1. Product and Company Identification

Product Code: 00174
Product Name: Orange Mandarin Flavor
Trade Name: Orange Mandarin Flavor
Company Name: Perfumer's Apprentice
170 Technology Circle
Scotts Valley, CA 95066

Web site address: Perfumersapprentice.com
Emergency Contact: Chem-Tel Phone (800)255-3924 (831)316-7137 Phone Number:

2. Hazards Identification

GHS Signal Word: None
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.

Potential Health Effects (Acute and Chronic):
Inhalation: May be harmful if inhaled.
Skin Contact: May cause skin irritation.

3. Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>CAS #</th>
<th>Hazardous Components (Chemical Name)</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>57-55-6</td>
<td>Propylene glycol</td>
<td>&gt;=10.0 %</td>
</tr>
<tr>
<td>64-17-5</td>
<td>Ethyl alcohol</td>
<td>&lt; 0.5 %</td>
</tr>
</tbody>
</table>

4. First Aid Measures

Emergency and First Aid Procedures:
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 at least 15 minutes.
In Case of Ingestion: Rinse mouth with water.

5. Fire Fighting Measures

Flash Pt: > 200.00 F
Explosive Limits: LEL: UEL:

Autoignition Pt:
Suitable Extinguishing Media: Use water spray, dry chemical, carbon dioxide, or alcohol-resistant foam.
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.

Flammable Properties and Hazards:
SAFETY DATA SHEET
Orange Mandarin Flavor

6. Accidental Release Measures

Protective Precautions, Protective Equipment and Emergency Procedures:
Steps To Be Taken In Case Material Is Released Or Spilled:

Dike to collect large liquid spills.

Ensure adequate ventilation.

7. Handling and Storage

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

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

8. Exposure Controls/Personal Protection

<table>
<thead>
<tr>
<th>CAS #</th>
<th>Partial Chemical Name</th>
<th>OSHA TWA</th>
<th>ACGIH TWA</th>
<th>Other Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>57-55-6</td>
<td>Propylene glycol</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>64-17-5</td>
<td>Ethyl alcohol</td>
<td>PEL: 1000 ppm</td>
<td>TLV: 1000 ppm</td>
<td></td>
</tr>
</tbody>
</table>

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.

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.

Protective Gloves:
Wear appropriate protective gloves to prevent skin exposure.

Other Protective Clothing:
Wear appropriate protective clothing to prevent skin exposure.

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.

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

9. Physical and Chemical Properties

Physical States: [ ] Gas [X] Liquid [ ] Solid

Appearance and Odor:
Colorless.
Mandarin orange taste and aroma.

Melting Point: > 200.00 F
Boiling Point: 
Autoignition Pt: 
Flash Pt: 
Explosive Limits: LEL: UEL:
Specific Gravity (Water = 1): 1.034 at 22.0 C
Vapor Pressure (vs. Air or mm Hg):
Vapor Density (vs. Air = 1):
Evaporation Rate:
Solubility in Water:
Percent Volatile:

10. Stability and Reactivity

Stability: Unstable [ ] Stable [ X ]

Conditions To Avoid -
Instability:

Incompatibility - Materials To Avoid:

Hazardous Decomposition Or Byproducts:
Possibility of Hazardous Reactions: Will occur [ ] Will not occur [ X ]

Conditions To Avoid - Hazardous Reactions:

11. Toxicological Information

Toxicological Information: This mixture has not been subjected to toxicological testing but has been blended from materials with established toxicological bibliographies. In view of the difficulty of using current standard toxicological evaluation techniques to predict potential hazards to susceptible individuals or arising from unforeseeable potentiation, this preparation should be considered and handled as if it displayed health hazards and consequently treated with all possible precaution.

Carcinogenicity: NTP? No IARC Monographs? No OSHA Regulated? No

12. Ecological Information

General Ecological Information: This mixture as a whole has not been subjected to ecotoxicological testing. In view of the difficulty of using current standard ecotoxicological evaluation techniques to predict the impact of particular modes of release on vulnerable or localized parts of the ecosystem, this preparation should be considered and handled as if it displayed potential environmental hazards, and treated in consequence with all possible precaution.

13. Disposal Considerations

Waste Disposal Method: This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

14. Transport Information

GHS Classification: No GHS classifications apply.

LAND TRANSPORT (US DOT):

DOT Proper Shipping Name: Not Regulated.
DOT Hazard Class:
UN/NA Number:

LAND TRANSPORT (Canadian TDG):

TDG Shipping Name: Not Regulated.
LAND TRANSPORT (European ADR/RID):
ADR/RID Shipping Name: Not Regulated.

MARINE TRANSPORT (IMDG/IMO):
IMDG/IMO Shipping Name: Not Regulated.

AIR TRANSPORT (ICAO/IATA):
ICAO/IATA Shipping Name: Not Regulated.

15. Regulatory Information

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

<table>
<thead>
<tr>
<th>CAS #</th>
<th>Hazardous Components (Chemical Name)</th>
<th>S. 302 (EHS)</th>
<th>S. 304 RQ</th>
<th>S. 313 (TRI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>57-55-6</td>
<td>Propylene glycol</td>
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<td>No</td>
<td>No</td>
</tr>
<tr>
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<td>Ethyl alcohol</td>
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<td>No</td>
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This material meets the EPA 'Hazard Categories' defined for SARA Title III Sections as indicated:
- [ ] Yes [X] No   Acute (immediate) Health Hazard
- [ ] Yes [X] No   Chronic (delayed) Health Hazard
- [ ] Yes [X] No   Fire Hazard
- [ ] Yes [X] No   Sudden Release of Pressure Hazard
- [ ] Yes [X] No   Reactive Hazard

CAS # Hazardous Components (Chemical Name) Other US EPA or State Lists
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<td>REACH: (R), (P)</td>
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<td>REACH: (R), (P)</td>
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16. Other Information

Revision Date: 03/31/2014

Additional Information About This Product: This product contains no added diacetyl as an ingredient. However, because diacetyl can occur in small amounts as an artifact of the production process in other ingredients, "No Added Diacetyl" products may not be "Diacetyl Free", as trace amounts may be present.

Company Policy or Disclaimer: The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any other process, unless specified in the text.