


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:** 00104  
**Product Name:** Strawberry (Ripe) Flavor  
**Trade Name:** Strawberry (Ripe) 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:**  
Xn: Harmful  
Risk Phrases: R10, R22, R36/37/38  
For full text of R- phrases: see SECTION 15.
- 2.2 Label Elements:**
- 2.2.1 Labeling according to Regulation (EC) No 1272/2008 [CLP]:**  
**GHS Signal Word:**  
**GHS Hazard Phrases:**  
**GHS Precaution Phrases:**  
**GHS Response Phrases:**  
**GHS Storage and Disposal Phrases:**
- 2.2.2 Labeling according to Directive 1999/45/EC:**
- 
- Xn**
- 2.3 Adverse Human Health** Chronic ingestion may cause lactic acidosis and possible seizures.  
**Effects and Symptoms:**  
Chronic: Exposure to large doses may cause central nervous system depression. Exposures to propylene glycol having no adverse effects on the mother should have no effect on the fetus. Birth defects are unlikely. In animal studies, propylene glycol has been shown not to interfere with reproduction.
- 2.3.1 Inhalation:** Low hazard for normal industrial handling. Inhalation of a mist of this material may cause respiratory tract irritation. Material has a low vapor pressure at room temperature, so exposure to vapor is not likely. The toxicological properties of this substance have not been fully investigated. Aspiration may lead to pulmonary edema. Vapors may cause dizziness or suffocation. May cause burning sensation in the chest. Vapor or mist is irritating to the mucous membranes and upper respiratory tract. May be harmful if inhaled. Skin: May be harmful if absorbed through skin. May cause skin irritation. Causes respiratory tract irritation.
- 2.3.2 Skin Contact:** May be absorbed through damaged or abraded skin in harmful amounts. Allergic reactions have been reported. A single prolonged skin exposure is not likely to result in

the material being absorbed in harmful amounts. Repeated exposures may cause problems. Negative results have consistently been obtained in guinea pigs studies for sensitization. 1,,2-Propylene glycol is not considered an occupational skin sensitizer. (CHEMINFO) May cause irritation and dermatitis. May cause cyanosis of the extremities. Causes skin irritation. May be harmful if absorbed through the skin.

**2.3.3 Eye Contact:** May cause slight transient injury. May cause chemical conjunctivitis and corneal damage. Vapors may cause eye irritation. Causes eye irritation.

**2.3.4 Ingestion:** May cause gastrointestinal irritation with nausea, vomiting and diarrhea. Low hazard for usual industrial handling. May cause hemoglobinuric nephrosis. May cause changes in surface EEG. The toxicological properties of this substance have not been fully investigated. Ingestion of large amounts may cause central nervous system depression. May cause irritation of the digestive tract. Harmful if swallowed. Additional Information. RTECS: QJ6950000

**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.
7452-79-1	Ethyl 2 - methylbutyrate	1.0 -10.0 %	231-225-4 NA	R10
105-54-4	Ethyl butyrate	1.0 -10.0 %	203-306-4 NA	R10
3658-77-3	4 - Hydroxy - 2,5 - dimethylfuran - 2(3H) - one	1.0 -10.0 %	222-908-8 NA	No phrases apply.
118-71-8	3-Hydroxy-2-methyl-4-pyrone	1.0 -10.0 %	204-271-8 NA	Xn; R22-36/37/38

**Section 4. First Aid Measures**

**4.1 Description of First Aid Measures:**

**In Case of Inhalation:** If inhaled, remove to fresh air. If breathing is difficult, give oxygen. Get medical aid. Remove from exposure and move to fresh air immediately. If breathed in, move person into fresh air. Consult a physician.

**In Case of Skin Contact:** In case of contact, flush skin with plenty of water. Remove contaminated clothing and shoes. Get medical aid if irritation develops and persists. Wash clothing before reuse. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash off with soap and plenty of water. Consult a physician.

**In Case of Eye Contact:** In case of contact, immediately flush eyes with plenty of water for a t least 15 minutes. Get medical aid. Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately. Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**In Case of Ingestion:** Never give anything by mouth to an unconscious person. Get medical aid. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Get medical aid immediately. Rinse mouth with water. Consult a physician. Wash mouth out with water.

**4.2 Important Symptoms and Effects, Both Acute and Delayed:** To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

**Note for the Doctor:** Persons with impaired kidney function may be more susceptible to the effects of this

substance. Treat symptomatically and supportively. Consult a physician. Show this safety data sheet to the doctor in attendance.

## 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. Use water spray, dry chemical, carbon dioxide, or chemical foam.
- 5.2 Flammable Properties and Hazards:**  
**Flash Pt:**  
**Explosive Limits:** LEL: UEL:  
**Autoignition Pt:**
- 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. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Vapors may form explosive mixtures with air. Vapors can travel to a source of ignition and flash back. Will burn if involved in a fire. Use water spray to keep fire-exposed containers cool. Water may be ineffective. Material is lighter than water and a fire may be spread by the use of water. Containers may explode in the heat of a fire. Flammable liquid and vapor. Vapors may be heavier than air. Wear self contained breathing apparatus for fire fighting if necessary. Dusts at sufficient concentrations can form explosive mixtures with air.

