

PERFUMER'S APPRENTICE

Issue date: 09/29/2017

Version: 1 (07/21/2017)

SAFETY DATA SHEET

In accordance with 29 CFR 1910.1200

Product: Pineapple Concentrate 507923

Version: 1

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

1.1 Product Identifier

Product identifier: Pineapple Concentrate 507923

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: +1 (831) 346 7234

1.4 Emergency telephone number

Emergency phone: +1 (831) 346 7234

Section 2. Hazards identification

2.1 Classification of the substance or mixture

Class and category of

danger:

Flammable Liquid, Hazard Category 2

Acute Toxicity - Oral Category 4
Acute Toxicity - Dermal Category 3
Acute Toxicity - Inhalation Category 3
Skin Corrosion / Irritation Category 2
Eye Damage / Irritation Category 1
Sensitization - Skin Category 1

Specific Target Organ Toxicity (Single Exposure) Category 3 Specific Target Organ Toxicity (Repeated Exposure) Category 2

H225, Highly flammable liquid and vapour.

H302, Harmful if swallowed. H311, Toxic in contact with skin. H315, Causes skin irritation.

H317, May cause an allergic skin reaction.

H318, Causes serious eye damage.

H331, Toxic if inhaled.

H335, May cause respiratory irritation.



PERFUMER'S APPRENTICE

Issue date: 09/29/2017

Version: 1 (07/21/2017)

SAFETY DATA SHEET

In accordance with 29 CFR 1910.1200

Product: Pineapple Concentrate 507923

Version: 1

Class and category of

danger:

H373, May cause damage to organs (organs) through prolonged or repeated exposure

(exposure route).

2.2 Label elements

Signal word: Danger

Hazard statements: H225, Highly flammable liquid and vapour.

H302, Harmful if swallowed. H311, Toxic in contact with skin. H315, Causes skin irritation.

H317, May cause an allergic skin reaction. H318, Causes serious eye damage.

H331, Toxic if inhaled.

H335, May cause respiratory irritation.

H373, May cause damage to organs (organs) through prolonged or repeated exposure (exposure

route).

Precautionary statements:

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.

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.

P280, Wear protective gloves/eye protection/face protection.

P301/312, IF SWALLOWED: call a POISON CENTER or doctor/physician if you feel unwell.

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.

P310, Immediately call a POISON CENTER or doctor/physician.

P330, Rinse mouth.

P333/313, If skin irritation or rash occurs: Get medical advice/attention.

P362, Take off contaminated clothing and wash before reuse.

P370/378, In case of fire: Use carbon dioxide, dry chemical, foam for extinction.

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.





Version: 1 (07/21/2017)

SAFETY DATA SHEET

In accordance with 29 CFR 1910.1200

Product: Pineapple Concentrate 507923

Version: 1

Pictograms:



Other hazards: None

Section 3. Composition / information on ingredients

3.2 Mixtures

Contains:

| Name | CAS | EC | % | GHS Classification |
|-----------------------------|-----------|-----------|---------|---|
| Lactic acid | 50-21-5 | 200-018-0 | 20-<50% | SCI 2-EDI 1;H315-H318 |
| Allyl hexanoate | 123-68-2 | 204-642-4 | 10-<20% | FL 4-ATO 3-ATD 3-ATI 3;H227-H301- H311-H331 |
| Ethyl acetate | 141-78-6 | 205-500-4 | 10-<20% | FL 2-EDI 2A-STO-SE 3(NE);H225- H319-H336 |
| Acetic acid | 64-19-7 | 200-580-7 | 1-<5% | FL 3-SCI 1A-EDI 1;H226-H314 |
| 2-Heptanone | 110-43-0 | 203-767-1 | 1-<5% | FL 3-ATO 4-ATI 4-STO-SE 3(NE); H226-H302-H332-H336 |
| Allyl heptanoate | 142-19-8 | 205-527-1 | 1-<5% | FL 4-ATO 3-ATD 3-ATI 3;H227-H301- H311-H331 |
| Vanillin | 121-33-5 | 204-465-2 | 1-<5% | EDI 2A;H319 |
| Allyl cyclohexanepropionate | 2705-87-5 | 220-292-5 | 0.1-<1% | ATO 4-ATD 4-ATI 4-SS 1;H302-H312- H317-H332 |
| Geranyl acetate | 105-87-3 | 203-341-5 | 0.1-<1% | SCI 2-SS 1B;H315-H317 |

The exact percentage concentrations of components are being withheld as a trade secret.

