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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: 346852

Product Name: Bitter Nut Extra Flavor
Trade Name: Bitter Nut Extra 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 Phone Number:

170 Technology Circle (831)316-7137

Scotts Valley, CA 95066

Web site address: Perfumersapprentice.com
Information: Contract #: MIS6760377

1.4 Emergency telephone number:

Emergency Contact: Chem-Tel Phone (800)255-3924

01 (813)248-0585

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 3

Flammable Liquids, Category 4

Serious Eye Damage/Eye Irritation, Category 2

Skin Sensitization, Category 1

Acute Toxicity: Inhalation, Category 4

- 2.1.2 Classification according to Directive 1999/45/EC:
- 2.2 Label Elements:
- 2.2.1 Labeling according to Regulation (EC) No 1272/2008 [CLP]:



GHS Signal Word: Warning

GHS Hazard Phrases:

Combustible liquid.

Causes mild skin irritation.

May cause an allergic skin reaction.

Causes serious eye irritation.

Harmful if inhaled.

GHS Precaution Phrases:

Keep away from {heat/sparks/open flames/hot surfaces}. - No smoking.

Avoid breathing {dust/fume/gas/mist/vapors/spray}.

Wash {hands} thoroughly after handling.

Use only outdoors or in a well-ventilated area.

Contaminated work clothing should not be allowed out of the workplace.

Wear {protective gloves/protective clothing/eye protection/face protection}.

GHS Response Phrases:

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IF ON SKIN: Wash with plenty of soap and water.

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.

Call a POISON CENTER or doctor/physician if you feel unwell.

Specific treatment {see ... on this label}.

If skin irritation occurs, get medical advice/attention.

If skin irritation or rash occurs, seek medical advice/attention.

If eye irritation persists, get medical advice/attention.

Wash contaminated clothing before reuse.

GHS Storage and Disposal Phrases:

Store in cool/well-ventilated place.

Dispose of contents/container to {...}.

2.2.2 Labeling according to Directive 1999/45/EC:

2.3 Adverse Human Health

Effects and Symptoms:

2.3.1 Inhalation: May be harmful if inhaled.
2.3.2 Skin Contact: May cause skin irritation.
2.3.3 Eye Contact: May cause eye irritation.
2.3.4 Ingestion: May be harmful if swallowed.

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	65.0 -71.0 %	200-338-0 NA	No phrases apply. Skin Corr. 2: H315 Eye Damage 2A: H319 STOT (SE) 3: H335 H336
56-81-5	Glycerin	12.0 -18.0 %	200-289-5 NA	No phrases apply. No data available.
64-17-5	Ethyl alcohol	2.0 -8.0 %	200-578-6 603-002-00-5	F; R11 Flam. Liq. 2: H225
4940-11-8	2 - Ethyl - 3 - hydroxy - 4 - pyrone	2.0 -3.0 %	225-582-5 NA	Xn; R22 No data available.
1124-11-4	2,3,5,6 - Tetramethylpyrazine	1.0 -2.0 %	214-391-2 NA	Xn; R22 No data available.
22047-25-2	Pyrazin - 1 - ylethan - 1 - one	1.0 -2.0 %	244-753-5 NA	Xn; R22-43 No data available.
765-70-8	1,2-Cyclopentanedione, 3-methyl-	1.0 -2.0 %	212-154-8 NA	No phrases apply. No data available.
121-33-5	Vanillin	1.0 -2.0 %	204-465-2 NA	No phrases apply. No data available.
14667-55-1	Pyrazine, Trimethyl-	1.0 -2.0 %	238-712-0 NA	Xn; R22-10 No data available.
3658-77-3	4 - Hydroxy - 2,5 - dimethylfuran - 2(3H) - one	1.0 -2.0 %	222-908-8 NA	No phrases apply. No data available.
21835-01-8	2-Cyclopenten-1-one, 3-ethyl-2-hydroxy-	1.0 -3.0 %	244-606-5 NA	No phrases apply. No data available.

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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.

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

Contact:

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. In Case of Eye

Contact:

In Case of Ingestion: Rinse mouth with water.

4.2 **Important Symptoms** To the best of our knowledge, the chemical, physical, and toxicological properties have

not been thoroughly investigated. and Effects, Both

Acute and Delayed:

Section 5. Fire Fighting Measures

Suitable Extinguishing Use water spray, dry chemical, carbon dioxide, or alcohol-resistant foam. 5.1

5.2 Flammable Properties No data available.

and Hazards:

No data available.

51.11 C Method Used: Closed Cup Flash Pt:

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

No data. **Autoignition Pt:**

5.3 Fire Fighting As in any fire, wear a self-contained breathing apparatus in pressure-demand,

MSHA/NIOSH (approved or equivalent), and full protective gear. Instructions:

Section 6. Accidental Release Measures

Protective Precautions. Ensure adequate ventilation. 6.1

Protective Equipment

and Emergency

Procedures:

Environmental 6.2 No data available.

Precautions:

Methods and Material Dike to collect large liquid spills. 6.3

For Containment and

Cleaning Up:

Section 7. Handling and Storage

Wash thoroughly after handling. 7.1 **Precautions To Be**

Taken in Handling:

7.2 **Precautions To Be** Store in a tightly closed container.

Taken in Storing:

Section 8. Exposure Controls/Personal Protection

8.1 **Exposure Parameters:**

CAS# **Chemical Name Britain EH40** France VL **Germany MAK/TRK**

57-55-6 TWA: 474 mg/m3 (150 ppm) No data. No data. Propylene glycol

(Total Particulates)

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		TWA: 10 mg/m3 (Powder)		
56-81-5	Glycerin	TWA: 10 mg/m3 () STEL: ()	TWA: 10 mg/m3	No data.
64-17-5	Ethyl alcohol	TWA: 1920 mg/m3 (1000 ppm) STEL: ()	TWA: 1900 mg/m3 (1000 ppm) STEL: 9500 mg/m3 (5000 ppm)	No data.
4940-11-8	2 - Ethyl - 3 - hydroxy - 4 - pyrone	No data.	No data.	No data.
1124-11-4	2,3,5,6 - Tetramethylpyrazine	No data.	No data.	No data.
22047-25-2	Pyrazin - 1 - ylethan - 1 - one	No data.	No data.	No data.
765-70-8	1,2-Cyclopentanedione, 3-methyl-	No data.	No data.	No data.
121-33-5	Vanillin	No data.	No data.	No data.
14667-55-1	Pyrazine, Trimethyl-	No data.	No data.	No data.
3658-77-3	4 - Hydroxy - 2,5 - dimethylfuran - 2(3H) - one	No data.	No data.	No data.
21835-01-8	2-Cyclopenten-1-one, 3-ethyl-2-hydroxy-	No data.	No data.	No data.
21033-01-0	2-Oydiopenien-1-one, o-emyi-2-nydroxy-			. To data.
CAS #	Chemical Name	OSHA TWA	ACGIH TWA	Europe
CAS#	Chemical Name	OSHA TWA	ACGIH TWA	Europe
CAS # 57-55-6	Chemical Name Propylene glycol	OSHA TWA No data. PEL: 15 (dust); 5 (resp.)	ACGIH TWA No data.	Europe No data.
CAS # 57-55-6 56-81-5	Chemical Name Propylene glycol Glycerin	OSHA TWA No data. PEL: 15 (dust); 5 (resp.) mg/m3	ACGIH TWA No data. TLV: 10 mg/m3	Europe No data. No data.
CAS # 57-55-6 56-81-5 64-17-5	Chemical Name Propylene glycol Glycerin Ethyl alcohol	OSHA TWA No data. PEL: 15 (dust); 5 (resp.) mg/m3 PEL: 1000 ppm	ACGIH TWA No data. TLV: 10 mg/m3 TLV: 1000 ppm	Europe No data. No data. No data.
CAS # 57-55-6 56-81-5 64-17-5 4940-11-8	Chemical Name Propylene glycol Glycerin Ethyl alcohol 2 - Ethyl - 3 - hydroxy - 4 - pyrone	OSHA TWA No data. PEL: 15 (dust); 5 (resp.) mg/m3 PEL: 1000 ppm No data.	ACGIH TWA No data. TLV: 10 mg/m3 TLV: 1000 ppm No data.	Europe No data. No data. No data. No data.
CAS # 57-55-6 56-81-5 64-17-5 4940-11-8 1124-11-4	Chemical Name Propylene glycol Glycerin Ethyl alcohol 2 - Ethyl - 3 - hydroxy - 4 - pyrone 2,3,5,6 - Tetramethylpyrazine	OSHA TWA No data. PEL: 15 (dust); 5 (resp.) mg/m3 PEL: 1000 ppm No data. No data.	ACGIH TWA No data. TLV: 10 mg/m3 TLV: 1000 ppm No data. No data.	Europe No data. No data. No data. No data. No data.
CAS # 57-55-6 56-81-5 64-17-5 4940-11-8 1124-11-4 22047-25-2	Chemical Name Propylene glycol Glycerin Ethyl alcohol 2 - Ethyl - 3 - hydroxy - 4 - pyrone 2,3,5,6 - Tetramethylpyrazine Pyrazin - 1 - ylethan - 1 - one	OSHA TWA No data. PEL: 15 (dust); 5 (resp.) mg/m3 PEL: 1000 ppm No data. No data. No data.	ACGIH TWA No data. TLV: 10 mg/m3 TLV: 1000 ppm No data. No data. No data.	Europe No data. No data. No data. No data. No data. No data.
CAS # 57-55-6 56-81-5 64-17-5 4940-11-8 1124-11-4 22047-25-2 765-70-8	Chemical Name Propylene glycol Glycerin Ethyl alcohol 2 - Ethyl - 3 - hydroxy - 4 - pyrone 2,3,5,6 - Tetramethylpyrazine Pyrazin - 1 - ylethan - 1 - one 1,2-Cyclopentanedione, 3-methyl-	OSHA TWA No data. PEL: 15 (dust); 5 (resp.) mg/m3 PEL: 1000 ppm No data. No data. No data. No data.	ACGIH TWA No data. TLV: 10 mg/m3 TLV: 1000 ppm No data. No data. No data. No data.	Europe No data.
CAS # 57-55-6 56-81-5 64-17-5 4940-11-8 1124-11-4 22047-25-2 765-70-8 121-33-5	Chemical Name Propylene glycol Glycerin Ethyl alcohol 2 - Ethyl - 3 - hydroxy - 4 - pyrone 2,3,5,6 - Tetramethylpyrazine Pyrazin - 1 - ylethan - 1 - one 1,2-Cyclopentanedione, 3-methyl- Vanillin	OSHA TWA No data. PEL: 15 (dust); 5 (resp.) mg/m3 PEL: 1000 ppm No data. No data. No data. No data. No data.	ACGIH TWA No data. TLV: 10 mg/m3 TLV: 1000 ppm No data. No data. No data. No data. No data. No data.	Europe No data.

8.2 Exposure Controls:

21835-01-8

8.2.1 Engineering Controls Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

8.2.2 Personal protection equipment:

2-Cyclopenten-1-one, 3-ethyl-2-hydroxy-

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

No data.

No data.

EN166.

Protective Gloves: Wear appropriate protective gloves to prevent skin exposure. **Other Protective** Wear appropriate protective clothing to prevent skin exposure.

No data.

Clothing:

Respiratory Equipment If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved (Specify Type): 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.

Work/Hygienic/Mainten Handle in accordance with good industrial hygiene and safety practice. **ance Practices:**

No data available.

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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 Amber Liquid.

Tobacco taste and aroma.

pH: No data.Melting Point: No data.Boiling Point: No data.

Flash Pt: 51.11 C Method Used: Closed Cup

No data.

Evaporation Rate: No data.

Flammability (solid, gas): No data available.

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

Vapor Pressure (vs. Air or

mm Hg):

Vapor Density (vs. Air = 1): No data.

Specific Gravity (Water = 1): 1.0615 at 22.0 C

Solubility in Water: No data.

Octanol/Water Partition No data.

Coefficient:

Autoignition Pt: No data.

Decomposition Temperature: No data.

Viscosity: No data.

9.2 Other Information

Percent Volatile: No data.

Section 10. Stability and Reactivity

10.1 Reactivity: No data available.

10.2 Stability: Unstable [] Stable [X]

10.3 Conditions To Avoid - No data available.

Hazardous Reactions:

Possibility of Will occur [] Will not occur [X]

Hazardous Reactions:

10.4 Conditions To Avoid - No data available.

Instability:

10.5 Incompatibility - No data available.

Materials To Avoid:

10.6 Hazardous Carbon monoxide, Carbon dioxide, Carbon oxides, irritating and toxic fumes and gases,

Decomposition or formed under fire conditions. Nitrogen oxides.

Byproducts:

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Section 11. Toxicological Information

11.1 Information on

Toxicological Effects:

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.

Irritation or Corrosion: No data available.

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

Section 12. Ecological Information

12.1 Toxicity: 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.

12.2 Persistence and

Degradability:

No data available.

No data available.

12.3 Bioaccumulative

Potential: 12.4 Mobility in Soil:

No data available.

12.5 Results of PBT and

No data available.

vPvB assessment:

12.6 Other adverse effects: No data available.

Section 13. Disposal Considerations

13.1 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.

