SAFETY DATA SHEET

DATE ISSUED: 3/24/2023



1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Lemongrass Oil

CHEMICAL NAME: Cymbopogon flexuosus, oil

CAS: 8007-02-1 **EC Number:** 292-161-9 **FEMA Number:** 2624

PRODUCT RECOMMENDED USE: Aromatic Ingredient(s). For Industrial Use Only.

RESTICTIONS ON USE: Do not ingest as such. Avoid eye contact.

MANUFACTURER

NorthWood Distributing, LLC 201 N Meridian Street Belle Plaine, MN 56011 customercare@northwoodcandle.com

952-679-4058

2. HAZARDS IDENTIFICATION

CLASSIFICATION:

Skin corrosion/irritation,Category 2;Sensitization — SkinCategory 1A;Serious Eye Damage/Eye IrritationCategory 1;Flammable LiquidsCategory 4

GHS LABEL ELEMENTS: HAZARD PICTOGRAM





SIGNAL WORD: Danger

HAZARD STATEMENTS:

H227 Combustible liquid, category 4

H315 Causes skin irritation

H317 May cause an allergic skin reaction
 H319 Causes serious eye damage
 H335 May cause respiratory irritation.

H412 Hazardous to the aquatic environment — long-term hazard, category chronic 3

PRECAUTIONARY STATEMENTS:

P403 + P235 Store in a well-ventilated place. Keep cool.
P264 Wash skin thoroughly after handling.

P261 Avoid breathing dust/fume/gas/mist/vapors/spray
P362 Take off contaminated clothing and wash before reuse.

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P280 Wear protective gloves/eye protection/face protection.

P501 Dispose of contents/container to an approved waste disposal plant

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present

and easy to do. Continue rinsing

P302 + P352 IF ON SKIN: Wash with plenty of water and soap

P333 + P313 If skin irritation or rash occurs: Get medical advice/attention P370 + P378 In case of fire: Use CO2, dry chemical, or foam to extinguish

OTHER INFORMATION:

May be harmful in contact with skin. Toxic to aquatic life with long lasting effects. Toxic to aquatic life.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS Number	Weight %	GHS Classification
Citral	5392-40-5	80% to 90%	Acute Tox. Dermal 5 (H313)
			Skin Irrit. 2 (H315)
			Eye Irrit. 2A (H319)
			Skin Sens. 1 (H317)
			Aquatic Acute 2 (H401)
Geraniol	106-24-1	5.0% to 10%	Skin Sens. 1B (H317)
			Skin Irrit. 2 (H315)
			Eye Dam. 1 (H318)
			Aquatic Acute 3 (H402)
			Acute Tox. Oral 5 (H303)
Geranyl acetate	105-87-3	5.0% to 10%	Skin Sens. 1B (H317)
			Skin Irrit. 2 (H315)
			Aquatic Chronic 3 (H412)
			Aquatic Acute 2 (H401)
beta-Caryophyllene	87-44-5	1.0% to 5.0%	Skin Sens. 1B (H317)
			Asp. Tox. 1 (H304)
			Aquatic Chronic 4 (H413)
Limonene	5989-27-5	1.0% to 5.0%	Flam. Liq. 3 (H226)
			Skin Irrit. 2 (H315)
			Skin Sens. 1B (H317)
			Asp. Tox. 1 (H304)
			Aquatic Acute 1 (H400)

