

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:** 00033
Product Name: Apple Candy Flavor
Trade Name: Apple Candy 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 3
- 2.1.2 Classification according to Directive 1999/45/EC:**
Xn: Harmful
Risk Phrases: R10, R66, R21/22, 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: Warning

GHS Hazard Phrases:

H226 - Flammable liquid and vapor.
EUH066 - Repeated exposure may cause skin dryness or cracking.

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.
P273 - Avoid release to the environment.

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 Effects and Symptoms:

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. May be harmful if inhaled. 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. Causes respiratory tract irritation. May cause irritation of the mucous membranes. Inhalation at high concentrations may cause CNS depression and asphyxiation. Material may be irritating to mucous membranes and upper respiratory tract. 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. Material is irritating to mucous membranes and upper respiratory tract.

2.3.2 Skin Contact: 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) 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. Causes skin irritation. Skin Absorption: May be harmful if absorbed through the skin. May cause irritation and dermatitis. May cause cyanosis of the extremities. Skin Std Draize tests in RTECS include data with humans, rats, and guinea pigs. Man Skin 16 mg/48H mild; Rabbit Skin 100 mg/24H severe; Guinea pig Skin 100 mg/24H moderate. Causes skin irritation.

Skin Absorption: Readily absorbed through skin. Harmful if absorbed through the skin.

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

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.
123-92-2	Iso-Amyl acetate	>=10.0 %	204-662-3 607-130-00-2	R10-66 Flam. Liq. 3: H226
659-70-1	3 - Methylbutyl isovalerate	1.0 -10.0 %	211-536-1 NA	No phrases apply. Aquatic (C) 2: H411
106-27-4	Isoamyl butyrate	1.0 -10.0 %	203-380-8	No phrases apply.

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142-92-7	Hexyl acetate	1.0 -10.0 %	NA	No data available.
			205-572-7	R10
			NA	No data available.
7452-79-1	Ethyl 2 - methylbutyrate	1.0 -10.0 %	231-225-4	R10
			NA	No data available.
105-87-3	Geranyl acetate	1.0 -10.0 %	203-341-5	N; R50/53
			NA	No data available.
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. If breathing is difficult, give oxygen. Get medical aid. Remove from exposure and move to fresh air immediately. Get medical aid if cough or other symptoms appear. If breathed in, move person into fresh air. Get medical aid immediately.

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. Get medical aid if irritation develops or persists. Wash off with soap and plenty of water. Consult a physician. Get medical aid. In case of skin contact, flush with copious amounts of water for at least 15 minutes. Call a physician.

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. If irritation develops, get medical aid. Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Get medical aid immediately. In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician. In case of contact, immediately flush eyes with copious amounts of water for at least 15 minutes. Flush eyes with water as a precaution.

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

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. 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. Use water spray to cool fire-exposed containers. Water may be ineffective. For large fires, use water spray, fog, or alcohol-resistant foam. Do NOT use straight streams of water. Suitable: 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. Use water spray, dry chemical, carbon dioxide, or appropriate foam.
- 5.2 Flammable Properties and Hazards:** EXPLOSION HAZARDS.
Vapor may travel considerable distance to source of ignition and flash back. Container explosion may occur under fire conditions. Forms explosive mixtures in air.
- Flash Pt:** > 150.00 F (65.6 C)
- 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. 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. Containers may explode in the heat of a fire. Wear self contained breathing apparatus for fire fighting if necessary. Use water spray to keep fire-exposed containers cool. Flammable liquid and vapor. Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Specific Hazard(s): Flammable Liquid. Water may be ineffective. Material is lighter than water and a fire may be spread by the use of water. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas. Containers may explode when heated. Vapor may travel considerable distance to source of ignition and flash back. Emits toxic fumes under fire conditions.

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. Remove all sources of ignition. Use a spark-proof tool. Do not let this chemical enter the environment. Personal precautions. Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Environmental precautions. Do not let product enter drains. Methods for cleaning up. Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal. Absorb spill using an absorbent, non-combustible material such as earth, sand, or vermiculite. Do not use combustible materials such as sawdust. A vapor suppressing foam may be used to reduce vapors. PROCEDURE TO BE FOLLOWED IN CASE OF LEAK OR SPILL. Evacuate area. Shut off all sources of ignition. Use nonsparking tools. PROCEDURE(S) OF PERSONAL PRECAUTION(S) Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves. Cover with dry-lime, sand, or soda ash. Place in covered containers using non-sparking tools and transport outdoors. Ventilate area and wash spill site after material pickup is

complete. Avoid runoff into storm sewers and ditches which lead to waterways. Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves.

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. Use only with adequate ventilation. Keep away from heat, sparks and flame. Avoid contact with skin and eyes. 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 in a well-ventilated area. Ground and bond containers when transferring material. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames. User Exposure: Do not breathe vapor. Avoid breathing vapor.
- 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 sources of ignition. Store in a cool, dry place. Keep container tightly closed in a dry and well-ventilated place. Flammables-area. Suitable: Keep container closed. Keep away from heat, sparks, and open flame.