Section 14. Transport Information

GHS Classification: Skin Corrosion/Irritation, Category 3 - Warning! Causes mild skin irritation

Flammable Liquids, Category 4 - Warning! Combustible liquid

Serious Eye Damage/Eye Irritation, Category 2 - Warning! Causes serious eye irritation

Skin Sensitization, Category 1 - Warning! May cause an allergic skin reaction

Acute Toxicity: Inhalation, Category 4 - Warning! Harmful if inhaled

14.1 LAND TRANSPORT (European ADR/RID):

ADR/RID Shipping Name: Not Regulated.

UN Number: Hazard Class:

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14.2 MARINE TRANSPORT (IMDG/IMO):

IMDG/IMO Shipping Name: Not Regulated.

14.3 AIR TRANSPORT (ICAO/IATA):

ICAO/IATA Shipping Name: Not Regulated.

Section 15. Regulatory Information

EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists					
CAS#	Hazardous Components (Chemica	al Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)
57-55-6	Propylene glycol		No	No	No
56-81-5	Glycerin		No	No	No
64-17-5	Ethyl alcohol		No	No	No
4940-11-8	2 - Ethyl - 3 - hydroxy - 4 - pyrone		No	No	No
1124-11-4	2,3,5,6 - Tetramethylpyrazine		No	No	No
22047-25-2	Pyrazin - 1 - ylethan - 1 - one		No	No	No
765-70-8	1,2-Cyclopentanedione, 3-methyl-		No	No	No
121-33-5	Vanillin		No	No	No
14667-55-1	Pyrazine, Trimethyl-		No	No	No
3658-77-3	4 - Hydroxy - 2,5 - dimethylfuran - 2(3H) - one	No	No	No
21835-01-8	2-Cyclopenten-1-one, 3-ethyl-2-hydr	оху-	No	No	No
'Hazard Categories' defined [X] Yes [] No Chronic of SARA Title III Sections [X] Yes [] No Fire Hazard Satisfactors [] Yes [X] No Sudden III		Chronic (dela Fire Hazard	diate) Health Haza ayed) Health Haza ease of Pressure F zard	rd	

CAS#	Hazardous Components (Chemical Name)	Other US EPA or State Lists
57-55-6	Propylene glycol	CA PROP.65: No
56-81-5	Glycerin	CA PROP.65: No
64-17-5	Ethyl alcohol	CA PROP.65: No
4940-11-8	2 - Ethyl - 3 - hydroxy - 4 - pyrone	CA PROP.65: No
1124-11-4	2,3,5,6 - Tetramethylpyrazine	CA PROP.65: No
22047-25-2	Pyrazin - 1 - ylethan - 1 - one	CA PROP.65: No
765-70-8	1,2-Cyclopentanedione, 3-methyl-	CA PROP.65: No
121-33-5	Vanillin	CA PROP.65: No
14667-55-1	Pyrazine, Trimethyl-	CA PROP.65: No
3658-77-3	4 - Hydroxy - 2,5 - dimethylfuran - 2(3H) - one	CA PROP.65: No
21835-01-8	2-Cyclopenten-1-one, 3-ethyl-2-hydroxy-	CA PROP.65: No
CAS#	Hazardous Components (Chemical Name)	International Regulatory Lists
57-55-6	Propylene glycol	REACH: Yes - (R), (P)
56-81-5	Glycerin	REACH: Yes - (R), (P)
64-17-5	Ethyl alcohol	REACH: Yes - (R), (P)
4940-11-8	2 - Ethyl - 3 - hydroxy - 4 - pyrone	REACH: Yes - (P)
1124-11-4	2,3,5,6 - Tetramethylpyrazine	REACH: Yes - (P)
22047-25-2	Pyrazin - 1 - ylethan - 1 - one	REACH: Yes - (P)

REACH: Yes - (P)

1,2-Cyclopentanedione, 3-methyl-

765-70-8

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REACH: Yes - (R), (P) 121-33-5 Vanillin Pyrazine, Trimethyl-REACH: Yes - (P) 14667-55-1 3658-77-3 4 - Hydroxy - 2,5 - dimethylfuran - 2(3H) - one REACH: Yes - (P) 21835-01-8 2-Cyclopenten-1-one, 3-ethyl-2-hydroxy-REACH: Yes - (P)

European Community Hazard Symbol codes:

European Community Risk and Safety Phrases:

No data available.

Section 16. Other Information

03/26/2014 **Revision Date:**

This Product:

Additional Information About 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 .