

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:** 00106
Product Name: Watermelon Flavor
Trade Name: Watermelon 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]:**
Flammable Liquids, Category 2
- 2.1.2 Classification according to Directive 1999/45/EC:**
Xn: Harmful
Risk Phrases: R22, R36/37/38, R10, R66
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: Danger

GHS Hazard Phrases:

H225 - Highly flammable liquid and vapor.

GHS Precaution Phrases:

P233 - Keep container tightly closed.

P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P280 - Wear protective gloves/protective clothing/eye protection/face protection.

P240 - Ground/bond container and receiving equipment.

P241 - Use explosion-proof electrical/ventilating/lighting/.../ equipment.

P243 - Take precautionary measures against static discharge.

P242 - Use only non-sparking tools.

GHS Response Phrases:

P370+378 - In case of fire, use ... to extinguish.

P303+361+353 - IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.

GHS Storage and Disposal Phrases:

P403+235 - Store in cool/well-ventilated place.

P501 - Dispose of contents/container to

2.2.2 Labeling according to Directive 1999/45/EC:



Xn

2.3 Adverse Human Health Prolonged or repeated skin contact may cause dermatitis.

Effects and Symptoms:

Chronic ingestion may cause lactic acidosis and possible seizures.

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. Causes respiratory tract irritation. May be harmful if inhaled. 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. Symptoms in humans following inhalation of pentyl acetate vapors (at unreported concentrations) include headache, fatigue, mucous membrane irritation, excessive salivation, tearing, nose and throat irritation, oppression in the chest, and occasional vague nervousness.

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) Causes skin irritation. May cause irritation and dermatitis. May cause cyanosis of the extremities. Repeated or prolonged exposure may cause drying and cracking of the skin. Human patch testing studies provided no evidence of skin sensitization, phototoxicity, or photoallergy.

2.3.3 Eye Contact:

May cause slight transient injury. Causes eye irritation. May cause chemical conjunctivitis and corneal damage.

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. Harmful if swallowed. May cause irritation of the digestive tract. The toxicological properties of this substance have not been fully investigated. Ingestion of large amounts may cause central nervous system depression.

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.
118-71-8	3-Hydroxy-2-methyl-4-pyrone	1.0 -10.0 %	204-271-8 NA	Xn; R22-36/37/38
7452-79-1	Ethyl 2 - methylbutyrate	1.0 -10.0 %	231-225-4 NA	R10
108-64-5	Ethyl isovalerate	1.0 -10.0 %	203-602-3	R10

2084-18-6	2-Butanethiol, 3-Methyl-	1.0 -10.0 %	NA	218-223-9	No phrases apply.
				NA	Flam. Liq. 2: H225
138-86-3	Dipentene	< 0.5 %		205-341-0	Xi; N; R10-38-43-50/53
				601-029-00-7	Flam. Liq. 3: H226
					Skin Corr. 2: H315
					Skin Sens. 1: H317
					Aquatic (A) 1: H400
					Aquatic (C) 1: H410

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. Get medical aid if cough or other symptoms appear.

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. Get medical aid if irritation develops or persists.

In Case of Eye Contact: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical aid. Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Flush eyes with water as a precaution. If irritation develops, get medical aid.

In Case of Ingestion: Never give anything by mouth to an unconscious person. Get medical aid. Wash mouth out with water. 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. Rinse mouth with water. Consult a physician.

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. Move out of dangerous area.

Section 5. Fire Fighting Measures

5.1 Suitable Extinguishing Media: Use water spray, dry chemical, carbon dioxide, or alcohol-resistant foam. Use water spray, dry chemical, carbon dioxide, or chemical 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 agent most appropriate to extinguish fire. For small (incipient) fires, use media such as "alcohol" foam, dry chemical, or carbon dioxide. For large fires, apply water from as far as possible. Use very large quantities (flooding) of water applied as a mist or spray; solid streams of water may be ineffective.

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.

Dusts at sufficient concentrations can form explosive mixtures with air. 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.

Further information.
Use water spray to cool unopened containers.

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. Vacuum or sweep up material and place into a suitable disposal container. Avoid generating dusty conditions. Do not let this chemical enter the environment. 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. Personal precautions.
Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
Environmental precautions.
Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

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. Use spark-proof tools and explosion proof equipment. Avoid breathing dust, mist, or vapor. Avoid contact with skin and eyes. Ground and bond containers when transferring material. 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. Avoid inhalation of vapor or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge. Use only with adequate ventilation.
- 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. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Store in cool place.

