

SAFETY DATA SHEET

In accordance with REACH Regulation EC No.1907/2006

Product: Bitter Nut Extra Flavor 347052

Version: 5

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

1.1 Product Identifier

Product identifier: Bitter Nut Extra Flavor 347052(Contains:4-Hydroxy-2,5-dimethyl-3(2H)-furanone)

Other identifiers: None

1.2 Relevant identified uses of the substance or 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: Skin Corrosion / Irritation Category 2
Eye Damage / Irritation Category 2
Sensitization - Skin Category 1
H315, Causes skin irritation.
H317, May cause an allergic skin reaction.
H319, Causes serious eye irritation.

2.2 Label elements

Classification under Regulation (EC) No 1272/2008

Signal word: Warning

Hazard statements: H315, Causes skin irritation.
H317, May cause an allergic skin reaction.
H319, Causes serious eye irritation.

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Supplemental Information: EUH208, Contains Rhodinol. May produce an allergic reaction.

Precautionary statements:

P261, Avoid breathing vapour or dust.
P264, Wash hands and other contacted skin thoroughly after handling.
P272, Contaminated work clothing should not be allowed out of the workplace.
P280, Wear protective gloves/eye protection/face protection.
P302/352, IF ON SKIN: Wash with plenty of soap and water.
P305/351/338, IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P333/313, If skin irritation or rash occurs: Get medical advice/attention.
P337/313, If eye irritation persists: Get medical advice/attention.
P362, Take off contaminated clothing and wash before reuse.
P501, Dispose of contents/container to approved disposal site, in accordance with local regulations.

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
2,3,5,6-Tetramethylpyrazine	1124-11-4	214-391-2		1-5%	Acute Tox. 4;H302,-	oral: ATE = 800 mg/kg bw
2,3,5-Trimethylpyrazine	14667-55-1	238-712-0		1-5%	Flam. Liq. 3-Acute Tox. 4;H226-H302,-	oral: ATE = 810 mg/kg bw
4-Hydroxy-2,5-dimethyl-3(2H)-furanone	3658-77-3	222-908-8		1-5%	Acute Tox. 4-Eye Dam. 1-Skin Sens. 1A;H302-H317-H318,-	oral: ATE = 2500 mg/kg bw
Ethyl alcohol	64-17-5	200-578-6		1-5%	Flam. Liq. 2-Eye Irrit. 2; H225-H319,-	
Ethyl maltol	4940-11-8	225-582-5		1-5%	Acute Tox. 4;H302,-	oral: ATE = 1200 mg/kg bw
Vanillin	121-33-5	204-465-2		1-5%	Eye Irrit. 2;H319,-	oral: ATE = 3500 mg/kg bw

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Rhodinol	6812-78-8	229-887-4		<1%	Skin Irrit. 2-Eye Irrit. 2-Skin Sens. 1B;H315-H317-H319,-	dermal: ATE = 2650 mg/kg bw-oral: ATE = 3450 mg/kg bw
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Substances with Community workplace exposure limits:

Name	CAS	EC	REACH Registration No.	%	Classification for (CLP) 1272/2008	Specific Conc. Limits, M-factors and ATEs
Ethyl alcohol	64-17-5	200-578-6		1-5%	Flam. Liq. 2-Eye Irrit. 2; H225-H319,-	
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:** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- Skin exposure:** IF ON SKIN: Wash with plenty of soap and water.
- Ingestion:** Rinse mouth with water and obtain medical attention.

4.2 Most important symptoms and effects, both acute and delayed

- Causes skin irritation.
- May cause an allergic skin reaction.
- Causes serious eye irritation.

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.

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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. Use personal protective equipment as required. Use in accordance with good manufacturing and industrial hygiene practices. Use in areas with adequate ventilation. 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 explosion-proof electrical, ventilating and lighting 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:

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Ingredient	CAS	EC	Description	Value
Ethyl alcohol	64-17-5	200-578-6	UK WEL Long term ppm	1000
			UK WEL Long term mgm3	1920
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 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

Physical State/Colour:	Not determined
Odour:	Not determined
Odour threshold:	Not determined
Melting point / freezing point:	Not determined
Boiling point or initial boiling point and boiling range:	Not determined
Flammability:	Not determined
Lower and upper explosion limit:	Not determined
Flash point:	84.5 °C
Auto-ignition temperature:	Not determined
Decomposition temperature:	Not relevant
pH:	Not determined
Kinematic viscosity:	Not determined
Solubility:	Not determined

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Partition coefficient: n-octanol/water (log value): Not determined

Vapour pressure: Not determined

Density and/or relative density: 1.0600

Relative vapour density: Not determined

Particle characteristics: 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.

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).

Acute Toxicity: Based on available data the classification criteria are not met.

Acute Toxicity Oral >5000

Acute Toxicity Dermal Not Applicable

Acute Toxicity Inhalation Not Available

Skin corrosion/irritation: Skin Corrosion / Irritation Category 2

Serious eye damage/irritation: Eye Damage / Irritation Category 2

Respiratory or skin sensitisation: Sensitization - Skin Category 1

Germ cell mutagenicity: Based on available data the classification criteria are not met.

Carcinogenicity: Based on available data the classification criteria are not met.

Reproductive toxicity: Based on available data the classification criteria are not met.

STOT-single exposure: Based on available data the classification criteria are not met.

STOT-repeated exposure: Based on available data the classification criteria are not met.

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Aspiration hazard: Based on available data the classification criteria are not met.

Information about hazardous ingredients in the mixture

Ingredient	CAS	EC	LD50/ATE Oral	LD50/ATE Dermal	LC50/ATE Inhalation	LC50 Route
2,3,5,6-Tetramethylpyrazine	1124-11-4	214-391-2	800	Not available	Not available	Not available
2,3,5-Trimethylpyrazine	14667-55-1	238-712-0	810	Not available	Not available	Not available
Ethyl maltol	4940-11-8	225-582-5	1200	Not available	Not available	Not available

Refer to Sections 2 and 3 for additional information.

11.2 Information on other hazards

Not Applicable

Section 12. Ecological information

12.1 Toxicity: Not available

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 Endocrine disrupting properties: Not Applicable

12.7 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:	14.2 UN Proper Shipping Name:	14.3 Transport hazard class (es):	Sub Risk:	14.4 Packing Group:
UN Model Regulations	Not classified	-	-	-	-
IMDG	Not classified	-	-	-	-
ADR,RID,ADN	Not classified	-	-	-	-

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ICAO TI	Not classified	-	-	-	-
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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 classified

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: EDI 2=55.56% SS 1=6.67%

Total Fractional Values: EDI 2=1.80 SS 1=15.00

Key to revisions:

Classification under Regulation (EC) No 1272/2008

Concentration % Limits

Endocrine Disruptor Ingredient Details

Information about hazardous ingredients in the mixture

SECTION 3: Composition/information on ingredients

Total Fractional Values

Workplace exposure limits

Key to abbreviations:

Abbreviation	Meaning
Acute Tox. 4	Acute Toxicity - Oral Category 4
Eye Dam. 1	Eye Damage / Irritation Category 1
Eye Irrit. 2	Eye Damage / Irritation Category 2
Flam. Liq. 2	Flammable Liquid, Hazard Category 2
Flam. Liq. 3	Flammable Liquid, Hazard Category 3
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.

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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.
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.
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.
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.
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.
P337/313	If eye irritation persists: Get medical advice/attention.
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.
P403/235	Store in a well-ventilated place. Keep cool.
P501	Dispose of contents/container to approved disposal site, in accordance with local regulations.
Skin Irrit. 2	Skin Corrosion / Irritation Category 2
Skin Sens. 1A	Sensitization - Skin Category 1A
Skin Sens. 1B	Sensitization - Skin Category 1B

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.