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## MATERIAL SAFETY DATA SHEET

### Emergency Phone Numbers:

Florida Chemical: (863) 294-8483

**CHEMTREC 24 Hour Number (800) 424-9300**

Outside United States: **Call CHEMTREC Collect**

April 2005

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### Section I - IDENTIFICATION

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**Trade Name:** Cold Pressed Orange Oil – Early/Midseason & Valencia

**Product Codes:** 330000-Early/Midseason      331000 – Valencia      329000 – Orange Oil Blend

**CAS Number:** 8028-48-6

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### Section II - HAZARDOUS COMPONENTS

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Volatile Ingredients: d-Limonene is the major component >90% of Early/Midseason and Valencia Orange Oil. Cold Pressed Orange Oil is a by-product of citrus, entirely of natural origin, and to the best of our knowledge and belief contains no artificial flavors, sulfites, nitrites, or pesticide residue exceeding tolerances established by the FDA. Cold Pressed Orange Oil does NOT contain lead, cadmium, mercury, or hexavalent chromium or come in contact with these chemicals since it is a citrus-derived essential oil expressed from orange peels. Further, Cold Pressed Orange Oil is packaged in food grade containers with inert liners that do NOT contain lead, cadmium, mercury, or hexavalent chromium. Cold Pressed Orange Oil does NOT contain and is NOT manufactured with any Class I or II Ozone-depleting substances listed under the United States Clean Air Act of 1990.

### Hazardous Materials Identification System - HMIS:

- 1 Health Hazard - Mild skin irritant
- 2 Flammability - Flashpoint above 100°F
- 0 Reactivity – Stable
- B Protection - Safety glasses & gloves recommended

This substance contains no materials subject to the reporting requirements of SARA TITLE III SECTION 313.

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### Section III - PHYSICAL DATA

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<b>Appearance</b>	Light yellow-orange oil
<b>Odor</b>	Fresh orange aroma
<b>Specific Gravity (25°C)</b>	0.842 - 0.846
<b>Refractive Index (20°C)</b>	1.4700-1.4740
<b>Optical Rotation (25°C)</b>	+94° - +99°
<b>Aldehyde, % (as decyl)</b>	0.80 - 2.2
<b>Flashpoint (CCCFP)</b>	>110°F ASTM D6450
<b>Boiling Point</b>	349°F (176° C)
<b>Evaporation Rate</b>	0.2 (BuAc=1)
<b>Water Solubility</b>	Insoluble
<b>Vapor Density (air=1)</b>	Over 1
<b>Vapor Pressure (20°C)</b>	2mmHg
<b>Percent Volatile by Volume</b>	98%

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### Section IV - FIRE AND EXPLOSION HAZARD DATA

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**Flash Point (CCCFP):** >110°F ASTM D6450

**Flammable Limits:** LEL = Not Available UEL =Not Available

**Extinguishing Media:** Carbon dioxide, foam or dry chemical

# MATERIAL SAFETY DATA SHEET (cont)

Cold Pressed Orange Oil

**Special Fire Fighting Procedures:** SCBA recommended. Smother to exclude air. Do not use water. Handle as an oil fire.

**Unusual Fire and Explosive Hazards:** Combustible liquid. Keep away from heat, sparks, and open flame.

**Incompatibility (Materials to avoid):** Strong oxidizing agents.

**Hazardous Decomposition Products:** Not Available

**Hazardous Polymerization:** Will not occur

**Conditions to Avoid for Polymerization:** Not Available

**Stability Considerations:** Stable

**Conditions to Avoid for Stability:** Avoid temperatures over 118°F (48°C).

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## Section V - HEALTH HAZARD DATA

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**Health Hazards (Acute and Chronic):** Product is a moderate irritant, moderate ingestion and slight inhalation hazard under acute local application.

**This Product Contains No Carcinogens (NTP, IARC or OSHA)**

**Signs and Symptoms of Exposure:** Product may be irritating to the skin, eyes, nose and throat.

**Medical Conditions Generally Aggravated by Exposure:** Persons with allergies or pre-existing skin conditions should avoid contact with this product.

