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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: 00191

Product Name: Sweet Woodruff Flavor
Trade Name: Sweet Woodruff 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

170 Technology Circle Scotts Valley, CA 95066

1.4 Emergency telephone number:

Section 2. Hazards Identification

- 2.1 Classification of the Substance or Mixture:
- 2.1.1 Classification according to Regulation (EC) No 1272/2008 [CLP]:

Acute Toxicity: Oral, Category 4
Acute Toxicity: Inhalation, Category 4

2.1.2 Classification according to Directive 1999/45/EC:

Xn: Harmful

Ha rm fu

Risk Phrases: R20/22, R36/38

For full text of R- phrases: see SECTION 15.

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



GHS Signal Word: Warning

GHS Hazard Phrases:

H302 - Harmful if swallowed.

H332 - Harmful if inhaled.

GHS Precaution Phrases:

P264 - Wash hands thoroughly after handling.

P270 - Do not eat, drink or smoke when using this product.

P271 - Use only outdoors or in a well-ventilated area.

P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.

GHS Response Phrases:

P301+312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

P330 - Rinse mouth.

P304+340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P312 - Call a POISON CENTER/doctor/... if you feel unwell.

GHS Storage and Disposal Phrases:

P501 - Dispose of contents/container to

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2.2.2 Labeling according to Directive 1999/45/EC:



Xn Ha rm fu I

2.3 Adverse Human Health Prolonged or repeated skin contact may cause dermatitis.
Effects and Symptoms:

Chronic ingestion may cause lactic acidosis and possible seizures.

Chronic: Exposure to large doses may cause central nervous system depression. Exposures to propylene glycol having no adverse effects on the mother should have no effect on the fetus. Birth defects are unlikely. In animal studies, propylene glycol has been shown not to interfere with reproduction.

2.3.1 Inhalation:

Low hazard for normal industrial handling. Inhalation of a mist of this material may cause respiratory tract irritation. Material has a low vapor pressure at room temperature, so exposure to vapor is not likely. Causes respiratory tract irritation. Material has a very low vapor pressure at room temperature, so inhalation exposures are not expected unless material is heated or misted. Material may be irritating to mucous membranes and upper respiratory tract.

May be harmful by inhalation, ingestion, or skin absorption. May be harmful if inhaled. Skin: May be harmful if absorbed through skin. May cause skin irritation.

2.3.2 Skin Contact:

May be absorbed through damaged or abraded skin in harmful amounts. Allergic reactions have been reported. A single prolonged skin exposure is not likely to result in the material being absorbed in harmful amounts. Repeated exposures may cause problems. Negative results have consistently been obtained in guinea pigs studies for sensitization. 1,,2-Propylene glycol is not considered an occupational skin sensitizer. (CHEMINFO) Prolonged and/or repeated contact may cause defatting of the skin and dermatitis. Causes redness and pain. May be harmful if absorbed through the skin. Contact with the skin may cause a local anesthetic effect. Material is a weak skin sensitizer. In an acute dermal irritation study in rats, two of six animals exhibited liver damage. Causes skin irritation.

2.3.3 Eye Contact:

2.3.4 Ingestion:

May cause slight transient injury. Causes severe eye irritation. Causes redness and pain. May cause gastrointestinal irritation with nausea, vomiting and diarrhea. Low hazard for usual industrial handling. May cause hemoglobinuric nephrosis. May cause changes in surface EEG. May cause severe gastrointestinal tract irritation with nausea, vomiting and possible burns. Ingestion of large amounts may cause central nervous system depression. 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	>=10.0 %	200-338-0 NA	No phrases apply.
100-51-6	Benzenemethanol	>=10.0 %	202-859-9 603-057-00-5	Xn; R20/22 Acute Tox.(O) 4: H302 Acute Tox.(I) 4: H332

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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. Get medical aid.

Remove from exposure and move to fresh air immediately. If breathed in, move person

into fresh air. Consult a physician.

In Case of Skin

Contact:

In case of contact, flush skin with plenty of water. Remove contaminated clothing and shoes. Get medical aid if irritation develops and persists. Wash clothing before reuse. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash off with soap and plenty of water. Consult a physician.