SPECIAL REQUIREMENTS:

Light sensitive. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

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.
123-92-2	Iso-Amyl acetate	TWA: 270 mg/m3 (50 ppm) STEL: 541 mg/m3 (100 ppm)	TWA: 270 mg/m3 (50 ppm) STEL: 540 mg/m3 (100 ppm)	TWA: 270 mg/m3 STEL: 540 mg/m3
659-70-1	3 - Methylbutyl isovalerate	No data.	No data.	No data.
106-27-4	Isoamyl butyrate	No data.	No data.	No data.
142-92-7	Hexyl acetate	No data.	No data.	No data.
7452-79-1	Ethyl 2 - methylbutyrate	No data.	No data.	No data.
105-87-3	Geranyl acetate	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.
CAS #	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
57-55-6	Propylene glycol	No data.	No data.	No data.
123-92-2	Iso-Amyl acetate	PEL: 100 ppm	TLV: 50 ppm STEL: 100 ppm	No data.
659-70-1	3 - Methylbutyl isovalerate	No data.	No data.	No data.
106-27-4	Isoamyl butyrate	No data.	No data.	No data.
142-92-7	Hexyl acetate	No data.	No data.	No data.
7452-79-1	Ethyl 2 - methylbutyrate	No data.	No data.	No data.

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105-87-3	Geranyl acetate	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. Use explosion-proof ventilation equipment. Use adequate general or local explosion-proof ventilation to keep airborne levels to acceptable levels. Safety shower and eye bath. Use nonsparking tools. Mechanical exhaust required.

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 with side-shields conforming to EN166. Chemical safety goggles.

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

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. 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). 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. Hand: Compatible chemical-resistant gloves. is not required.

Work/Hygienic/Maintenance Practices: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. Wash thoroughly after handling. Wash contaminated clothing before reuse. General industrial hygiene practice.

Section 9. Physical and Chemical Properties

9.1 Information on Basic Physical and Chemical Properties

Physical States:	[] Gas	[X] Liquid	[] Solid
Appearance and Odor:	Transparent Colorless. Green Apple.		
Melting Point:	No data.		
Boiling Point:	No data.		
Flash Pt:	> 150.00 F (65.6 C)		
Evaporation Rate:	No data.		
Explosive Limits:	LEL: No data.	UEL: No data.	
Vapor Pressure (vs. Air or mm Hg):	No data.		
Vapor Density (vs. Air = 1):	No data.		

Specific Gravity (Water = 1): No data.
Solubility in Water: No data.
Autoignition Pt: 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.
10.5 Incompatibility - Materials To Avoid: Strong oxidizing agents, Strong acids, Reducing agents, Strong oxidizing agents.
10.6 Hazardous Decomposition Or Byproducts: Carbon monoxide, Carbon dioxide, formed under fire conditions. Carbon oxides, irritating and toxic fumes and gases.

Section 11. Toxicological Information

11.1 Information on Toxicological Effects: Epidemiology: No information available.
Teratogenicity: No information available.
Reproductive Effects: Mutagenicity: Neurotoxicity: Other Studies: No information found.
Mutagenic effects have occurred in experimental animals.
Acute toxicity. No data available.

Irritation or Corrosion: Skin - rabbit - No data available.

Sensitization: No data available.

Chronic Toxicological Effects: 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.
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.

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.
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.

Carcinogenicity/Other Information: CAS# 57-55-6: Not listed by ACGIH, IARC, NTP, or CA Prop 65. CAS# 123-92-2: Not listed by ACGIH, IARC, NTP, or CA Prop 65. CAS# 106-27-4: 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# 105-87-3: 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.
- Other: Do not empty into drains. 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.
- 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.
- Dispose of as unused product. APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION. Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable.

Section 14. Transport Information

- GHS Classification:** Flammable Liquids, Category 3 - Warning! Flammable liquid and vapor
- 14.1 LAND TRANSPORT (US DOT):**
- DOT Proper Shipping Name:** Not Regulated. AMYL ACETATES. AMYL BUTYRATES. FLAMMABLE LIQUIDS, N.O.S.
- DOT Hazard Class:**
- UN/NA Number:**
- 14.1 LAND TRANSPORT (Canadian TDG):**
- TDG Shipping Name:** Not Regulated. AMYL ACETATES. No information available.
- 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: UN Number: 1988 Hazard Class: 3 Packing Group: II.

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
123-92-2	Iso-Amyl acetate	No	Yes 5000 LB	No
659-70-1	3 - Methylbutyl isovalerate	No	No	No
106-27-4	Isoamyl butyrate	No	No	No
142-92-7	Hexyl acetate	No	No	No
7452-79-1	Ethyl 2 - methylbutyrate	No	No	No
105-87-3	Geranyl acetate	No	No	No
64-17-5	Ethyl alcohol	No	No	No

European Community Hazard Symbol codes:

European Community Risk and Safety Phrases:

R10	Flammable.
R66	Repeated exposure may cause skin dryness or cracking
R21/22	Harmful in contact with skin and if swallowed.
R36/37/38	Irritating to eyes, respiratory system and skin.
S24/25	Avoid contact with skin and eyes.
S23	Do not breathe vapour.
S16	Keep away from sources of ignition.
S33	Take precautionary measures against static discharges.
S37	Wear suitable gloves.
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.
S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S36	Wear suitable protective clothing.

Section 16. Other Information

Revision Date: 03/21/2014

Additional Information About This Product: No data available.

This Product: