SAFETY DATA SHEET
Cinnamon Red Hot (PG) Flavor

Printed: 04/14/2014
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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: 00123
Product Name: Cinnamon Red Hot (PG) Flavor
Trade Name: Cinnamon Red Hot (PG) 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]:

2.1.2 Classification according to Directive 1999/45/EC:

Xn: Harmful
Risk Phrases: R21
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:

GHS Hazard Phrases:

No phrases apply.

GHS Precaution Phrases:

No phrases apply.

GHS Response Phrases:

No phrases apply.

GHS Storage and Disposal Phrases:

No phrases apply.

2.2.2 Labeling according to Directive 1999/45/EC:

Xn

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

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. This is an experimental neoplastigen, tumorigen, and carcinogen. May cause reproductive and fetal effects. Laboratory experiments have shown mutagenic effects. Animal studies have reported the development of tumors. Prolonged exposure may cause liver, kidney, and heart damage.

2.3.1 Inhalation: May be harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract. 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. Inhalation of high concentrations may cause central nervous system effects characterized by nausea, headache, dizziness, unconsciousness and coma. May cause narcotic effects in high concentration. Vapors may cause dizziness or suffocation.

2.3.2 Skin Contact: May be harmful if absorbed through the skin. Causes skin burns. 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. 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. May cause skin sensitization, an allergic reaction, which becomes evident upon re-exposure to this material. May cause cyanosis of the extremities.

2.3.3 Eye Contact: Causes eye burns. May cause slight transient injury. Causes severe eye irritation. Causes redness and pain. May cause painful sensitization to light. May cause chemical conjunctivitis and corneal damage.

Section 3. Composition/Information on Ingredients

CAS #	Hazardous Components (Chemical Name)/ REACH Registration No.	Concentration	EC No./ EC Index No.	Risk Phrases/ GHS Classification
104-55-2	Cinnamaldehyde	>=10.0 %	203-213-9 NA	N; R43-50 No data available.
57-55-6	Propylene glycol	>=10.0 %	200-338-0 NA	No phrases apply. No data available.
NA	(Trade Secret)	< 7.8 %	NA NA	Xn; R20/22 Acute Tox.(O) 4: H302 Acute Tox.(I) 4: H332
97-53-0	Eugenol	1.0 -10.0 %	202-589-1 NA	Xn;Xi; Mu:3, R22-40-43-36/37/38 No data available.
64-17-5	Ethyl alcohol	< 1.0 %	200-578-6 603-002-00-5	F; R11 Flam. Liq. 2: H225

Section 4. First Aid Measures

4.1 Description of First Aid Measures:

In Case of Inhalation: Consult a physician. If inhaled, remove to fresh air. If breathing is difficult, give oxygen. Get medical aid. Remove from exposure and move to fresh air immediately. Get medical aid immediately. Do NOT use mouth-to-mouth resuscitation.

In Case of Skin Contact: Wash off with soap and plenty of water. Consult a physician. 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.

In Case of Eye Contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Continue rinsing eyes during transport to hospital. 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. Gently lift eyelids and flush continuously with water.

4.2 Important Symptoms and Effects, Both Acute and Delayed: Burning sensation, Cough, Wheezing, Laryngitis, Shortness of breath, Headache. Nausea. Vomiting.

Note for the Doctor: Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area. 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. Persons with skin or eye disorders or liver, kidney, chronic respiratory diseases, or central and peripheral nervous sytem diseases may be at increased risk from exposure to this substance. Antidote: Replace fluid and electrolytes.

Section 5. Fire Fighting Measures

5.1 Suitable Extinguishing Media: 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. Use water spray, dry chemical, carbon dioxide, or appropriate foam. For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam. For large fires, use water spray, fog, or alcohol-resistant foam. Use water spray to cool fire-exposed containers. Water may be ineffective. Do NOT use straight streams of water.

5.2 Flammable Properties and Hazards: CONDITIONS OF FLAMMABILITY:
Flammable in the presence of a source of ignition when the temperature is above the flash point. Keep away from heat/sparks/open flame/hot surface. No smoking.

Flash Pt: > 200.00 F (93.3 C)

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

Autoignition Pt: No data.

5.3 Fire Fighting Instructions: Wear self contained breathing apparatus for fire fighting if necessary. 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. Replace fluid and electrolytes. Vapors may form explosive mixtures with air. Vapors can travel to a source of ignition and flash back. Will burn if involved in a fire. Flammable Liquid. Can release vapors that form explosive mixtures at temperatures above the flashpoint. Use water spray to keep fire-exposed containers cool.

Section 6. Accidental Release Measures

6.3 Methods and Material For Containment and Cleaning Up:

Personal precautions.
Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
Environmental precautions.
Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Keep in suitable, closed containers for disposal. 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. Wash area with soap and water. Use a spark-proof tool. A vapor suppressing foam may be used to reduce vapors.

Section 7. Handling and Storage

7.1 Precautions To Be Taken in Handling:

Avoid contact with skin and eyes. Avoid inhalation of vapor or mist.
Take measures to prevent the build up of electrostatic charge. 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. 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. Use only in a chemical fume hood. Use only in a well-ventilated area. Ground and bond containers when transferring material. Use spark-proof tools and explosion proof equipment. Keep away from heat, sparks and flame.

