

# SAFETY DATA SHEET

In accordance with REACH Regulation EC No.1907/2006

**Product:** Pear Flavor 332963

**Version:** 2

## Section 1. Identification of the substance or the mixture and of the supplier

### 1.1 Product Identifier

**Product identifier:** Pear Flavor 332963(Contains:4-Hydroxy-2,5-dimethyl-3(2H)-furanone)

**Other identifiers:** None

### 1.2 Relevant identified uses of the substance of mixture and uses advised against

**Product uses:** Flavours

### 1.3 Details of the supplier of the safety data sheet

**Company name:** Perfumer's Apprentice

**Company address:** 170 Technology Circle  
Scotts Valley  
CA 95066  
USA

**Contact:** Elisabeth Hanson

**E-Mail address:** regulatory@perfumersapprentice.com

**Company phone:** (831)316-7137

### 1.4 Emergency telephone number

**Emergency phone:** ChemTel:1(800)255-3924, 01(813)248-0585 MIS6760377

## Section 2. Hazards identification

### 2.1 Classification of the substance or mixture

#### **Classification under Regulation (EC) No 1272/2008**

**Class and category of danger:** Flammable Liquid, Hazard Category 3  
Carcinogenicity Category 2  
H226, Flammable liquid and vapour.  
H351, Suspected of causing cancer (exposure route).

### 2.2 Label elements

#### **Classification under Regulation (EC) No 1272/2008**

**Signal word:** Warning

**Hazard statements:** H226, Flammable liquid and vapour.  
H351, Suspected of causing cancer (exposure route).

**Supplemental Information:** None

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**Precautionary statements:**

P210, Keep away from heat, sparks, open flames and hot surfaces. - No smoking.  
P233, Keep container tightly closed.  
P240, Ground/bond container and receiving equipment.  
P241, Use explosion-proof electrical, ventilating and lighting equipment.  
P242, Use only non-sparking tools.  
P243, Take precautionary measures against static discharge.  
P280, Wear protective gloves/eye protection/face protection.  
P303/361/353, IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.  
P308/313, IF exposed or concerned: Get medical advice/attention.  
P370/378, In case of fire: Use carbon dioxide, dry chemical, foam for extinction.  
P403/235, Store in a well-ventilated place. Keep cool.  
P405, Store locked up.  
P501, Dispose of contents/container to approved disposal site, in accordance with local regulations.  
P202, Do not handle until all safety precautions have been read and understood.

**Pictograms:**



### 2.3 Other hazards

**Other hazards:** None

## Section 3. Composition / information on ingredients

### 3.2 Mixtures

**Contains:**

Name	CAS	EC	REACH Registration No.	%	Classification for (CLP) 1272/2008	Specific Conc. Limits, M-factors and ATEs
Ethyl acetate	141-78-6	205-500-4		1-5%	Flam. Liq. 2-Eye Irrit. 2-STOT SE 3;H225-H319-H336,EUH066	
Benzyl benzoate	120-51-4	204-402-9		<1%	Acute Tox. 4-Aquatic Acute 1-Aquatic Chronic 2;H302-H400-H411,-	dermal: ATE = 4000 mg/kg bw-oral: ATE = 1500 mg/kg bw
Butyric acid	107-92-6	203-532-3		<1%	Acute Tox. 4-Skin Corr. 1B-Eye Dam. 1;H302-H314,-	oral: ATE = 1630 mg/kg bw

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Acetaldehyde	75-07-0	200-836-8		<1%	Flam. Liq. 1-Flam. Liq. 2-Eye Irrit. 2-Carc. 2-STOT SE 3;H224-H225-H319-H335-H351,-	
4-Hydroxy-2,5-dimethyl-3(2H)-furanone	3658-77-3	222-908-8		<1%	Acute Tox. 4-Eye Dam. 1-Skin Sens. 1A;H302-H317-H318,-	oral: ATE = 2500 mg/kg bw

### Substances with Community workplace exposure limits:

Name	CAS	EC	REACH Registration No.	%	Classification for (CLP) 1272/2008	Specific Conc. Limits, M-factors and ATEs
Acetaldehyde	75-07-0	200-836-8		<1%	Flam. Liq. 1-Flam. Liq. 2-Eye Irrit. 2-Carc. 2-STOT SE 3;H224-H225-H319-H335-H351,-	
Ethyl acetate	141-78-6	205-500-4		1-5%	Flam. Liq. 2-Eye Irrit. 2-STOT SE 3;H225-H319-H336,EUH066	
Isobutyl acetate	110-19-0	203-745-1		<1%	Flam. Liq. 2-STOT SE 3;H225-H336,EUH066	
Propylene glycol	57-55-6	200-338-0		70-80%	-,-,-	

### Substances that are endocrine disruptors according to Regulation (EU) 2017/2100 or Regulation (EU) 2018/605, greater than 0.1%:

Not Applicable

### Substances that are persistent, bioaccumulative and toxic or very persistent and very bioaccumulative, greater than 0.1%:

Not Applicable

## Section 4. First-aid measures

### 4.1 Description of first aid measures

- Inhalation:** Remove from exposure site to fresh air, keep at rest, and obtain medical attention.
- Eye exposure:** Flush immediately with water for at least 15 minutes. Contact physician if symptoms persist.
- Skin exposure:** IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.
- Ingestion:** Rinse mouth with water and obtain medical attention.

### 4.2 Most important symptoms and effects, both acute and delayed

Suspected of causing cancer (exposure route).

### 4.3 Indication of any immediate medical attention and special treatment needed

None expected, see Section 4.1 for further information.

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### Section 5: Firefighting measures

#### 5.1 Extinguishing media

Suitable media: Carbon dioxide, Dry chemical, Foam.

#### 5.2 Special hazards arising from the substance or mixture

In case of fire, may be liberated: Carbon monoxide, Unidentified organic compounds.

#### 5.3 Advice for fire fighters:

In case of insufficient ventilation, wear suitable respiratory equipment.

### Section 6. Accidental release measures

#### 6.1 Personal precautions, protective equipment and emergency procedures:

Avoid inhalation. Avoid contact with skin and eyes. See protective measures under Section 7 and 8.

#### 6.2 Environmental precautions:

Keep away from drains, surface and ground water, and soil.

#### 6.3 Methods and material for containment and cleaning up:

Remove ignition sources. Provide adequate ventilation. Avoid excessive inhalation of vapours. Contain spillage immediately by use of sand or inert powder. Dispose of according to local regulations.

#### 6.4 Reference to other sections:

Also refer to sections 8 and 13.

### Section 7. Handling and storage

#### 7.1 Precautions for safe handling:

Keep away from heat, sparks, open flames and hot surfaces. - No smoking.

#### 7.2 Conditions for safe storage, including any incompatibilities:

Ground/bond container and receiving equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

#### 7.3 Specific end use(s):

Flavours: Use in accordance with good manufacturing and industrial hygiene practices.

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### Section 8. Exposure controls/personal protection

#### 8.1 Control parameters

Workplace exposure limits:

Ingredient	CAS	EC	Description	Value
Acetaldehyde	75-07-0	200-836-8	UK WEL Long term ppm	20
			UK WEL Long term mgm3	37
			UK WEL Short term ppm	50
			UK WEL Short term mgm3	92
Ethyl acetate	141-78-6	205-500-4	UK WEL Long term ppm	200
			UK WEL Short term ppm	400
Isobutyl acetate	110-19-0	203-745-1	UK WEL Long term ppm	150
			UK WEL Long term mgm3	724
			UK WEL Short term ppm	187
			UK WEL Short term mgm3	903
Propylene glycol	57-55-6	200-338-0	UK WEL Long term ppm	150
			UK WEL Long term mgm3	474