Substances with Community workplace exposure limits, not listed above:

| Name | CAS | EC | % |
|---------------|----------|-----------|--------|
| 2-Heptanone | 110-43-0 | 203-767-1 | 1-5% |
| Ethyl acetate | 141-78-6 | 205-500-4 | 10-20% |

Section 4. First-aid measures

4.1 Description of first aid measures

IF SWALLOWED: call a POISON CENTER or doctor/physician if you feel unwell.

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

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.





Version: 1 (07/21/2017)

SAFETY DATA SHEET

In accordance with 29 CFR 1910.1200

Product: Pineapple Concentrate 507923

Version: 1

Immediately call a POISON CENTER or doctor/physician.

4.2 Most important symptoms and effects, both acute and delayed

Harmful if swallowed.

Toxic in contact with skin.

Causes skin irritation.

May cause an allergic skin reaction.

Causes serious eve damage.

Toxic if inhaled.

May cause respiratory irritation.

May cause damage to organs (organs) through prolonged or repeated exposure (exposure route).

4.3 Indication of any immediate medical attention and special treatment needed

None expected, see Section 4.1 for further information.

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.





Version: 1 (07/21/2017)

SAFETY DATA SHEET

In accordance with 29 CFR 1910.1200

Product: Pineapple Concentrate 507923

Version: 1

Section 7. Handling and storage

7.1 Precautions for safe handling:

Keep away from heat, sparks, open flames and hot surfaces. - No smoking. Do not eat, drink or smoke when using this product.

7.2 Conditions for safe storage, including any incompatibilities:

Store in a well-ventilated place. Keep container tightly closed. Keep cool. 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.

Section 8. Exposure controls/personal protection

8.1 Control parameters

Workplace exposure limits:

| Ingredient | CAS | EC | Description | ppm | mg/m³ | Reference |
|------------------------|----------|--|--|-----|-------|-----------|
| | 110 42 0 | 203-767- | Long-term exposure limit (8-hour TWA reference period) | - | - | - |
| 2-Heptanone | 110-43-0 | | Short-term exposure limit (15-minute reference period) | - | - | - |
| Ethyl acetate 141-78-6 | 205-500- | Long-term exposure limit (8-hour TWA reference period) | - | - | - | |
| | 141-78-0 | 4 | Short-term exposure limit (15-minute reference period) | - | - | - |

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

Also refer to Sections 2 and 7.





Version: 1 (07/21/2017)

SAFETY DATA SHEET

In accordance with 29 CFR 1910.1200

Product: Pineapple Concentrate 507923

Version: 1

Section 9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance:

Odour:

Not determined

Not determined

Not determined

Not determined

Not determined

Not determined

Flash point: < 23 °C

Vapour pressure:

Relative density:

Solubility(ies):

Not determined

Not determined

Not determined

Not determined

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.

10.6 Hazardous decomposition products:

Not expected.

Section 11. Toxicological information

11.1 Information on toxicological effects

This mixture has not been tested as a whole for health effects. The health effects have been calculated using the methods outlined in 29 CFR 1910.1200.

Harmful if swallowed.

Toxic in contact with skin.

Causes skin irritation.

May cause an allergic skin reaction.





Version: 1 (07/21/2017)

SAFETY DATA SHEET

In accordance with 29 CFR 1910.1200

Product: Pineapple Concentrate 507923

Version: 1

Causes serious eye damage.

Toxic if inhaled.

May cause respiratory irritation.

May cause damage to organs (organs) through prolonged or repeated exposure (exposure route).

Assumed Toxicity Value (LD50 or ATE) for Acute Oral Toxicity: 1380
Assumed Toxicity Value (LD50 or ATE) for Acute Dermal Toxicity: 1792
Assumed Toxicity Value (LC50 or ATE) for Acute Inhalation Toxicity: 16.2
Inhalation Route: Vapour

Information about hazardous ingredients in the mixture

| Ingredient | CAS | EC | LD50/ATE Oral | LD50/ATE Dermal | LC50/ATE Inhalation | LC50 Route |
|------------------|----------|-----------|---------------|--------------------|------------------------|------------|
| 2-Heptanone | 110-43-0 | 203-767-1 | 1600 | Not available | 11 | Vapour |
| Allyl heptanoate | 142-19-8 | 205-527-1 | 218 | 810 | 3 | Vapour |
| Allyl hexanoate | 123-68-2 | 204-642-4 | 300 | 300 | 3 | Vapour |

Refer to Sections 2 and 3 for additional information.

Section 12. Ecological information

12.1 Toxicity:

Toxic to aquatic life with long lasting effects.

12.2 Persistence and degradability:Not available

12.3 Bioaccumulative potential: Not available

12.4 Mobility in soil:Not available

12.5 Results of PBT and vPvB assessment:

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

12.6 Other adverse effects: Not available

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: UN1992

14.2 UN Proper Shipping Name: FLAMMABLE LIQUID, TOXIC, N.O.S. (Ethyl acetate, Allyl hexanoate)



PERFUMER'S APPRENTICE

Issue date: 09/29/2017

Version: 1 (07/21/2017)

SAFETY DATA SHEET

In accordance with 29 CFR 1910.1200

Product: Pineapple Concentrate 507923

Version: 1

14.3 Transport hazard class(es): 3

Sub Risk: 6.1

14.4. Packing Group:

14.5 Environmental hazards: This is an environmentally hazardous substance.

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: SCI 2=14.71% EDI 1=9.38% EDI 2=2.97% SS 1=20.00%

Total Fractional Values: SCI 2=6.80 EDI 1=10.67 EDI 2=33.70 SS 1=5.00

Key to revisions:

Not applicable

Key to abbreviations:

| Abbreviation | Meaning |
|--------------|--|
| ATD 3 | Acute Toxicity - Dermal Category 3 |
| ATD 4 | Acute Toxicity - Dermal Category 4 |
| ATI 3 | Acute Toxicity - Inhalation Category 3 |
| ATI 4 | Acute Toxicity - Inhalation Category 4 |
| ATO 3 | Acute Toxicity - Oral Category 3 |
| ATO 4 | Acute Toxicity - Oral Category 4 |
| EDI 1 | Eye Damage / Irritation Category 1 |
| EDI 2A | Eye Damage / Irritation Category 2A |
| FL 2 | Flammable Liquid, Hazard Category 2 |
| FL 3 | Flammable Liquid, Hazard Category 3 |
| FL 4 | Flammable Liquid, Hazard Category 4 |
| H225 | Highly flammable liquid and vapour. |
| H226 | Flammable liquid and vapour. |
| H227 | Combustible liquid. |
| H301 | Toxic if swallowed. |
| H302 | Harmful if swallowed. |





Version: 1 (07/21/2017)

SAFETY DATA SHEET

In accordance with 29 CFR 1910.1200

Product: Pineapple Concentrate 507923

Version: 1

| H311 | Toxic in contact with skin. |
|--------------|--|
| H312 | Harmful in contact with skin. |
| H314 | Causes severe skin burns and eye damage. |
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H318 | Causes serious eye damage. |
| H319 | Causes serious eye irritation. |
| H331 | Toxic if inhaled. |
| H332 | Harmful if inhaled. |
| H336 | May cause drowsiness or dizziness. |
| 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. |
| 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. |
| P280 | Wear protective gloves/eye protection/face protection. |
| P301/310 | IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. |
| 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. |
| P310 | Immediately call a POISON CENTER or doctor/physician. |
| P311 | Call a POISON CENTRE or doctor/physician. |
| P312 | Call a POISON CENTRE or doctor/physician if you feel unwell. |
| P330 | Rinse mouth. |
| P332/313 | If skin irritation occurs: Get medical advice/attention. |
| P333/313 | If skin irritation or rash occurs: Get medical advice/attention. |
| P337/313 | If eye irritation persists: Get medical advice/attention. |
| P361 | Remove/Take off immediately all contaminated clothing. |
| P362 | Take off contaminated clothing and wash before reuse. |
| P363 | Wash contaminated clothing before reuse. |
| P370/378 | In case of fire: Use carbon dioxide, dry chemical, foam for extinction. |
| P403/233/235 | Store in a well-ventilated place. Keep container tightly closed. Keep cool. |





Version: 1 (07/21/2017)

SAFETY DATA SHEET

In accordance with 29 CFR 1910.1200

Product: Pineapple Concentrate 507923

Version: 1

| 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. | |
| SCI 1A | Skin Corrosion / Irritation Category 1A | |
| SCI 2 | Skin Corrosion / Irritation Category 2 | |
| SS 1 | Sensitization - Skin Category 1 | |
| SS 1B | Sensitization - Skin Category 1B | |
| STO-SE 3(NE) | Specific Target Organ Toxicity (Single Exposure) Category 3 | |

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.