			Aquatic Chronic 3 (H412)		
Camphene	79-92-5	1.0% to 5%	Flam. Sol. 2 (H228)		
			Eye Irrit. 2B (H320)		
			Aquatic Acute 1 (H400)		
			Aquatic Chronic 1 (H410		
Linalool	78-70-6	1.0% to 5%	Flam. Liq. 4 (H227)		
			Acute Tox. Oral 5 (H303)		
			Skin Irrit. 2 (H315)		
			Eye Irrit. 2A (H319)		
			Skin Sens. 1B (H317)		
			Aquatic Acute 3 (H402)		
Citronellal	106-23-0	0.1% to 1.0%	Flam. Liq. 4 (H227)		
			Acute Tox. Oral 5 (H303)		
			Acute Tox. Dermal 5 (H313)		
			Skin Irrit. 2 (H315)		
			Eye Irrit. 2A (H319)		
			Skin Sens. 1 (H317)		
			Aquatic Acute 2 (H401)		
Nerol	106-25-2	0.1% to 1.0%	Acute Tox. Oral 5 (H303)		
			Skin Irrit. 2 (H315)		
			Eye Irrit. 2A (H319)		
			Skin Sens. 1B (H317)		
			Aquatic Acute 2 (H401)		
Citronellol	106-22-9	0.1% to 1.0%	Acute Tox. Oral 5 (H303)		
			Acute Tox. Dermal 5 (H313)		
			Skin Irrit. 2 (H315)		
			Eye Irrit. 2A (H319)		
			Skin Sens. 1B (H317)		
			Aquatic Acute 2 (H401)		
Isoeugenol	97-54-1	0.1% to 1.0%	Acute Tox. Oral 4 (H302)		
			Acute Tox. Dermal 4 (H312)		
			Acute Tox. Inhalation - dust and mist 4 (H332)		
			Skin Irrit. 2 (H315)		
			Eye Irrit. 2A (H319)		
			Skin Sens. 1A (H317)		
			STOT SE 3 (H335)		
			Aquatic Acute 2 (H401)		
alpha-Pinene	80-56-8	0.1% to 1.0%	Flam. Liq. 3 (H226)		
			Acute Tox. Oral 4 (H302)		
			Skin Irrit. 2 (H315)		
			Skin Sens. 1B (H317)		
			Asp. Tox. 1 (H304)		
			Aquatic Acute 1 (H400)		
			Aquatic Chronic 1 (H410)		
Farnesol	4602-84-0	0.1% to 1.0%	Skin Irrit. 2 (H315)		
			Eye Irrit. 2A (H319)		
			Skin Sens. 1B (H317)		

4. FIRST AID MEASURES

MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED:

Burning sensation, itching, rashes, hives.

EYES:

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention.

SKIN:

Remove contaminated clothing. Wash affected areas with plenty of soap and water. If irritation develops, seek medical attention.

INGESTION:

If swallowed, rinse mouth with water. Seek medical advice immediately and show this container or label. Do NOT induce vomiting. Rinse mouth with water and obtain medical advice.

INHALATION:

Remove to fresh air. Get medical attention immediately if symptoms occur.

SELF-PROTECTION OF THE FIRST AID:

Remove all sources of ignition. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Wear personal protective clothing (see section 8). Avoid contact with skin, eyes or clothing.

NOTE TO PHYSICIANS:

May cause sensitization in susceptible persons. Treat symptomatically

5. FIRE FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA: Dry chemical. Carbon dioxide (CO2). Water spray. Alcohol resistant foam. CAUTION: Use of water spray when fighting fire may be inefficient.

UNSUITABLE EXTINGUISHING MEDIA: Do not scatter spilled material with high pressure water streams.

SPECIAL HAZARDS ARISING FROM THE SUBSTANCE /MIXTURE: Keep product and empty container away from heat and sources of ignition. In the event of fire, cool tanks with water spray. Product is or contains a sensitizer. May cause sensitization by skin contact.

DURING FIREFIGHTING: Water may be ineffective.

HAZARDOUS COMBUSTION PRODUCTS: Carbon Dioxide, Carbon Monoxide and other unidentified organic compounds.

SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTION FOR FIRE FIGHTERS: Treat as a chemical fire. Self-contained breathing apparatus and protective clothing should be worn when fighting fires involving chemicals.

ADVICE FOR FIREFIGHTERS: Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. ACCIDENTAL RELEASE MEASURES

PRESONAL PRECAUTIONS, PROTECTIVE EQUIPMENT, AND EMERGENCY PROCEDURES: PERSONAL PRECAUTIONS:

Evacuate personnel to safe areas. Use personal protective equipment as required. See section 8 for more information. Take precautionary measures against static discharges. Do not touch or walk through spilled material. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Keep people away from and upwind of spill/leak.

OTHER INFORMATIOKN:

Refer to protective measures listed in Sections 7 and 8

METHODS AND MATERIAL FOR CONTAINMENT AND CLEAN UP:

Stop leak if you can do it without risk. Do not touch or walk through spilled material. Dike far ahead of liquid spill for later disposal. Take precautionary measures against static discharges. Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers

7. HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING:

Use personal protection equipment. Do not breathe vapor or mist. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharges. Use with local exhaust ventilation. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. In case of insufficient ventilation, wear suitable respiratory equipment. Take off contaminated clothing and wash before reuse.

STORAGE:

Keep container tightly closed in a dry and well-ventilated place. Keep away from open flames, hot surfaces and sources of ignition

8. EXPOSURE CONTROLS\PERSONAL PROTECTION

CONTROL PARAMETERS:

Exposure Limits:

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Citral	dermal sensitizer	-	-
5392-40-5	TWA: 5 ppm inhalable fraction		
	and vapor		
	S*		
alpha-Pinene	dermal sensitizer	-	-
80-56-8	TWA: 20 ppm		

ENGINEERING CONTROLS:

Showers Eyewash Stations Ventilation Systems

PERSONAL PROTECTIVE EQUIPMENT:

RESPIRATORY PROTECTION: No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

EYE PROTECTION: Use tightly sealed splash goggles, face shield, or safety glasses with brow guards and side shields as may be appropriate.