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## Section VI – EMERGENCY FIRST AID PROCEDURES

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**Eye Contact:** Remove contact lenses at once. Immediately flush eyes with large quantities of clean water for at least 15 minutes. Call a physician immediately.

**Skin Contact:** Remove any contaminated clothing or shoes. Thoroughly wash affected area with soap. Flush with large quantities of clean water. If irritation develops or persists, call a physician.

**Ingestion:** DO NOT induce vomiting. Administer water and call a physician or local Poison Control Center immediately.

**Inhalation:** Remove to fresh air and contact a physician immediately.

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## Section VII - SPILL OR LEAK PROCEDURES

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**Steps to be Taken if Material is Released or Spilled:** Use protective gloves to avoid skin contact. Small spills can be wiped up. Large spills should be absorbed by dirt, sand, or other suitable absorbents for disposal. Do not hose spills down drains, sewers, or waterways. Cold Pressed Orange Oil may be toxic to aquatic organisms. Move leaking containers to well ventilated area. No smoking. Eliminate any source of ignition. Minimize inhalation. Use NIOSH approved respiratory protection device. CAUTION: slippery on floor.

**Waste Disposal Method:** Incinerate or Dispose in Accordance with Local, State, and Federal Regulations.

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## Section VIII - SPECIAL PROTECTION INFORMATION

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**Respiratory Protection:** Not normally required. If vapor concentration becomes high, use NIOSH approved respirators.

**Ventilation:** Local exhaust should be adequate. Mechanical ventilation otherwise recommended if necessary.

**Skin Protection:** Oil resistant gloves.

**Eye Protection:** Oil resistant goggles.

**Other Protective Equipment:** Oil resistant apron, emergency eye wash and shower stations.

**Appropriate Hygienic Practices:** Wash thoroughly after handling. Launder contaminated clothing before re-use.

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## Section IX - SPECIAL PRECAUTIONS

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**Precautions to be Taken in Handling and Storing:** Usual precautions for combustible liquids.

**Handling and Storage Precautions:** Store in warehouse with proper sprinkler/fire deterrent system. Avoid contact with incompatible chemicals listed in Section IV. Store in tightly sealed, full containers in well-ventilated controlled warehouse conditions. Partially filled containers should be blanketed with nitrogen.

**Other Precautions:** Product may expand slightly in storage causing pressure to build in container. Open container carefully if product appears to be under pressure. Drum lining may occasionally chip and fall to bottom of container after long storage or excessive handling. As a precaution, pour liquid through filter/strainer to catch small pieces of liner before blending or repackaging. Commercially clean empty containers before re-use. **CAUTION:** Do not weld or cut empty containers (Vapors May Ignite).

# MATERIAL SAFETY DATA SHEET (cont.)

Cold Pressed Orange Oil

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## Section X – REGULATORY INFORMATION

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### Inventory

United States (TSCA)  
Canada (DSL)  
European Union (EINECS)  
Australia (AICS)  
Japan (MITI)  
South Korea (KECL)  
Philippines (PICCS)

### Status

Listed on the inventory.  
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## Section XI – TRANSPORTATION INFORMATION

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**TDG Status:** Hazardous  
**IMO Status:** Hazardous  
**IATA Status:** Hazardous

**DOT Label/Placard [exemption § 173.150(f) applies:**  
**Highway/Rail:** per requirements for Combustible Liquids  
**Air/Ship:** per requirements for Flammable Liquids

### **SHIPPING CLASSIFICATION:**

**Proper Shipping Name:** TERPENE HYDROCARBONS, N.O.S.  
**Hazard Class:** 3  
**Identification No:** UN2319  
**Packing Group:** III

The listed transportation classification does not address regulatory variations due to changes in package size, mode of shipment or other regulatory descriptors.

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## Section XII - ADDITIONAL INFORMATION

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### **National Fire Protection Association Hazard Rating – NFPA(R):**

1 Health Hazard – Slight  
2 Flammability - Moderate  
0 Reactivity – Minimal

### **Key Legend Information:**

ACGIH American Conference of Governmental Industrial Hygienists  
OSHA Occupational Safety and Health Administration  
NTP National Toxicology Program  
IARC International Agency for Research on Cancer

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