SAFETY DATA SHEET
Cranberry Sauce Flavor

1. Product and Company Identification

Product Code: 17675
Product Name: Cranberry Sauce Flavor
Trade Name: Cranberry Sauce 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
(813)248-0585
Information: Contract #: MIS6760377

2. Hazards Identification

Serious Eye Damage/Eye Irritation, Category 2B
Flammable Liquids, Category 4

GHS Signal Word: Warning
GHS Hazard Phrases: Combustible liquid.
Causes eye irritation.
GHS Precaution Phrases: Keep away from {heat/sparks/open flames/hot surfaces}. - No smoking.
Wash {hands} thoroughly after handling.
Wear {protective gloves/protective clothing/eye protection/face protection}.
GHS Response Phrases: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists, get medical advice/attention.
GHS Storage and Disposal Phrases: Store in cool/well-ventilated place.
Dispose of contents/container to {...}.

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>90.0 -99.0 %</td>
</tr>
</tbody>
</table>
4. First Aid Measures

Emergency and First Aid Procedures:

In Case of Inhalation: If fumes or combustion products are inhaled remove from contaminated area.
Lay patient down. Keep warm and rested.
Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.
Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary.
Transport to hospital, or doctor.

In Case of Skin Contact: If skin contact occurs:
Immediately remove all contaminated clothing, including footwear.
Flush skin and hair with running water (and soap if available).
Seek medical attention in event of irritation.

In Case of Eye Contact: If this product comes in contact with the eyes:
Wash out immediately with fresh running water.
Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.
Seek medical attention without delay; if pain persists or recurs seek medical attention.
Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

In Case of Ingestion: If swallowed do NOT induce vomiting.
If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.
Observe the patient carefully.
Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious.
Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink.
Seek medical advice.

Note to Physician: Propylene glycol is primarily a CNS depressant in large doses and may cause hypoglycaemia, lactic acidosis and seizures.
The usual measures are supportive care and decontamination (Ipecac/ lavage/ activated charcoal/ cathartics), within 2 hours of exposure should suffice.
Check the anion gap, arterial pH, renal function and glucose levels.
5. Fire Fighting Measures

Flash Pt: 84.50 C  Method Used: Closed Cup
Explosive Limits: LEL: No data. UEL: No data.
Autoignition Pt: No data.

Unsuitable Extinguishing Media: Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result

Fire Fighting Instructions: Alert Fire Brigade and tell them location and nature of hazard. Wear full body protective clothing with breathing apparatus. Prevent, by any means available, spillage from entering drains or water course. Use water delivered as a fine spray to control fire and cool adjacent area.

Flammable Properties and Hazards: Combustible. Slight fire hazard when exposed to heat or flame. Heating may cause expansion or decomposition leading to violent rupture of containers. On combustion, may emit toxic fumes of carbon monoxide (CO). Combustion products include:, carbon dioxide (CO2), other pyrolysis products typical of burning organic material May emit poisonous fumes. May emit corrosive fumes.

Hazardous Combustion Products: No data available.

6. Accidental Release Measures

Steps To Be Taken In Case Material Is Released Or Spilled:
Remove all ignition sources. Clean up all spills immediately. Avoid breathing vapours and contact with skin and eyes. Control personal contact with the substance, by using protective equipment. Moderate hazard. Clear area of personnel and move upwind. Alert Fire Brigade and tell them location and nature of hazard. Wear breathing apparatus plus protective gloves.

7. Handling and Storage

Precautions To Be Taken in Handling:
Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. Prevent concentration in hollows and sumps. DO NOT allow clothing wet with material to stay in contact with skin

Precautions To Be Taken in Storing:
Metal can or drum Packaging as recommended by manufacturer. Check all containers are clearly labelled and free from leaks. Glycols and their ethers undergo violent decomposition in contact with 70% perchloric acid. This seems likely to involve formation of the glycol perchlorate esters (after scission of ethers) which are explosive, those of ethylene glycol and 3-chloro-1,2-propanediol being more powerful than glycercyl nitrate, and the former so sensitive that it explodes on addition of water.
Alcohols are incompatible with strong acids, acid chlorides, acid anhydrides, oxidising and reducing agents. It reacts, possibly violently, with alkaline metals and alkaline earth metals to produce hydrogen. It can react with strong acids, strong caustics, aliphatic amines, isocyanates, acetaldehyde, benzoyl peroxide, chromic acid, chromium oxide, dialkyldzincs, dichlorine oxide, ethylene oxide, hypochlorous acid, isopropyl chlorocarbonate, lithium tetrahydroaluminate, nitrogen dioxide, pentafluoroguanidine, phosphorus halides, phosphorus pentasulfide, tangerine oil, triethylaluminium, triisobutylaluminium. It should not be heated above 49 deg. C. when in contact with aluminium equipment.