SKIN PROTECTION: Wear suitable protective clothing. Long sleeved clothing

GENERAL HYGIENIC PRACTICES: Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection

9. PHYSICAL AND CHEMICAL PROPERTIES

COLOR: Orange yellow to dark brown

ODOR: Characteristic

APPEARANCE: Liquid

FLASH POINT: 79 °C / 174 °F

FLASH POINT METHOD: CLOSED CUP

SPECIFIC GRAVITY @ 20/20 °C: 0.870-0.910

REFRACTIVE INDEX: 1.460 to 1.497 @ 20°C

OPTICAL ROTATION: -4 to 4

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY: Product is stable under normal storage and use.

POSSIBILITY OF HAZARDOUS REACTIONS: None Known.

CONDITIONS TO AVOID: Excessive heat, sparks or open flame.

HAZARDOUS DECOMPOSITION PRODUCTS: None known based on information supplied.

INCOMPATIBLE MATERIALS: Strong acids. Strong bases. Strong oxidizing agents

REACTIVITY: No Information Available.

11. TOXICOLOGICAL INFORMATION

INFORMATION ON LIKELY ROUTES OF EXPOSURE:

PRODUCT INFORMATION:

Inhalation Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract.

Eye contact Specific test data for the substance or mixture is not available. Causes serious eye damage. May cause irreversible damage to eyes. (based on components).

Skin contact Specific test data for the substance or mixture is not available. May cause sensitization by skin contact. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. (based on components). Causes skin irritation.

Ingestion Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea

Symptoms related to the physical, chemical and toxicological characteristics:

Symptoms Redness. Burning. May cause blindness. Itching. Rashes. Hives. May cause redness and tearing of the eyes.

ACUTE TOXICITY:

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral) > 5000 mg/kg ATEmix (dermal) 2,714.10 mg/kg

Delayed and immediate effects as well as chronic effects from short and long-term exposure:

Skin corrosion/irritation Classification based on data available for ingredients. Irritating to skin.

Serious eye damage/eye irritation Classification based on data available for ingredients. Causes burns. Risk of serious damage to eyes.

Respiratory or skin sensitization May cause sensitization by skin contact.

Germ cell mutagenicity No information available.

Carcinogenicity No information available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Toxic to aquatic life. Toxic to aquatic life with long lasting effects.

Persistence and degradability

No information available.

Bioaccumulation

There is no data for this product.

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Do not allow product to reach sewage systems. Dispose of in accordance with all local and national regulations. Send to a licensed waste management company. The product should not be allowed to enter drains, water courses or the soil. Do not contaminate ponds, waterways or ditches with chemical or used container.

14. TRANSPORT INFORMATION

Regulator Class Pack Group Sub Risk UN-nr

DOT (US)
NON-BULK Not Regulated by DOT

BULK

(Bulk packaging consists for a liquid of a capacity greater 119 US gal / 450 L. See CFR 171.4(c))

Environmentally Hazardous Substance, 9 III UN-3082

Liquid, n.o.s. (Citral and Geranyl acetate)



IATA (Air Cargo)

Environmentally Hazardous Substance 9 III UN-3082

Liquid, n.o.s. (Citral and Geranyl acetate)



IMGD/IMO (Sea)

Environmentally Hazardous Substance 9 III UN-3082

Liquid, n.o.s. (Citral and Geranyl acetate)

EmS: F-A, S-F Marine Pollutant: Yes



15. REGULATORY INFORMATION

US FEDERAL REGULATIONS:

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

US STATE REGULATIONS:

California Proposition 65

This product does not contain any Proposition 65 chemicals

16. OTHER INFORMATION

DISCLAIMER:

The information in this MSDS was obtained from current and reliable sources. However, the data is provided without any warranty, expressed or implied, regarding its correctness and accuracy. Since the conditions for use, handling, storage and disposal of this product are beyond NorthWood Distributing LLC 's control, it is the user's responsibility both to determine safe conditions for use of this product and to assume liability for loss, injury, damage or expense arising out of the product's

improper use. No warranty, expressed or implied, regarding the product described herein shall be created by or inferred from any statement or omission in this MSDS. Various government agencies (e.g.DOT, EPA, FDA) may have specific regulations concerning the transportation, handling, storage, use or disposal of this product, which may not be reflected in this MSDS. The user should review these regulations to ensure full compliance.