SAFETY DATA SHEET
Pizza Flavor

Printed: 03/31/2014
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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: 00178
Product Name: Pizza Flavor
Trade Name: Pizza 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]:
Skin Corrosion/Irritation, Category 1B
Flammable Liquids, Category 3
Skin Sensitization, Category 1
Aquatic Toxicity (Chronic), Category 4

2.1.2 Classification according to Directive 1999/45/EC:
C: Corrosive
Xn: Harmful
Risk Phrases: R21/22, R34, R36/38
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: **Danger**

GHS Hazard Phrases:
H314 - Causes severe skin burns and eye damage.
H226 - Flammable liquid and vapor.
H317 - May cause an allergic skin reaction.
H413 - May cause long lasting harmful effects to aquatic life.

GHS Precaution Phrases:
P260 - Do not breathe dust/fume/gas/mist/vapours/spray.
P264 - Wash hands thoroughly after handling.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P233 - Keep container tightly closed.
P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
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.
P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.
P272 - Contaminated work clothing should not be allowed out of the workplace.
P273 - Avoid release to the environment.

GHS Response Phrases:

P303+361+353 - IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.
P363 - Wash contaminated clothing before reuse.
P305+351+338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P301+330+331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P304+340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P310 - Immediately call a POISON CENTER/doctor/....
P321 - Specific treatment see ... on this label.
P370+378 - In case of fire, use ... to extinguish.
P302+352 - IF ON SKIN: Wash with plenty of soap and water.
P333+313 - If skin irritation or rash occurs, seek medical advice/attention.

GHS Storage and Disposal Phrases:
P405 - Store locked up.
P501 - Dispose of contents/container to ....
P403+235 - Store in cool/well-ventilated place.

2.2.2 Labeling according to Directive 1999/45/EC:


C **Xn**

2.3 Adverse Human Health Effects and Symptoms: Adverse reproductive effects have been reported in animals.

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. Laboratory experiments have shown mutagenic effects.

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 cause respiratory tract irritation. May be harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract. Causes chemical burns to the respiratory tract. Inhalation of high concentrations may cause central nervous system effects characterized by nausea, headache, dizziness, unconsciousness and coma.

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) Causes burns. Skin Absorption: May be harmful if absorbed through the skin. Harmful if absorbed through the skin. Causes skin burns. Causes skin irritation.

2.3.3 Eye Contact: May cause slight transient injury. Causes burns. Causes eye burns. 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. May cause irritation of the digestive tract. Harmful if swallowed. May cause severe and permanent damage to the digestive tract. Causes gastrointestinal tract burns. Causes burns. May cause central nervous system depression, characterized by

excitement, followed by headache, dizziness, drowsiness, and nausea. Advanced stages may cause collapse, unconsciousness, coma and possible death due to respiratory failure. Causes gastrointestinal tract irritation.

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.
102-76-1	Triacetin	1.0 -10.0 %	203-051-9 NA	No phrases apply.
499-75-2	Phenol, 2-Methyl-5-(1-methylethyl)-	1.0 -10.0 %	207-889-6 NA	Xn;N;C; R22-43-50/53-34
107-92-6	Butyric acid	1.0 -10.0 %	203-532-3 607-135-00-X	C; R34 Skin Corr. 1B: H314
8007-46-3	Thyme, oil	< 1.0 %	NA NA	No phrases apply. Flam. Liq. 3: H226 Skin Corr. 2: H315 Skin Sens. 1: H317 Aquatic (C) 4: H413
64-17-5	Ethyl alcohol	1.0 -10.0 %	200-578-6 603-002-00-5	F; R11 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. Get medical aid immediately. Do NOT use mouth-to-mouth resuscitation. If breathing has ceased apply artificial respiration using oxygen and a suitable mechanical device such as a bag and a mask. If breathed in, move person into fresh air.

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. In case of skin contact, flush with copious amounts of water for at least 15 minutes. Call a physician. Get medical aid immediately. Destroy contaminated shoes. Take off contaminated clothing and shoes immediately. 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. If irritation develo ps, get medical aid. 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. Get medical aid immediately. Do NOT allow victim to rub eyes or keep eyes closed. Extensive irrigation with water is required (at least 30 minutes). Continue rinsing eyes during transport to hospital. 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. Get medical

aid if irritation or symptoms occur. If swallowed, wash out mouth with water provided person is conscious. Call a physician immediately. 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.

4.2 Important Symptoms and Effects, Both Acute and Delayed: Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. Inhalation may result in spasm, inflammation and edema of the larynxand bronchi, chemical pneumonitis, and pulmonary edema. Symptoms of exposure may include burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea, and vomiting. spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea.

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. Suitable: In case of fire, use water, dry chemical, chemical foam, or alcohol-resistant foam. Use water spray to cool fire-exposed containers. Use foam, dry chemical, or carbon dioxide. Water spray may cause frothing. Cool containers with flooding quantities of water until well after fire is out.

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. Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Specific Hazard(s): Use water spray to keep fire-exposed containers cool. Combustible liquid. Containers may explode when heated. Wear self contained breathing apparatus for fire fighting if necessary. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas. Containers may explode if exposed to fire.