#### 8.2 Exposure Controls

##### Eye / Skin Protection

Wear protective gloves/eye protection/face protection

##### Respiratory Protection

Ensure adequate and ongoing ventilation is maintained in order to prevent build up of excessive vapour and to ensure occupational exposure limits are adhered to. If appropriate, and depending on your patterns and volumes of use, the following engineering controls may be required as additional protective measures: a) Isolate mixing rooms and other areas where this material is used or openly handled. Maintain these areas under negative air pressure relative to the rest of the plant. b) Employ the use of Personal protective equipment - an approved, properly fitted respirator with organic vapour cartridges or canisters and particulate filters. c) Use local exhaust ventilation around open tanks and other open sources of potential exposures in order to avoid excessive inhalation, including places where this material is openly weighed or measured. In addition, use general dilution ventilation of the work area to eliminate or reduce

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possible worker exposures. d) Use closed systems for transferring and processing this material.

Also refer to Sections 2 and 7.

### Section 9. Physical and chemical properties

#### 9.1 Information on basic physical and chemical properties

<b>Physical State/Colour:</b>	Not determined
<b>Odour:</b>	Not determined
<b>Odour threshold:</b>	Not determined
<b>Melting point / freezing point:</b>	Not determined
<b>Boiling point or initial boiling point and boiling range:</b>	Not determined
<b>Flammability:</b>	Not determined
<b>Lower and upper explosion limit:</b>	Not determined
<b>Flash point:</b>	43.88 °C
<b>Auto-ignition temperature:</b>	Not determined
<b>Decomposition temperature:</b>	Not relevant
<b>pH:</b>	Not determined
<b>Kinematic viscosity:</b>	Not determined
<b>Solubility:</b>	Not determined
<b>Partition coefficient: n-octanol/water (log value):</b>	Not determined
<b>Vapour pressure:</b>	Not determined
<b>Density and/or relative density:</b>	Not determined
<b>Relative vapour density:</b>	Not determined
<b>Particle characteristics:</b>	Not determined

**9.2 Other information:** None available

### Section 10. Stability and reactivity

#### 10.1 Reactivity:

Presents no significant reactivity hazard, by itself or in contact with water.

#### 10.2 Chemical stability:

Good stability under normal storage conditions.

#### 10.3 Possibility of hazardous reactions:

Not expected under normal conditions of use.

#### 10.4 Conditions to avoid:

Avoid extreme heat.

#### 10.5 Incompatible materials:

Avoid contact with strong acids, alkalis or oxidising agents.

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### 10.6 Hazardous decomposition products:

Not expected.

## Section 11. Toxicological information

### 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

This mixture has not been tested as a whole for health effects. The health effects have been calculated using the methods outlined in Regulation (EC) No 1272/2008 (CLP).

<b>Acute Toxicity:</b>	Based on available data the classification criteria are not met.
Acute Toxicity Oral	>5000
Acute Toxicity Dermal	Not Applicable
Acute Toxicity Inhalation	Not Available
<b>Skin corrosion/irritation:</b>	Based on available data the classification criteria are not met.
<b>Serious eye damage/irritation:</b>	Based on available data the classification criteria are not met.
<b>Respiratory or skin sensitisation:</b>	Based on available data the classification criteria are not met.
<b>Germ cell mutagenicity:</b>	Based on available data the classification criteria are not met.
<b>Carcinogenicity:</b>	Carcinogenicity Category 2
<b>Reproductive toxicity:</b>	Based on available data the classification criteria are not met.
<b>STOT-single exposure:</b>	Based on available data the classification criteria are not met.
<b>STOT-repeated exposure:</b>	Based on available data the classification criteria are not met.
<b>Aspiration hazard:</b>	Based on available data the classification criteria are not met.

### Information about hazardous ingredients in the mixture

Not Applicable

Refer to Sections 2 and 3 for additional information.

### 11.2 Information on other hazards

Not Applicable

## Section 12. Ecological information

<b>12.1 Toxicity:</b>	Not available
<b>12.2 Persistence and degradability:</b>	Not available
<b>12.3 Bioaccumulative potential:</b>	Not available
<b>12.4 Mobility in soil:</b>	Not available

### 12.5 Results of PBT and vPvB assessment:

This substance does not meet the PBT/vPvB criteria of REACH, annex XIII.