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)		

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TWA: 10 mg/m3 (Powder)

118-71-8	3-Hydroxy-2-methyl-4-pyrone
7452-79-1	Ethyl 2 - methylbutyrate
108-64-5	Ethyl isovalerate
2084-18-6	2-Butanethiol, 3-Methyl-
138-86-3	Dipentene

CAS #	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
57-55-6	Propylene glycol			
118-71-8	3-Hydroxy-2-methyl-4-pyrone			
7452-79-1	Ethyl 2 - methylbutyrate			
108-64-5	Ethyl isovalerate			
2084-18-6	2-Butanethiol, 3-Methyl-			
138-86-3	Dipentene			

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. Use explosion-proof ventilation equipment.

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. Wear chemical splash goggles. Face shield and safety glasses.

Protective Gloves: Wear appropriate protective gloves to prevent skin exposure. For prolonged or repeated contact use protective 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 conditions warrant respirator use. Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced. 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

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

Appearance and Odor: Clear Colorless.
Watermelon taste and aroma.

Melting Point:

Boiling Point:

Flash Pt:

Evaporation Rate:

Explosive Limits: LEL: UEL:

Vapor Pressure (vs. Air or mm Hg):

Vapor Density (vs. Air = 1):

Specific Gravity (Water = 1):

Solubility in Water:

Autoignition Pt:

9.2 Other Information

Percent Volatile:

Section 10. Stability and Reactivity

10.1 Reactivity:

10.2 Stability: Unstable [] Stable [X]

10.3 Conditions To Avoid - Hazardous Reactions: Vapors may form explosive mixture with air.

Hazardous Reactions:

Possibility of Hazardous Reactions: Will occur [] Will not occur [X]

10.4 Conditions To Avoid - Instability: Excess heat, moist air, Incompatible materials, ignition sources, Heat, flames and sparks.

10.5 Incompatibility - Materials To Avoid: Strong oxidizing agents, Strong reducing agents, Reducing agents.

10.6 Hazardous Decomposition Or Byproducts: Carbon monoxide, Carbon dioxide, irritating and toxic fumes and gases, formed under fire conditions. Carbon oxides, Sulphur oxides.

Section 11. Toxicological Information

11.1 Information on Toxicological Effects:	<p>Epidemiology: No data available. Teratogenicity: No data available. Reproductive Effects: Mutagenicity: Neurotoxicity: Other Studies: No information found. Teratogenicity: No information available. No information available. Acute toxicity. Respiratory or skin sensitization: Germ cell mutagenicity. Reproductive toxicity - no data available. Specific target organ toxicity -single exposure (Globally Harmonized System) Specific target organ toxicity -repeated exposure (Globally Harmonized System) Aspiration hazard.</p>
Irritation or Corrosion:	No data available.
Carcinogenicity/Other Information:	<p>CAS# 57-55-6: Not listed by ACGIH, IARC, NTP, or CA Prop 65. CAS# 118-71-8: 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# 108-64-5: Not listed by ACGIH, IARC, NTP, or CA Prop 65. Carcinogenicity.</p> <p>IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.</p> <p>ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.</p> <p>NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.</p> <p>OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA. CAS# 123-92-2: Not listed by ACGIH, IARC, NTP, or CA Prop 65.</p>
Carcinogenicity:	NTP? No IARC Monographs? No OSHA Regulated? No

Section 12. Ecological Information

12.1 Toxicity:	<p>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.</p> <p>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.</p> <p>Physical: No information available. Other: No information available. No information available. Other: Do not empty into drains.</p>
12.2 Persistence and Degradability:	No data available.
12.3 Bioaccumulative Potential:	No data available.
12.4 Mobility in Soil:	No data 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.

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging.
Dispose of as unused product.

Section 14. Transport Information

14.1 LAND TRANSPORT (US DOT):

DOT Proper Shipping Name: Dipentene. mixture.
DOT Hazard Class: 3 FLAMMABLE LIQUID
UN/NA Number: UN2052 **Packing Group:** III

14.1 LAND TRANSPORT (Canadian TDG):

TDG Shipping Name: Not Regulated. No information available. AMYL ACETATES.

14.1 LAND TRANSPORT (European ADR/RID):

ADR/RID Shipping Name:
UN Number: 2052 **Packing Group:** III
Hazard Class: 3 - FLAMMABLE LIQUID

14.3 AIR TRANSPORT (ICAO/IATA):

ICAO/IATA Shipping Name: Dipentene. mixture.

Section 15. Regulatory Information

European Community Hazard Symbol codes:

European Community Risk and Safety Phrases:

- R22 Harmful if swallowed.
- R36/37/38 Irritating to eyes, respiratory system and skin.
- R10 Flammable.
- R66 Repeated exposure may cause skin dryness or cracking
- S24/25 Avoid contact with skin and eyes.
- S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- S37/39 Wear suitable gloves and eye/face protection.
- S16 Keep away from sources of ignition.
- S33 Take precautionary measures against static discharges.
- 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.

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S28A After contact with skin, wash immediately with plenty of water.
S23 Do not breathe vapour.

Section 16. Other Information

Revision Date: 03/26/2014

**Additional Information About
This Product:**