



MATERIAL SAFETY DATA SHEET
PETITGRAIN ESSENTIAL OIL

MSDS

1. PRODUCT NAME AND COMPANY IDENTIFICATION

Product Name: PETITGRAIN ESSENTIAL OIL (BIGARADE, PARAGUAY)
Product Use: Personal Care Formulations
Company Name: Natural Sourcing
Company Address: 341 Christian Street, Oxford, CT 06478, USA
Date Issued: 01/28/2010
Emergency Telephone Number: Chemtrec Tel: (800) 262-8200

2. COMPOSITION/INGREDIENT INFORMATION

Composition:

Steam distilled essential oil from Citrus aurantium L. ssp. amara var. pumilia 100% by weight

Latin Name: Citrus aurantium L.

Naturalness: 100% Natural Complex Substance

Hazardous Components:

- Linalool (Xi, R38) < 27%
 - Alpha terpineol (Xi, R38) < 8%
 - Myrcene (Xn, R65) < 5%
 - Trans Beta Ocimene Xn, R65) < 5%
 - Geraniol (Xi, R38, R41, R43) < 4%
 - Beta Pinene (N, Xn, R43, R50/53, R65) < 3%
 - D-Limonene (N, Xi, R10, R38, R43, R50/53) < 2%
 - Alpha Pinene (N, Xn, R43, R50/53, R65) < 1%
 - Cital (Geranial + Neral) (Xi, R38, R43) < 0.50%
- Linalool (18-27%), Geraniol (<=4%), D-Limonene (<=2%) Citral (Geranial + Neral) (<=0.50%)

Allergens:

Toxicological Data:

CAS #: 8016-44-2
EINECS #: 277-143-2
FEMA #: 2855

3. HAZARDS IDENTIFICATION

Primary Hazard: Xi: Irritant
 N: Dangerous for environment
 R38: Irritating to skin
 R43: May cause sensitization by skin contact
 R51/53: Toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment

Routes of Entry:

- Eyes
- Skin
- Ingestion
- Inhalation

Eye Contact:	Irritation may occur.
Skin Contact:	Irritation may occur. Sensitization may occur with prolonged or repeated exposure.
Ingestion:	Not known
Inhalation:	Not known

4. FIRST AID MEASURES

Eyes:	Remove lenses if applicable. Flush with plenty of vegetable oil for 15 minutes holding lids apart. Get medical attention if irritation persists.
Skin:	Remove contaminated clothing. Thoroughly wash the affected area with soap and water. Flush with large quantities of water. Cover with emollient or pure vegetable oil. Seek medical attention if irritation persists.
Ingestion:	Rinse with water. Do not induce vomiting. Loosen tight clothing such as a collar, tie, belt or waistband. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek medical attention or contact local poison control center immediately. Remove to fresh air. Seek medical attention if necessary.
Inhalation:	Serious Inhalation: Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek medical attention.
Medical Conditions Generally Aggravated by Exposure:	No information

5. FIRE FIGHTING MEASURES

Flash Point (Method Used):	>75° C
Flammable Limits	LEL: Not Established UEL: Not Established
Auto Ignition Temperature:	No information
Hazardous Combustion Products:	None known
Extinguishing Media:	<ul style="list-style-type: none"> • Dry Chemical • Carbon Dioxide • Foam
Special Firefighting Procedures:	<p>Note: Do not use water spray except to cool containers</p> <ul style="list-style-type: none"> • Wear positive pressure, self contained breathing apparatus. • Wear protective clothing to prevent contact with skin and eyes. • Remove containers from fire area. • Spray extinguishing media directly into the base of the flames. • Water is unsuitable for use on burning materials but may be used to cool containers exposed to heat.
Unusual Fire & Explosion Hazards:	None known

6. ACCIDENTAL RELEASE MEASURES (STEPS FOR SPILLS)

- Personal Protection:**
- Chemical splash goggles should be worn.
 - If in a confined area, a certified/approved vapor respirator should be used.
 - Remove individuals if they do not have respiratory/dust protection.
 - Wear protective clothing and chemical resistant gloves.

Note: Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product

Environmental Protection: Notify authorities if large amounts of product enters sewer.

- Remove any source of flame or sparks.
- Ventilate area
- Prevent liquid from entering the sewers.
- Recover spilled material with pump or absorb onto an inert, absorbent substrate and sweep up.
- Wash area with soap and water.

Methods for Cleaning Up:

7. HANDLING AND STORAGE

Handling

- Safe Handling:**
- Wear safety glasses and chemical resistant gloves.
 - Keep away from oxidizing agents, excessive heat, light and sources of ignition.

