface and ground water.

Storage: Store in cool, dry and well ventilated area protected in tightly closed container away from sources of ignition, heat and sunlight. Keep air contact to minimum.

9. First Aid Measures:

Eye contact: Flush with water for at least 15 minutes. Call physician if irritation persists.

Inhalation: Remove to fresh air. Avoid casual breathing.

Ingestion: Rinse mouth and consult a physician immediately. Never-give anything by mouth if victim is unconscious, is rapidly-losing consciousness, or is convulsing.

Skin contact: Remove contaminated clothing. Wash with soap and plenty of water.

11. Individual Protection:

Use safety glasses.

Avoid breathing in product by ensuring good ventilation when handling.

Avoid skin contact by using chemical resistant gloves.

12. Preparation Information:

Quality Assurance

New Directions Aromatics Inc.

Brampton ON

L7A 1C5

Revision Date: 12th April 2010

Disclaimer

The information contained in this Certificate of Analysis and Material Safety Data Sheet are obtained from current and reliable sources. As the ordinary or otherwise use(s) of this product is outside the control of New Directions Aromatics Inc., no representation or warranty, expressed or implied is made as to the effect(s) of such use(s) (including damage or injury), or the results obtained.

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CERTIFICATE OF ANALYSIS

PRODUCT: ORANGE ESSENTIAL OIL – SWEET (DARK)

PRODUCT No: 11232

LOT No: 11232-02

	Specifications:	Results:
	Yellowish orange to dark orange liquid.	Complies
Odor:	Characteristic sweet orange citrus odor.	Complies
Solubility:	Soluble in alcohol and oils. Insoluble in water.	Complies
Specific Gravity:	0.8430 – 0.8455 @ 20°C	Complies
Optical Rotation:	+95 - +99 @ 20°C	Complies
Refractive Index:	1.4730 – 1.4740 @ 20°C	Complies