

according to Regulation (EC) No. 1907/2006 as amended by (EC) No. 1272/2008

## Section 1. Identification of the Substance/Mixture and of the Company/Undertaking

- 1.1 Product Code:** 00174  
**Product Name:** Orange Mandarin Flavor  
**Trade Name:** Orange Mandarin Flavor
- 1.2 Relevant identified uses of the substance or mixture and uses advised against:**
- 1.3 Details of the Supplier of the Safety Data Sheet:**  
**Company Name:** Perfumer's Apprentice  
170 Technology Circle  
Scotts Valley, CA 95066
- 1.4 Emergency telephone number:**

## Section 2. Hazards Identification

- 2.1 Classification of the Substance or Mixture:**
- 2.1.1 Classification according to Regulation (EC) No 1272/2008 [CLP]:**
- 2.1.2 Classification according to Directive 1999/45/EC:**
- 2.2 Label Elements:**
- 2.2.1 Labeling according to Regulation (EC) No 1272/2008 [CLP]:**
- GHS Signal Word:**
- GHS Hazard Phrases:**  
No phrases apply.
- GHS Precaution Phrases:**  
No phrases apply.
- GHS Response Phrases:**  
No phrases apply.
- GHS Storage and Disposal Phrases:**  
No phrases apply.
- 2.2.2 Labeling according to Directive 1999/45/EC:**
- 2.3 Adverse Human Health Effects and Symptoms:**
- 2.3.1 Inhalation:** May be harmful if inhaled.
- 2.3.2 Skin Contact:** May be absorbed through damaged or abraded skin in harmful amounts.
- 2.3.3 Eye Contact:** May cause slight transient injury. Vapors may cause eye irritation.
- 2.3.4 Ingestion:** May cause gastrointestinal irritation with nausea, vomiting and diarrhea.

## Section 3. Composition/Information on Ingredients

CAS #	Hazardous Components (Chemical Name)/ REACH Registration No.	Concentration	EC No./ EC Index No.	Risk Phrases/ GHS Classification
57-55-6	Propylene glycol	>=10.0 %	200-338-0 NA	No phrases apply. No data available.
105-54-4	Ethyl butyrate	1.0 -10.0 %	203-306-4 NA	R10 No data available.
8008-57-9	Oils, orange, sweet	< 0.5 %	NA NA	No phrases apply. Flam. Liq. 3: H226 Asp. Toxic. 1: H304 Skin Corr. 2: H315 Skin Sens. 1: H317 Aquatic (A) 1: H400 Aquatic (C) 1: H410

64-17-5 Ethyl alcohol

0.5 %

200-578-6 F; R11

603-002-00-5 Flam. Liq. 2: H225

### Section 4. First Aid Measures

**4.1 Description of First Aid Measures:**

**In Case of Inhalation:** If inhaled, remove to fresh air.

**In Case of Skin Contact:** In case of contact, flush skin with plenty of water.

**In Case of Eye Contact:** In case of contact, immediately flush eyes with plenty of water for a t least 15 minutes.

**In Case of Ingestion:** Rinse mouth with water.

### Section 5. Fire Fighting Measures

**5.1 Suitable Extinguishing Media:** Use water spray, dry chemical, carbon dioxide, or alcohol-resistant foam. For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam. For large fires, use water spray, fog, or alcohol-resistant foam. Use water spray to cool fire-exposed containers. Water may be ineffective. Do NOT use straight streams of water. Use water spray, dry chemical, carbon dioxide, or appropriate foam.

**5.2 Flammable Properties and Hazards:** No data available.

**Flash Pt:** No data.

**Explosive Limits:** LEL: No data. UEL: No data.

**Autoignition Pt:** No data.

**5.3 Fire Fighting Instructions:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.

### Section 6. Accidental Release Measures

**6.3 Methods and Material For Containment and Cleaning Up:** No data available.

### Section 7. Handling and Storage

**7.1 Precautions To Be Taken in Handling:** Wash thoroughly after handling.

**7.2 Precautions To Be Taken in Storing:** Store in a tightly closed container.

### Section 8. Exposure Controls/Personal Protection

**8.1 Exposure Parameters:**

CAS #	Partial Chemical Name	Britain EH40	France VL	Europe
57-55-6	Propylene glycol	TWA: 474 mg/m3 (150 ppm) (Total Particulates) TWA: 10 mg/m3 (Powder)	No data.	No data.
105-54-4	Ethyl butyrate	No data.	No data.	No data.
8008-57-9	Oils, orange, sweet	No data.	No data.	No data.
64-17-5	Ethyl alcohol	TWA: 1920 mg/m3 (1000 ppm) STEL: ()	TWA: 1900 mg/m3 (1000 ppm) STEL: 9500 mg/m3 (5000 ppm)	No data.

# SAFETY DATA SHEET

## Orange Mandarin Flavor

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CAS #	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
57-55-6	Propylene glycol	No data.	No data.	No data.
105-54-4	Ethyl butyrate	No data.	No data.	No data.
8008-57-9	Oils, orange, sweet	No data.	No data.	No data.
64-17-5	Ethyl alcohol	PEL: 1000 ppm	TLV: 1000 ppm	No data.