## Section 6. Accidental Release Measures

- 6.3 Methods and Material For Containment and Cleaning Up:** Use proper personal protective equipment as indicated in Section 8.  
Spills/Leaks: Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Clean up spills immediately, observing precautions in the Protective Equipment section. Provide ventilation. Avoid runoff into storm sewers and ditches which lead to waterways. Remove all sources of ignition. Use a spark-proof tool. A vapor suppressing foam may be used to reduce vapors. Sweep up or absorb material, then place into a suitable clean, dry, closed container for disposal. Personal precautions. Use personal protective equipment. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation.
- Environmental precautions.  
Do not let product enter drains.  
Methods for cleaning up.  
Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal. Avoid generating dusty conditions. Do not let this chemical enter the environment.

## Section 7. Handling and Storage

- 7.1 Precautions To Be Taken in Handling:** Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation. Ground and bond containers when transferring material. Use spark-proof tools and explosion proof equipment. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep away from heat, sparks and flame. Do not pressurize, cut, weld, braze, solder, drill,

grind, or expose empty containers to heat, sparks or open flames. Wash clothing before reuse. Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection. Avoid breathing dust, mist, or vapor. Avoid contact with skin and eyes.

**7.2 Precautions To Be Taken in Storing:** Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Store protected from moisture. Keep away from heat, sparks and flame. Keep away from sources of ignition. Flammables-area. Store in a cool, dry place. Keep container tightly closed in a dry and well-ventilated place. Recommended storage temperature: 2 - 8 deg.C.  
 Store under inert gas.

**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)		
7452-79-1	Ethyl 2 - methylbutyrate			
105-54-4	Ethyl butyrate			
3658-77-3	4 - Hydroxy - 2,5 - dimethylfuran - 2(3H) - one			
118-71-8	3-Hydroxy-2-methyl-4-pyrone			
CAS #	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
57-55-6	Propylene glycol			
7452-79-1	Ethyl 2 - methylbutyrate			
105-54-4	Ethyl butyrate			
3658-77-3	4 - Hydroxy - 2,5 - dimethylfuran - 2(3H) - one			
118-71-8	3-Hydroxy-2-methyl-4-pyrone			

**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. Use adequate general or local explosion-proof ventilation to keep airborne levels to acceptable levels.

**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. Wear chemical splash goggles.
- Protective Gloves:** Wear appropriate protective gloves to prevent skin exposure. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. Handle with gloves.
- 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



## Section 11. Toxicological Information

<b>11.1 Information on Toxicological Effects:</b>	Epidemiology: No information found. Teratogenicity: No information available. Reproductive Effects: Mutagenicity: Neurotoxicity: No information available. Other Studies: No data available. Teratogenicity: No data available.
<b>Carcinogenicity/Other Information:</b>	CAS# 57-55-6: Not listed by ACGIH, IARC, NTP, or CA Prop 65. CAS# 7452-79-1: Not listed by ACGIH, IARC, NTP, or CA Prop 65. CAS# 105-54-4: Not listed by ACGIH, IARC, NTP, or CA Prop 65. CAS# 118-71-8: Not listed by ACGIH, IARC, NTP, or CA Prop 65.
<b>Carcinogenicity:</b>	NTP? No      IARC Monographs? No      OSHA Regulated? No

## Section 12. Ecological Information

<b>12.1 Toxicity:</b>	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. Other: Do not empty into drains.
-----------------------	--

## Section 13. Disposal Considerations

<b>13.1 Waste Disposal Method:</b>	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. Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.  Contaminated packaging. Dispose of as unused product.
------------------------------------	---

## Section 14. Transport Information

### 14.1 LAND TRANSPORT (US DOT):

**DOT Proper Shipping Name:** Ethyl butyrate. mixture.  
**DOT Hazard Class:** 3      FLAMMABLE LIQUID  
**UN/NA Number:** UN1180      **Packing Group:** III

### 14.1 LAND TRANSPORT (Canadian TDG):

**TDG Shipping Name:** Not Regulated. No information available. ETHYL BUTYRATE.

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

**ADR/RID Shipping Name:** Not dangerous goods.

**UN Number:** 1180

**Packing Group:** III

**Hazard Class:** 3 - FLAMMABLE LIQUID

**14.2 MARINE TRANSPORT (IMDG/IMO):**

**IMDG/IMO Shipping Name:** Not dangerous goods.

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

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

**Section 15. Regulatory Information**

**European Community Hazard Symbol codes:**

**European Community Risk and Safety Phrases:**

R10	Flammable.
R22	Harmful if swallowed.
R36/37/38	Irritating to eyes, respiratory system and skin.
S24/25	Avoid contact with skin and eyes.
S16	Keep away from sources of ignition.
S33	Take precautionary measures against static discharges.
S37/39	Wear suitable gloves and eye/face protection.
S45	In case of accident or if you feel unwell, seek medical advice immediately (show the label whenever possible.)
S9	Keep container in a well-ventilated place.
S28A	After contact with skin, wash immediately with plenty of water.
S36	Wear suitable protective clothing.
S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

**Section 16. Other Information**

**Revision Date:** 03/26/2014

**Additional Information About  
This Product:**