In Case of Eve

Contact:

In case of contact, immediately flush eyes with plenty of water for a t least 15 minutes. Get medical aid. Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately. In case of contact, immediately flush eyes with copious amounts of water for at least 15 minutes. Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

In Case of Ingestion:

Never give anything by mouth to an unconscious person. Get medical aid. If victim is conscious and alert, give 2-4 cupfuls of milk or water. If swallowed, wash out mouth with water provided person is conscious. Call a physician. Rinse mouth with water. Consult a physician.

4.2 **Important Symptoms**

and Effects, Both Acute and Delayed: To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. Central nervous system depression, Prolonged or

repeated exposure to skin causes defatting and dermatitis.

Note for the Doctor:

Persons with impaired kidney function may be more susceptible to the effects of this substance. Treat symptomatically and supportively. Blood benzyl alcohol and benzoic acid and urine hippuric acid may be helpful in diagnosis. Consult a physician. Show this safety data sheet to the doctor in attendance.

Section 5. Fire Fighting Measures

5.1

Media:

Suitable Extinguishing Use water spray, dry chemical, carbon dioxide, or alcohol-resistant foam. Use dry chemical, carbon dioxide, or alcohol-resistant foam. Water spray may cause frothing.

Suitable: Water spray.

LEL:

5.2 **Flammable Properties**

and Hazards:

Flash Pt:

Explosive Limits:

UEL:

Autoignition Pt:

5.3 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. Combustible liquid and vapor. Vapors are heavier than air and may travel to a source of ignition and flash back. Vapors can spread along the ground and collect in low or confined areas. Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Specific Hazard(s): Wear self contained breathing apparatus for fire fighting if necessary.

Further information.

Under fire conditions, material may decompose to form flammable and/or explosive

mixtures in air.

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Section 6. Accidental Release Measures

6.3 Methods and Material For Containment and Cleaning Up:

Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Clean up spills immediately, observing precautions in the Protective Equipment section. Provide ventilation. Remove all sources of ignition. PROCEDURE(S) OF PERSONAL PRECAUTION(S)

Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves. Methods for cleaning up.

Cover with dry lime or soda ash, pick up, keep in a closed container, and hold for waste disposal. Ventilate area and wash spill site after material pickup is complete. Personal precautions.

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation.

Environmental precautions.

Do not let product enter drains.

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

Section 7. Handling and Storage

7.1 Precautions To Be Taken in Handling:

Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames. Keep away from heat and flame. Avoid breathing dust, mist, or vapor. User Exposure: Do not breathe vapor. Avoid inhalation of vapor or mist.

Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

7.2 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. Keep away from sources of ignition. Suitable: Keep tightly closed. Store in cool place. Store under nitrogen.

Section 8. Exposure Controls/Personal Protection

8.1 Exposure Parameters:

CAS#	Partial Chemical Name	Britain EH40	France VL	Europe		
57-55-6	Propylene glycol	TWA: 474 mg/m3 (150 ppm) (Total Particulates) TWA: 10 mg/m3 (Powder)				
100-51-6	Benzenemethanol					
CAS#	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits		
57-55-6	Propylene glycol					
100-51-6	Benzenemethanol					

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8.2 **Exposure Controls:**

8.2.1 Engineering Controls

(Ventilation etc.):

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low. Safety

shower and eye bath. Mechanical exhaust required.

8.2.2 Personal protection equipment:

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

EN166. Wear chemical splash goggles. Chemical safety goggles. Safety glasses.

Wear appropriate protective gloves to prevent skin exposure. Handle with gloves. The **Protective Gloves:**

selected protective gloves have to satisfy the specifications of EU Directive 89/689/EEC

and the standard EN 374 derived from it.

Other Protective

Clothing:

Wear appropriate protective clothing to prevent skin exposure. Choose body protection according to the amount and concentration of the dangerous substance at the work

place.

Respiratory Equipment A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2

(Specify Type):

requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use. Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi- purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Hand: Compatible chemical-resistant gloves.

ance Practices:

Work/Hygienic/Mainten Wash thoroughly after handling. Wash contaminated clothing before reuse. Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Section 9 Physical and Chemical Properties

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9.1 Information on Basic Physical and Chemical Properties

> [] Solid **Physical States:** [] Gas [X] Liquid

Transparent Colorless. **Appearance and Odor:**

Sweet Woodruff taste and aroma.