7.2 Precautions To Be Taken in Storing:

Keep container tightly closed in a dry and well-ventilated place. 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. Store in a cool, dry place. Keep away from heat, sparks and flame. Keep from contact with oxidizing materials. Flammables-area. Do not store near perchlorates, peroxides, chromic acid or nitric acid.

Section 8. Exposure Controls/Personal Protection

8.1 Exposure Parameters:

CAS #	Partial Chemical Name	Britain EH40	France VL	Europe
104-55-2	Cinnamaldehyde	No data.	No data.	No data.
57-55-6	Propylene glycol	TWA: 474 mg/m3 (150 ppm) (Total Particulates) TWA: 10 mg/m3 (Powder)	No data.	No data.
NA	(Trade Secret)	No data.	No data.	No data.
97-53-0	Eugenol	No data.	No data.	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.

CAS #	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
104-55-2	Cinnamaldehyde	No data.	No data.	No data.
57-55-6	Propylene glycol	No data.	No data.	No data.
NA	(Trade Secret)	No data.	No data.	No data.
97-53-0	Eugenol	No data.	No data.	No data.
64-17-5	Ethyl alcohol	No data.	No data.	No data.

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. Use only under a chemical fume hood. Use explosion-proof ventilation equipment. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

8.2.2 Personal protection equipment:

Eye Protection: Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

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.

Protective Gloves: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. Wear appropriate protective gloves to prevent skin exposure.

Other Protective Clothing: Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Wear appropriate protective clothing to prevent skin exposure.

Respiratory Equipment (Specify Type): 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. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 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.

Work/Hygienic/Maintenance Practices: 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

9.1 Information on Basic Physical and Chemical Properties

Physical States:	[ ] Gas [X] Liquid [ ] Solid
Appearance and Odor:	Cinnamon taste and aroma. Transparent yellow liquid.
Melting Point:	No data.
Boiling Point:	No data.
Flash Pt:	> 200.00 F (93.3 C)
Evaporation Rate:	No data.
Explosive Limits:	LEL: No data. UEL: No data.
Vapor Pressure (vs. Air or mm Hg):	No data.
Vapor Density (vs. Air = 1):	No data.
Specific Gravity (Water = 1):	No data.
Solubility in Water:	No data.
Autoignition Pt:	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 - Hazardous Reactions:**	No data available.
	Possibility of Hazardous Reactions:	Will occur [ ] Will not occur [X]
10.4	**Conditions To Avoid - Instability:**	No data available.
10.5	**Incompatibility - Materials To Avoid:**	Strong oxidizing agents, hydrogen bromide gas, iron at 100C(exothermic polymerization), Corrosive to iron, Steel, acids, Alkali metals, Ammonia, hydrazine, Peroxides, Sodium, Acid anhydrides, calcium hypochlorite, chromyl chloride, nitrosyl perchlorate, bromine pentafluoride, Perchloric acid, silver nitrate, mercuric nitrate, potassium tert-butoxide, magnesium perchlorate, Acid chlorides, platinum, uranium hexafluoride, silver oxide, iodine heptafluoride, acetyl bromide, disulfuryl difluoride, tetrachlorosilane + water, acetyl chloride, permanganic acid, ruthenium (VIII) oxide, uranyl perchlorate.
10.6	**Hazardous Decomposition Or Byproducts:**	formed under fire conditions. Carbon oxides, Carbon monoxide, Carbon dioxide, irritating and toxic fumes and gases.

Section 11. Toxicological Information

11.1 Information on Toxicological Effects: Epidemiology: No data available.
Teratogenicity: No data available.
Reproductive Effects: Mutagenicity: Neurotoxicity: Other Studies:

Carcinogenicity/Other Information: Carcinogenicity.
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA. 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. CAS# 97-53-0: Not listed by ACGIH, IARC, NTP, or CA Prop 65. CAS# 64-17-5: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

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

Section 12. Ecological Information

12.1 Toxicity: Ecotoxicity: Water flea Daphnia: EC50 10000 mg/L; 48 HrUnspecified, Bacteria: 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.
When released to the atmosphere it will photodegrade in hours (polluted urban atmosphere) to an estimated range of 4 to 6 days in less polluted areas. Rainout should be significant.

12.2 Persistence and Degradability: No data available.

12.3 Bioaccumulative Potential: No data available.

12.4 Mobility in Soil: No data available.

Section 13. Disposal Considerations

13.1 Waste Disposal Method:

Product.
This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging.
Dispose of as unused product. 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.

Section 14. Transport Information

GHS Classification: No GHS classifications apply.

14.1 LAND TRANSPORT (US DOT):

DOT Proper Shipping Name:
DOT Hazard Class:
UN/NA Number: **Packing Group:** I

14.1 LAND TRANSPORT (European ADR/RID):

ADR/RID Shipping Name:
UN Number: **Packing Group:** I
Hazard Class:

Section 15. Regulatory Information

EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists

CAS #	Hazardous Components (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)
104-55-2	Cinnamaldehyde	No	No	No
57-55-6	Propylene glycol	No	No	No
NA	(Trade Secret)	No	No	No
97-53-0	Eugenol	No	No	No
64-17-5	Ethyl alcohol	No	No	No

European Community Hazard Symbol codes:

European Community Risk and Safety Phrases:

R21	Harmful in contact with skin.

Section 16. Other Information

Revision Date: 03/27/2014

Additional Information About This Product: No data available.