**Other Precautions:**
- Material is hygroscopic, i.e. absorbs moisture from the air. Keep containers well sealed in storage.
- Store in original containers.
- Keep containers securely sealed.
- No smoking, naked lights or ignition sources.
- Store in a cool, dry, well-ventilated area.

### 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>No data.</td>
<td>No data.</td>
<td>No data.</td>
</tr>
</tbody>
</table>

**Respiratory Equipment**

**Eye Protection:**
- Safety glasses with side shields.
- Chemical goggles.
- Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task.

**Protective Gloves:**
- Wear chemical protective gloves, e.g. PVC.
- Wear safety footwear or safety gumboots, e.g. Rubber

**NOTE:**
- The material may produce skin sensitisation in predisposed individuals. Care must be taken, when removing gloves and other protective equipment, to avoid all possible skin contact.
- Contaminated leather items, such as shoes, belts and watch-bands should be removed and destroyed.
- The selection of suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. Where the chemical is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- The exact break through time for substances has to be obtained from the manufacturer of the protective gloves and has to be observed when making a final choice.
- Suitability and durability of glove type is dependent on usage.

**Other Protective Clothing:**
- Overalls.
- P.V.C. apron.
Barrier cream. Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection. The basic types of engineering controls are: Process controls which involve changing the way a job activity or process is done to reduce the risk. Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment.

### 9. Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Physical States:</th>
<th>[ ] Gas</th>
<th>[ X ] Liquid</th>
<th>[ ] Solid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance and Odor:</td>
<td>Clear yellow liquid with cranberry scent and flavor.</td>
<td></td>
<td></td>
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<tr>
<td>pH:</td>
<td>No data.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Melting Point:</td>
<td>No data.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boiling Point:</td>
<td>No data.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flash Pt:</td>
<td>84.50 C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Method Used:</td>
<td>Closed Cup</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evaporation Rate:</td>
<td>No data.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flammability (solid, gas):</td>
<td>No data available.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Explosive Limits:</td>
<td>LEL: No data.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UEL: No data.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vapor Pressure (vs. Air or mm Hg):</td>
<td>No data.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vapor Density (vs. Air = 1):</td>
<td>No data.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Specific Gravity (Water = 1):</td>
<td>1.04</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Solubility in Water:</td>
<td>No data.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Octanol/Water Partition Coefficient:</td>
<td>No data.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Autoignition Pt:</td>
<td>No data.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decomposition Temperature:</td>
<td>No data.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Viscosity:</td>
<td>No data.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 10. Stability and Reactivity

| Stability:                        | Unstable [ ] Stable [ X ] |
| Conditions To Avoid - Instability:| No data available. |
| Incompatibility - Materials To Avoid:| No data available. |
| Hazardous Decomposition or Byproducts:| No data available. |
| Possibility of Hazardous Reactions:| Will occur [ ] Will not occur [ X ] |
| Conditions To Avoid - Hazardous Reactions:| No data available. |
11. Toxicological Information

Toxicological Information: No data available.

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

12. Ecological Information

No data available.

13. Disposal Considerations

Waste Disposal Method: No data available.

14. Transport Information

GHS Classification: Serious Eye Damage/Eye Irritation, Category 2B - Warning! Causes eye irritation
Flammable Liquids, Category 4 - Warning! Combustible liquid

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.
- UN Number:
- Hazard Class:

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>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
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</table>

This material meets the EPA 'Hazard Categories' defined for SARA Title III Sections 311/312 as indicated:

- [X] Yes  [ ] No  Acute (immediate) Health Hazard
- [ ] Yes  [X] No  Chronic (delayed) Health Hazard
- [X] Yes  [ ] No  Fire Hazard
- [ ] Yes  [X] No  Sudden Release of Pressure Hazard
- [ ] Yes  [X] No  Reactive Hazard

Other US EPA or State Lists

<table>
<thead>
<tr>
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<th>REACH: (R), (P)</th>
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International Regulatory Lists

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16. Other Information

Revision Date: 05/09/2016

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.