Melting Point:

Boiling Point:

Flash Pt:

Evaporation Rate:

UEL: **Explosive Limits:** LEL:

Vapor Pressure (vs. Air or

mm Hg):

Vapor Density (vs. Air = 1):

Specific Gravity (Water = 1):

Solubility in Water:

Autoignition Pt:

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9.2 Other Information

Percent Volatile:

Section 10. Stability and Reactivity

10.1 Reactivity:

Unstable [] Stable [X] 10.2 Stability:

10.3 Conditions To Avoid -

Hazardous Reactions:

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

Hazardous Reactions:

10.4 Conditions To Avoid - Excess heat, moist air, ignition sources, Air Exposure to moisture. Light, Heat.

Instability:

10.5 Incompatibility -Strong oxidizing agents, Strong acids, hydrogen bromide gas, iron at 100C(exothermic

polymerization), Corrosive to iron, Steel, Strong reducing agents, Alkali metals, Materials To Avoid:

Aluminum, iron, phenols, Oxygen.

Carbon monoxide, Carbon dioxide, Hazardous decomposition products formed under fire 10.6 Hazardous

Decomposition Or conditions.

Byproducts:

Carbon oxides.

Section 11. Toxicological Information

11.1 Information on

Information:

Toxicological Effects:

Carcinogenicity/Other CAS# 57-55-6: Not listed by ACGIH, IARC, NTP, or CA Prop 65. CAS# 100-51-6: Not

listed by ACGIH, IARC, NTP, or CA Prop 65.

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

Section 12. Ecological Information

Ecotoxicity: Water flea Daphnia: EC50 10000 mg/L; 48 HrUnspecified, Bacteria: 12.1 Toxicity:

> Phytobacterium phosphoreum: EC50 = 710 mg/L; 30 min; Microtox testFish: Goldfish: LC50 5000 mg/L; 24 Hr; UnspecifiedFish: Guppy: LC50 1000 mg/L; 48 Hr; Unspecified If

released to water, 1,2-propanediol is expected to degrade relatively rapidly via biodegradation. If released to soil, relatively rapid biodegradation should also occur.

Significant leaching in soil can be predicted.

Environmental: If released to the atmosphere, it is degraded rapidly by reaction with photochemically produced hydroxyl radicals (typical half-life of 32 hr). Physical removal

from air by rainfall is possible.

Physical: No information available.

Other: No information available. If released to soil, benzyl alcohol is expected to display high mobility and readily leach through soil. Volatilization from dry soil to the atmosphere may be an important fate process; however, it is not expected to be an important process in moist soils. If released to water, benzyl alcohol is expected to undergo microbial

degradation under aerobic and anaerobic conditions.

Physical: In the atmosphere, benzyl alcohol is expected to exist almost entirely in the vapor phase. The estimated half-life for the vapor phase reaction of benzyl alcohol with

photochemically produced hydroxyl radicals is 2 days.

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Section 13. Disposal Considerations

13.1 Waste Disposal Method:

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed.

RCRA U-Series: None listed. APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Product.

This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber.

Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material. Contaminated packaging.

Section 14. Transport Information

14.1 LAND TRANSPORT (US DOT):

DOT Proper Shipping Name: Alcohols, flammable, toxic, n.o.s.

DOT Hazard Class: 3 FLAMMABLE LIQUID, POISON UN/NA Number: UN1986 Packing Group:

14.1 LAND TRANSPORT (Canadian TDG):
TDG Shipping Name: Not Regulated.

14.1 LAND TRANSPORT (European ADR/RID):

ADR/RID Shipping Name:

UN Number: 1986 Packing Group:

Hazard Class: 3 (6.1) - FLAMMABLE LIQUID, POISON

Section 15. Regulatory Information

European Community Hazard Symbol codes:

European Community Risk and Safety Phrases:

R20/22 Harmful by inhalation and if swallowed.

R36/38 Irritating to eyes and skin.

S24/25 Avoid contact with skin and eyes.

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical

advice.

S36 Wear suitable protective clothing.

Section 16. Other Information

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Additional Information About

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