<b>12.6 Endocrine disrupting properties:</b>	Not Applicable
<b>12.7 Other adverse effects:</b>	Not available

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### Section 13. Disposal considerations

**13.1 Waste treatment methods:**

Dispose of in accordance with local regulations. Avoid disposing into drainage systems and into the environment. Empty containers should be taken to an approved waste handling site for recycling or disposal.

### Section 14. Transport information

- 14.1 UN number:** This product has been reclassified as non-flammable in accordance with DOT CFR 49 {173.120(d)}.
- 14.2 UN Proper Shipping Name:** Not Applicable
- 14.3 Transport hazard class(es):** Not Applicable
- Sub Risk:** -
- 14.4. Packing Group:** Not Applicable
- 14.5 Environmental hazards:** Not environmentally hazardous for transport
- 14.6 Special precautions for user:** None additional
- 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:**  
Not applicable

### Section 15. Regulatory information

**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**  
None additional

**15.2 Chemical Safety Assessment**

A Chemical Safety Assessment has not been carried out for this product.

### Section 16. Other information

**Concentration % Limits:** SS 1=38.10%

**Total Fractional Values:** SS 1=2.63

**Key to revisions:**

- 14.2. UN proper shipping name
- Endocrine Disruptor Ingredient Details
- Information about hazardous ingredients in the mixture
- SECTION 3: Composition/information on ingredients
- Workplace exposure limits

**Key to abbreviations:**

Abbreviation	Meaning
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Acute Tox. 4	Acute Toxicity - Oral Category 4
Aquatic Acute 1	Hazardous to the Aquatic Environment - Acute Hazard Category 1
Aquatic Chronic 2	Hazardous to the Aquatic Environment - Long-term Hazard Category 2
Carc. 2	Carcinogenicity Category 2
EUH066	Repeated exposure may cause skin dryness or cracking.
Eye Dam. 1	Eye Damage / Irritation Category 1
Eye Irrit. 2	Eye Damage / Irritation Category 2
Flam. Liq. 1	Flammable Liquid, Hazard Category 1
Flam. Liq. 2	Flammable Liquid, Hazard Category 2
H224	Extremely flammable liquid and vapour.
H225	Highly flammable liquid and vapour.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H351	Suspected of causing cancer (exposure route).
H400	Very toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.
P202	Do not handle until all safety precautions have been read and understood.
P210	Keep away from heat, sparks, open flames and hot surfaces. - No smoking.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical, ventilating and lighting equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P260	Do not breathe vapour or dust.
P261	Avoid breathing vapour or dust.
P264	Wash hands and other contacted skin thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Wear protective gloves/eye protection/face protection.
P301/312	IF SWALLOWED: call a POISON CENTER or doctor/physician if you feel unwell.
P301/330/331	If swallowed: Rinse mouth. Do not induce vomiting.
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.
P304/340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305/351/338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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P308/313	IF exposed or concerned: Get medical advice/attention.
P310	Immediately call a POISON CENTER or doctor/physician.
P312	Call a POISON CENTRE or doctor/physician if you feel unwell.
P330	Rinse mouth.
P333/313	If skin irritation or rash occurs: Get medical advice/attention.
P337/313	If eye irritation persists: Get medical advice/attention.
P363	Wash contaminated clothing before reuse.
P370/378	In case of fire: Use carbon dioxide, dry chemical, foam for extinction.
P391	Collect spillage.
P403/233/235	Store in a well-ventilated place. Keep container tightly closed. Keep cool.
P405	Store locked up.
P501	Dispose of contents/container to approved disposal site, in accordance with local regulations.
STOT SE 3	Specific Target Organ Toxicity (Single Exposure) Category 3
STOT SE 3	Specific Target Organ Toxicity (Single Exposure) Category 3
Skin Corr. 1B	Skin Corrosion / Irritation Category 1B
Skin Sens. 1A	Sensitization - Skin Category 1A

The information in this safety data sheet is to the best of our knowledge true and accurate but all data, instructions, recommendations and/or suggestions are made without guarantee.