### 8.2 Exposure Controls:

**8.2.1 Engineering Controls (Ventilation etc.):** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

### 8.2.2 Personal protection equipment:

**Eye Protection:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166. Safety glasses.

**Protective Gloves:** Wear appropriate protective gloves to prevent skin exposure. Handle with gloves. The selected protective gloves have to satisfy the specifications of EU Directive 89/689/EEC and the standard EN 374 derived from it.

**Other Protective Clothing:** Wear appropriate protective clothing to prevent skin exposure. Choose body protection according to the amount and concentration of the dangerous substance at the work place.

**Respiratory Equipment (Specify Type):** A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use. Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Work/Hygienic/Maintenance Practices:** Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

## Section 9. Physical and Chemical Properties

### 9.1 Information on Basic Physical and Chemical Properties

<b>Physical States:</b>	[ ] Gas	[ X ] Liquid	[ ] Solid
<b>Appearance and Odor:</b>	colorless. Mandarin orange taste and aroma.		
<b>Melting Point:</b>	No data.		
<b>Boiling Point:</b>	No data.		
<b>Flash Pt:</b>	No data.		
<b>Evaporation Rate:</b>	No data.		
<b>Explosive Limits:</b>	LEL: No data.	UEL: No data.	
<b>Vapor Pressure (vs. Air or mm Hg):</b>	No data.		
<b>Vapor Density (vs. Air = 1):</b>	No data.		
<b>Specific Gravity (Water = 1):</b>	No data.		
<b>Solubility in Water:</b>	No data.		
<b>Autoignition Pt:</b>	No data.		

**9.2 Other Information**

**Percent Volatile:** No data.

**Section 10. Stability and Reactivity**

- 10.1 Reactivity:** No data available.
- 10.2 Stability:** Unstable [ ] Stable [ X ]
- 10.3 Conditions To Avoid - Hazardous Reactions:** No data available.
- Possibility of Hazardous Reactions:** Will occur [ ] Will not occur [ X ]
- 10.4 Conditions To Avoid - Instability:** Excess heat, moist air, Incompatible materials, ignition sources, Air Exposure to moisture. Light, Heat.
- 10.5 Incompatibility - Materials To Avoid:** Strong oxidizing agents, acids, Bases, Heat, Strong reducing agents, Alkali metals, Aluminum, iron, phenols, Oxygen.
- 10.6 Hazardous Decomposition Or Byproducts:** Carbon monoxide, Carbon dioxide, Hazardous decomposition products formed under fire conditions.  
Carbon oxides.

**Section 11. Toxicological Information**

- 11.1 Information on Toxicological Effects:** Epidemiology: No information available.  
Teratogenicity: No information available.  
Reproductive Effects: Mutagenicity: Neurotoxicity: Other Studies:
- Carcinogenicity/Other Information:** CAS# 57-55-6: Not listed by ACGIH, IARC, NTP, or CA Prop 65. CAS# 105-54-4: Not listed by ACGIH, IARC, NTP, or CA Prop 65.
- Carcinogenicity:** NTP? No IARC Monographs? No OSHA Regulated? No

**Section 12. Ecological Information**

- 12.1 Toxicity:** Ecotoxicity: Water flea Daphnia: EC50 10000 mg/L; 48 HrUnspecified, Bacteria: Phytobacterium phosphoreum: EC50 = 710 mg/L; 30 min; Microtox testFish: Goldfish: LC50 5000 mg/L; 24 Hr; UnspecifiedFish: Guppy: LC50 1000 mg/L; 48 Hr; Unspecified If released to water, 1,2-propanediol is expected to degrade relatively rapidly via biodegradation. If released to soil, relatively rapid biodegradation should also occur. Significant leaching in soil can be predicted.  
Environmental: If released to the atmosphere, it is degraded rapidly by reaction with photochemically produced hydroxyl radicals (typical half-life of 32 hr). Physical removal from air by rainfall is possible.  
Physical: No information available.  
Other: No information available. No information available.

**Section 13. Disposal Considerations**

- 13.1 Waste Disposal Method:** Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.  
RCRA P-Series: None listed.  
RCRA U-Series: None listed. Product.  
This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber.  
Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material. Contaminated packaging.

## Section 14. Transport Information

**GHS Classification:** No GHS classifications apply.

### 14.1 LAND TRANSPORT (US DOT):

**DOT Proper Shipping Name:**

**DOT Hazard Class:**

**UN/NA Number:**

### 14.1 LAND TRANSPORT (Canadian TDG):

**TDG Shipping Name:** Not Regulated. ETHYL BUTYRATE.

### 14.1 LAND TRANSPORT (European ADR/RID):

**ADR/RID Shipping Name:**

**UN Number:**

**Hazard Class:**

### 14.3 AIR TRANSPORT (ICAO/IATA):

**ICAO/IATA Shipping Name:** Ethyl butyrate. mixture.

## Section 15. Regulatory Information

### EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists

CAS #	Hazardous Components (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)
57-55-6	Propylene glycol	No	No	No
105-54-4	Ethyl butyrate	No	No	No
8008-57-9	Oils, orange, sweet	No	No	No
64-17-5	Ethyl alcohol	No	No	No

**European Community Hazard Symbol codes:**

**European Community Risk and Safety Phrases:**

No data available.

## Section 16. Other Information

**Revision Date:** 03/31/2014

**Additional Information About** No data available.

**This Product:**