Storage

- Requirements for Storage Areas and Containers:**
- Store in a cool, dry location, in a sealed container in a well ventilated area away from sources of ignition.

8. EXPOSURE CONTROL/PERSONAL PROTECTION

- Engineering Controls:**
- Provide exhaust ventilation. If necessary, install equipment at the point of emission.
 - Ensure that eyewash stations and safety showers are proximal to the work-station location.

Personal Protection

Eye: Chemical splash goggles or face shield should be worn.

Skin/Body: Lab coats, boots and chemical resistant gloves should be worn.

Respiratory: Use adequate ventilation or NIOSH-approved respiratory devices.

Ventilation: Handle in well ventilated areas. Ventilation meeting ACGIH Standards should be employed.

Other: Evaluate need based on application. Slip proof shoes may be worn where spills may occur.

Work/Hygiene Practice: Use good personal hygiene practices. Limit exposure to product whenever possible. Wash contaminated clothing or shoes before each use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Liquid
Color:	Clear, yellow to pale brown
Odor:	Characteristic of floral, citrus, herbal
Density:	0.882-0.894
Refractive Index @ 20°C:	1.457-1.467

Optical Rotation @ 20°C:	-5° to -1°
Viscosity:	No Information
Flash Point:	>75 °C
Boiling Point:	Not determined
Melting Point:	N/A
Solubility in Water:	Insoluble

10. STABILITY AND REACTIVITY

Stability:	Stable under normal conditions of use
Conditions to Avoid:	Keep away from sources of ignition, flame and heat. Avoid hot work and sources of ignition on or near empty containers.
Incompatibility (Materials to Avoid):	Strong oxidizing agents, PVC
Hazardous Decomposition or Byproducts:	No decomposition if use is appropriate
Hazardous Polymerization:	Will Not Occur
Shelf Life:	3 Years

11. TOXICOLOGICAL INFORMATION

Acute Toxicity:	LD50 Oral [Rat]: 5,000 mg/kg LD50 Dermal [Rabbit]: 5,000 mg/kg
Sensitization:	Not Available
Irritation:	Not Available
Phototoxicity:	Not Available
Carcinogenicity:	Not Regulated
Mutagenicity:	Not Regulated
Toxic Effects on the Reproductive system:	Not Regulated
Other Effects:	None established

12. ECOLOGICAL INFORMATION

Mobility:	Low mobility in the soil
Aquatic Toxicity:	Toxic to aquatic organisms, may cause long term effects in the aquatic environment.
Bioaccumulation Potential:	No impact according to known information
Other Harmful Effects:	No other serious according to known information
Precautions:	Avoid release into the environment (surface water, sewers, groundwater and air in the middle and natural). Comply with national regulations and regional legislation.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods:	Do not put into sewer lines. Dispose of according to local, state and federal regulations.
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14. TRANSPORT INFORMATION

Transport Classification: (according to international regulations)	ADR/RID Class: 9 UN #: 3082 Packing Group: III Label: Environmentally Hazardous Substance, Liquid
	IMDG Class: 9 UN #: 3082 Packing Group: III Label: Environmentally Hazardous Substance, Liquid Marine Pollutant: Yes
	Air ICAO-TI and IATA-DGR Class: 9 UN #: 3082 Packing Group: III Label: Environmentally Hazardous Substance, Liquid

15. REGULATORY INFORMATION

DSCL (EEC):	IFRA restrictions: This substance and/or some of its components are covered by the Code of Practice of the IFRA, the 42nd Amendment of May 16, 2007, available on the internet website www.ifraorg.org Xi: Irritant N: Dangerous for the environment
	R38: Irritating to skin R43: May cause sensitization by skin contact R51/53: Toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment
	S24: Avoid contact with eyes S26: In case of contact with skin, wash area immediately with soap and water and cover the effected area with vegetable oil S37: Wear suitable gloves S61: Avoid release to the environment. Refer to special instructions/safety data sheet.

Protective Equipment: Gloves, Lab Coat, Respirator, Splash Goggles

16. ADDITIONAL INFORMATION

This information is provided for documentation purposes only.

The complete range of conditions or methods of use are beyond our control therefore we do not assume any responsibility and expressly disclaim any liability for any use of this product. Information contained herein is believed to be true and accurate however, all statements or suggestions are made without warranty, expressed or implied, regarding accuracy of the information, the hazards connected with the use of the material or the results to be obtained from the use thereof. Compliance with all applicable federal, state, and local laws and local regulations remains the responsibility of the user.

This safety sheet cannot cover all possible situations which the user may experience during processing. Each aspect of your operation should be examined to determine if, or where, additional precautions may be necessary. All health and safety information contained in this bulletin should be provided to your employees or customers.