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. Do not let this chemical enter the environment. PROCEDURE TO BE FOLLOWED IN CASE OF LEAK OR SPILL. Evacuate area. PROCEDURE(S) OF PERSONAL PRECAUTION(S)
Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves. Methods for cleaning up.
Cover with dry lime or soda ash, pick up, keep in a closed container, and hold for waste disposal. Use water spray to dilute spill to a non-flammable mixture. Avoid runoff into storm sewers and ditches which lead to waterways. Use water spray to disperse the gas/vapor. Remove all sources of ignition. Use a spark-proof tool. Absorb spill with an

alkaline material such as soda ash or lime. Carefully scoop up and place into appropriate disposal container. Personal precautions.
Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.
Environmental precautions.
Do not let product enter drains.
Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

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. User Exposure: Do not breathe vapor. Do not get in eyes, on skin, on clothing. Use only in a well-ventilated area. Ground and bond containers when transferring material. Do not get in eyes, on skin, or on clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep away from heat, sparks and flame. Do not ingest or inhale. Discard contaminated shoes. 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. Wash clothing before reuse. Avoid breathing dust, mist, or 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. Store in a cool, dry place. Suitable: Keep away from heat, sparks and flame. Keep away from heat and flame. Keep away from sources of ignition. Do not store in direct sunlight. Keep container closed when not in use. Keep from contact with oxidizing materials. Keep container tightly closed in a dry and well-ventilated place. 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)		
102-76-1	Triacetin			
499-75-2	Phenol, 2-Methyl-5-(1-methylethyl)-			
107-92-6	Butyric acid			
8007-46-3	Thyme, oil			
64-17-5	Ethyl alcohol	TWA: 1920 mg/m3 (1000 ppm) STEL: ()	TWA: 1900 mg/m3 (1000 ppm) STEL: 9500 mg/m3 (5000 ppm)	

CAS #	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
57-55-6	Propylene glycol			
102-76-1	Triacetin			
499-75-2	Phenol, 2-Methyl-5-(1-methylethyl)-			
107-92-6	Butyric acid			
8007-46-3	Thyme, oil			
64-17-5	Ethyl alcohol	PEL: 1000 ppm	TLV: 1000 ppm	

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. Safety shower and eye bath. Use only in a chemical fume hood. Local exhaust may be necessary to control concentrations 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. Chemical safety goggles. Other: Faceshield (8-inch minimum). Wear chemical splash goggles. Tightly fitting safety goggles. Faceshield (8-inch minimum).

Protective Gloves: Wear appropriate protective gloves to prevent skin exposure. 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 conditions warrant respirator use. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). 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. Hand: Compatible chemical-resistant gloves. 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.

Work/Hygienic/Maintenance Practices: Wash contaminated clothing before reuse. Discard contaminated shoes. Wash thoroughly after handling. 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: Transparent Colorless.
Pizza 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:**	
	Possibility of Hazardous Reactions:	Will occur [ ] Will not occur [X]
10.4	**Conditions To Avoid - Instability:**	Excess heat, moist air, Incompatible materials, ignition sources, alkaline materials.
10.5	**Incompatibility - Materials To Avoid:**	Strong oxidizing agents, Ammonia, Sulfuric acid, isocyanates, epichlorohydrin, aliphatic amines, caustics (e.g. ammonia, ammonium hydroxide, calcium hydroxide, potassium hydroxide, sodium hydroxide), 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 found. Teratogenicity: No information available. Reproductive Effects: Mutagenicity: Mutagenic effects have occurred in experimental animals. Neurotoxicity: No data available. Teratogenicity: No data available. See actual entry in RTECS for complete information. Other Studies:
	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# 102-76-1: Not listed by ACGIH, IARC, NTP, or CA Prop 65. CAS# 107-92-6: Not listed by ACGIH, IARC, NTP, or CA Prop 65. CAS# 60-12-8: 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. Avoid entering into waters or underground water. Contaminated waste water must be cleared before entering into sewerage.
Physical: No information found.
If released to soil, butyric acid is expected to be relatively mobile, although adsorption may occur by attractive interactions with active sites in the soil. Butyric acid is not expected to significantly volatilize from either moist or dry soil to the atmosphere. If released to water, butyric acid will exist predominately in the dissociated form under environmental conditions. Butyric acid is expected to biodegrade rapidly under both aerobic and anaerobic conditions.
Physical: BOD: 1.150 lb/lb, 5 days; 1.450 lb/lb, 20 days.
No information 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. APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION. Contact a licensed professional waste disposal service to dispose of this material. Observe all federal, state, and local environmental regulations. Product.
This combustible material may be burned 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: Butyric acid. mixture.
DOT Hazard Class: 8 CORROSIVE
UN/NA Number: UN2820 **Packing Group:** III

14.1 LAND TRANSPORT (Canadian TDG):

TDG Shipping Name: Not Regulated. ISOBUTYRIC ACID.

14.1 LAND TRANSPORT (European ADR/RID):

ADR/RID Shipping Name:
UN Number: 2820 **Packing Group:** III
Hazard Class: 8 - CORROSIVE

14.3 AIR TRANSPORT (ICAO/IATA):

ICAO/IATA Shipping Name: Butyric acid. mixture.

Section 15. Regulatory Information

European Community Hazard Symbol codes:

European Community Risk and Safety Phrases:

R21/22	Harmful in contact with skin and if swallowed.
R34	Causes burns.
R36/38	Irritating to eyes and skin.
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.
S36/37/39	Wear suitable protective clothing, gloves and eye/face protection.
S45	In case of accident or if you feel unwell, seek medical advice immediately (show the label whenever possible.)
S23	Do not breathe vapour.

Section 16. Other Information

Revision Date: 03/31/2014

Additional Information About This Product: