SAFETY DATA SHEET
Apple (Tart Granny Smith) Flavor

Printed: 01/27/2016
Revision: 03/18/2014

1. Product and Company Identification

Product Code: 343135
Product Name: Apple (Tart Granny Smith) Flavor
Trade Name: Apple (Tart Granny Smith) Flavor

Company Name: Perfumer's Apprentice
170 Technology Circle
Scotts Valley, CA 95066
Phone Number: (831)316-7137
Web site address: Perfumersapprentice.com
Emergency Contact: Chem-Tel Phone (800)255-3924

2. Hazards Identification

Skin Corrosion/Irritation, Category 3
Flammable Liquids, Category 3
Skin Sensitization, Category 1

GHS Signal Word: **Warning**

GHS Hazard Phrases:
H226: Flammable liquid and vapor.
H316: Causes mild skin irritation.
H317: May cause an allergic skin reaction.

GHS Precaution Phrases:
P210: Keep away from {heat/sparks/open flames/hot surfaces}. - No smoking.
P233: Keep container tightly closed.
P240: Ground/bond container and receiving equipment.
P241: Use explosion-proof electrical/ventilating/lighting/{.../} equipment.
P242: Use only non-sparking tools.
P243: Take precautionary measures against static discharge.
P261: Avoid breathing {dust/fume/gas/mist/vapors/spray}.
P272: Contaminated work clothing should not be allowed out of the workplace.
P280: Wear {protective gloves/protective clothing/eye protection/face protection}.

GHS Response Phrases:
P302+352: IF ON SKIN: Wash with plenty of soap and water.
P303+361+353: IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.
P321: Specific treatment {see ... on this label}.
P332+313: If skin irritation occurs, get medical advice/attention.
P333+313: If skin irritation or rash occurs, seek medical advice/attention.
P362+364: Take off contaminated clothing and wash it before reuse.

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

Potential Health Effects (Acute and Chronic): No data available.

Inhalation: Low hazard for normal industrial handling. Inhalation of a mist of this material may cause respiratory tract irritation.

Skin Contact: May be absorbed through damaged or abraded skin in harmful amounts.

Eye Contact: May cause eye irritation.

Ingestion: May be harmful if swallowed.

3. Composition/Information on Ingredients

CAS #	Hazardous Components (Chemical Name)	Concentration
57-55-6	Propylene glycol	39.0 -49.0 %
64-17-5	Ethyl alcohol	17.0 -23.0 %
8007-80-5	Oils, cassia	< 1.0 %
8008-45-5	Oil, nutmeg	< 0.5 %
68916-89-2	Oils, lemon, psoralen-free	< 0.5 %
513-86-0	Acetyl methyl carbinol	1.0 -3.0 %
77-92-9	Citric acid	1.0 -3.0 %
7732-18-5	Water	1.0 -3.0 %
123-92-2	Iso-Amyl acetate	< 6.0 %
659-70-1	3 - Methylbutyl isovalerate	0.5 -1.5 %
66-25-1	Hexanal	0.5 -1.5 %
110-19-0	Iso-Butyl acetate	< 2.0 %
142-92-7	Hexyl acetate	1.0 -5.0 %
141-78-6	Acetic acid, ethyl ester	5.0 -1.5 %
7452-79-1	Ethyl 2 - methylbutyrate	1.0 -5.0 %

4. First Aid Measures

Emergency and First Aid Procedures: No data available.

In Case of Inhalation: If inhaled, remove to fresh air.

In Case of Skin Contact: In case of contact, flush skin with plenty of water.

In Case of Eye Contact: In case of contact, immediately flush eyes with plenty of water for a t least 15 minutes.

In Case of Ingestion: Clean mouth with water and drink afterwards plenty of water.

Signs and Symptoms Of Exposure: To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Note to Physician: Treat symptomatically.

5. Fire Fighting Measures

Flash Pt: 155.00 F

Explosive Limits: LEL: No data. UEL: No data.

Autoignition Pt: No data.

Suitable Extinguishing Media: Use water spray, dry chemical, carbon dioxide, or alcohol-resistant foam.

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.

Flammable Properties and Hazards: No data available.

6. Accidental Release Measures

Protective Precautions, Protective Equipment and Emergency Procedures: Ensure adequate ventilation.

Environmental Precautions: Prevent entry into waterways, sewers, basements or confined areas.

Steps To Be Taken In Case Material Is Released Or Spilled: Dike to collect large liquid spills.

7. Handling and Storage

Precautions To Be Taken in Handling: Wash thoroughly after handling.

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.

8. Exposure Controls/Personal Protection

CAS #	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
57-55-6	Propylene glycol	No data.	No data.	No data.
64-17-5	Ethyl alcohol	PEL: 1000 ppm	TLV: 1000 ppm	No data.
8007-80-5	Oils, cassia	No data.	No data.	No data.
8008-45-5	Oil, nutmeg	No data.	No data.	No data.
68916-89-2	Oils, lemon, psoralen-free	No data.	No data.	No data.
513-86-0	Acetyl methyl carbinol	No data.	No data.	No data.
77-92-9	Citric acid	No data.	No data.	No data.
7732-18-5	Water	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.
66-25-1	Hexanal	No data.	No data.	No data.
110-19-0	Iso-Butyl acetate	PEL: 150 ppm	TLV: 150 ppm	No data.
142-92-7	Hexyl acetate	No data.	No data.	No data.
141-78-6	Acetic acid, ethyl ester	PEL: 400 ppm	TLV: 400 ppm	No data.
7452-79-1	Ethyl 2 - methylbutyrate	No data.	No data.	No data.

Respiratory Equipment (Specify Type): If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Eye Protection: Safety glasses

Protective Gloves: No data available.

Other Protective Clothing: Wear suitable protective clothing.

Engineering Controls (Ventilation etc.): Showers
Eyewash stations
Ventilation systems

Work/Hygienic/Maintenance Practices: Wash thoroughly after handling.

9. Physical and Chemical Properties

Physical States:	[ ] Gas [X] Liquid [ ] Solid
Appearance and Odor:	Slightly Cloudy Yellow Apple Pie taste and aroma
Melting Point:	No data.
Boiling Point:	No data.
Autoignition Pt:	No data.
Flash Pt:	155.00 F
Explosive Limits:	LEL: No data. UEL: No data.
Specific Gravity (Water = 1):	0.96 at 25.0 C
Vapor Pressure (vs. Air or mm Hg):	No data.
Vapor Density (vs. Air = 1):	No data.
Evaporation Rate:	No data.
Solubility in Water:	No data.
Percent Volatile:	No data.

10. Stability and Reactivity

Stability:	Unstable [ ] Stable [X]
Conditions To Avoid - Instability:	Excess heat, moist air.
Incompatibility - Materials To Avoid:	Strong bases, Strong oxidizing agents.
Hazardous Decomposition Or Byproducts:	Carbon monoxide, Carbon dioxide, Aldehydes.
Possibility of Hazardous Reactions:	Will occur [ ] Will not occur [X]
Conditions To Avoid - Hazardous Reactions:	No data available.

11. Toxicological Information

Toxicological Information: This mixture has not been subjected to toxicological testing but has been blended from materials with established toxicological bibliographies. In view of the difficulty of using current standard toxicological evaluation techniques to predict potential hazards to susceptible individuals or arising from unforeseeable potentiation, this preparation should be considererd and handled as if it displayed health hazards and consequently treated with all possible precaution.

Sensitization: No data available.

No data available.

No data available.

Chronic Toxicological Effects: Prolonged or repeated ingestion may cause damage to kidneys, liver, lungs, digestive tract.

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

12. Ecological Information

General Ecological Information: This mixture as a whole has not been subjected to ecotoxicological testing. In view of the difficulty of using current standard ecotoxicological evaluation techniques to predict the impact of particular modes of release on vulnerable or localized parts of the ecosystem, this preparation should be considered and handled as if it displayed potential environmental hazards, and treated in consequence with all possible precaution.

13. Disposal Considerations

Waste Disposal Method: This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

14. Transport Information

GHS Classification: Skin Corrosion/Irritation, Category 3 - Warning! Causes mild skin irritation
Flammable Liquids, Category 3 - Warning! Flammable liquid and vapor
Skin Sensitization, Category 1 - Warning! May cause an allergic skin reaction

LAND TRANSPORT (US DOT):

DOT Proper Shipping Name: Extracts , Flavoring, Liquid.
DOT Hazard Class: 3 FLAMMABLE LIQUID
UN/NA Number: 1197 **Packing Group:** II

LAND TRANSPORT (Canadian TDG):

TDG Shipping Name: Extracts , Flavoring, Liquid.

LAND TRANSPORT (European ADR/RID):

ADR/RID Shipping Name: Extracts , Flavoring, Liquid.
UN Number: 1197 **Packing Group:** II
Hazard Class: 3 - FLAMMABLE LIQUID

MARINE TRANSPORT (IMDG/IMO):

IMDG/IMO Shipping Name: Extracts , Flavoring, Liquid.

AIR TRANSPORT (ICAO/IATA):

ICAO/IATA Shipping Name: Extracts , Flavoring, Liquid.

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
64-17-5	Ethyl alcohol	No	No	No
8007-80-5	Oils, cassia	No	No	No
8008-45-5	Oil, nutmeg	No	No	No
68916-89-2	Oils, lemon, psoralen-free	No	No	No
513-86-0	Acetyl methyl carbinol	No	No	No
77-92-9	Citric acid	No	No	No
7732-18-5	Water	No	No	No
123-92-2	Iso-Amyl acetate	No	Yes 5000 LB	No
659-70-1	3 - Methylbutyl isovalerate	No	No	No
66-25-1	Hexanal	No	No	No
110-19-0	Iso-Butyl acetate	No	Yes 5000 LB	No
142-92-7	Hexyl acetate	No	No	No
141-78-6	Acetic acid, ethyl ester	No	Yes 5000 LB	No
7452-79-1	Ethyl 2 - methylbutyrate	No	No	No

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

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

CAS #	Hazardous Components (Chemical Name)	Other US EPA or State Lists
57-55-6	Propylene glycol	
64-17-5	Ethyl alcohol	
8007-80-5	Oils, cassia	
8008-45-5	Oil, nutmeg	
68916-89-2	Oils, lemon, psoralen-free	
513-86-0	Acetyl methyl carbinol	
77-92-9	Citric acid	
7732-18-5	Water	
123-92-2	Iso-Amyl acetate	
659-70-1	3 - Methylbutyl isovalerate	
66-25-1	Hexanal	

110-19-0	Iso-Butyl acetate
142-92-7	Hexyl acetate
141-78-6	Acetic acid, ethyl ester
7452-79-1	Ethyl 2 - methylbutyrate

CAS #	Hazardous Components (Chemical Name)	International Regulatory Lists
57-55-6	Propylene glycol	REACH: (R), (P)
64-17-5	Ethyl alcohol	REACH: (R), (P)
8007-80-5	Oils, cassia	REACH: (P)
8008-45-5	Oil, nutmeg	REACH: (R), (P)
68916-89-2	Oils, lemon, psoralen-free	REACH: (P)
513-86-0	Acetyl methyl carbinol	REACH: (P)
77-92-9	Citric acid	REACH: (R), (P)
7732-18-5	Water	REACH: (P)
123-92-2	Iso-Amyl acetate	REACH: (R), (P)
659-70-1	3 - Methylbutyl isovalerate	REACH: (P)
66-25-1	Hexanal	REACH: (R), (P)
110-19-0	Iso-Butyl acetate	REACH: (R), (P)
142-92-7	Hexyl acetate	REACH: (R), (P)
141-78-6	Acetic acid, ethyl ester	REACH: (R), (P)
7452-79-1	Ethyl 2 - methylbutyrate	REACH: (R), (P)

16. Other Information

Revision Date: 03/18/2014

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 .