
1. PRODUCT AND COMPANY IDENTIFICATION

Product name	Lemongrass Essential Oil
Product code	EO-GINGE
Botanical name	Cymbopogon flexuosus
CAS #	8007-02-1
Product use	Domestic and Industrial
Supplier	WFMed
Address	8245 Backlick Rd Unit D, Lorton VA 22079 USA
Telephone number	888-WFMED-97 (888-936-3397)
Emergency phone number	888-WFMED-97 (888-936-3397)

2. HAZARD(S) IDENTIFICATION**GHS Hazard Classification**

Flammable liquids - Category 4
Skin corrosion/irritation - Category 2
Skin Sensitization - Category 1
Serious eye damage/eye irritation - Category 2A
Hazardous to the aquatic environment — Chronic Hazard - Category 3

GHS Label Elements

Pictogram
Signal Word



Warning

Hazard Statements

H227	Combustible liquid.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H412	Harmful to aquatic life with long-lasting effects.

Precautionary Statements - Prevention

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261	Avoid breathing dust/fumes/gas/mist/vapours/spray.
P272	Wash skin thoroughly after handling.
P273	Contaminated work clothing should not be allowed out of the workplace.
P280	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary Statements - Response

P302+P352

P305+P351+P338

IF ON SKIN: Wash with plenty of water.

IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses if present and easy to do – continue rinsing.

P321

Specific treatment (see section 4 on the SDS).

P333+P313

If skin irritation or a rash occurs: Get medical advice/attention.

P303+P361+P353

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.

P362

Take off contaminated clothing.

P363

Wash contaminated clothing before reuse.

P370+P378

In case of fire: Use appropriate fire extinguisher to extinguish.

P391

Collect spillage.

Precautionary Statements - Storage

P403+P235

Store in a well ventilated place. Keep cool.

P405

Store locked up.

Precautionary Statements - Disposal

P501

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

Hazards Not Otherwise Classified (HNOC)

No data available

3. COMPOSITION / INFORMATION ON INGREDIENTS

<u>Product Name</u>	<u>CAS NO</u>	<u>Concentration</u>
Cymbopogon Flexuosus Essential Oil	8007-02-1	100%

4. FIRST-AID MEASURES**Description of first aid measures****Eye Contact**

Contact with eyes can produce burning sensation. Irrigate with water immediately, continue flushing eyes with water for 15 minutes. Seek medical attention if irritation persists.

Skin Contact

Skin contact can produce irritation, or itching of the skin. Remove contaminated clothing Wash with soap and plenty of water. Seek medical attention if irritation persists.

Inhalation

Remove to fresh air. Give oxygen if breathing is labored and seek medical advice. Avoid casual breathing. Signs of overexposure are dizziness and nausea.

Ingestion

Rinse mouth and consult a physician immediately. Never-give anything by mouth if victim is unconscious, is rapidly-losing consciousness, or is convulsing.

Most important symptoms and effects, both acute and delayed

No additional information available.

Indication of any immediate medical attention and special treatment needed

No additional information available. Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Extinguishing media

CO₂, foam and dry chemicals. DO NOT use direct water jet on burning material.

Specific hazards arising from the chemical

Carbon oxides.

Special protective equipment and precautions for firefighters

Wear proper protective equipment. Exercise caution when fighting any chemical fire. Use water spray or fog for cooling exposed containers.

Further information

No data available

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Use of self-contained breathing apparatus is recommended for any major chemical spill. Avoid breathing vapours, 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. Refer also to section 8.

Environmental precautions

Keep away from drains, surface and groundwater. Report spills to appropriate authorities if required.

Methods and materials for containment and cleaning up

Methods for containment

Contain and collect spillage with Non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations.

Methods for cleaning up

Contain and collect with inert absorbent material and place in suitable container for disposal. Comply with all federal, state, and local regulation. Wipe small spills with cloth. Clean with hot water and detergent.

7. HANDLING AND STORAGE

Precautions for safe handling

No direct lighting. No smoking. Ensure prompt removal from eyes, skin and clothing. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Handle in accordance with good industrial hygiene and safety procedures.

Conditions for safe storage, including any incompatibilities

Storage conditions

Containers should be kept closed in order to minimize contamination. Store in a cool, dry, well ventilated place protected from light. Keep away from extreme heat and from freezing conditions and away from all sources of ignition. Make sure the material does not come into contact with substances listed as: "Materials to Avoid".

Incompatible materials

None known based on information supplied.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Control parameters

No data available.

Exposure controls

Engineering controls

Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

Eye/Face protection: The use of safety glasses is recommended. If a material is to be handled in a manner where splashing may occur, the use of splash goggles or face shield is recommended. An eyewash fountain and / or safety shower should be available in the work area.

Skin/Body protection: Chemical resistant gloves/clothing are recommended.

Respiratory protection: In well-ventilated areas, respiratory protection is not normally required. In confined, poorly ventilated areas the use of "NIOSH" approved respiratory protection normally required (use only if trained in proper use and with acceptable oxygen level).

General hygiene considerations

Acceptable industrial hygiene practices should be maintained.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Liquid
Appearance	Pale yellow to radish brown liquid
Odor	Very strong and stimulating characteristic lemon odor
Refractive Index	1.4785 – 1.4890
Specific Gravity(d20/20):	0.906
Specific Gravity(d25/25):	0.880
Flash point	71°C (159.8°F)
Solubility	Soluble in alcohol and oils. Insoluble in water
Contents	neral, geranial, terpenoids of nerol, limonene, linalool and β -caryophyllene

10 . STABILITY AND REACTIVITY

Reactivity

This material presents no significant reactivity hazard.

Chemical stability

Stable under recommended storage conditions.

Possible hazardous reactions

No data available.

Conditions to avoid

Avoid sparks, flame and other heat sources.

Incompatible materials

Strong oxidizing agents

Hazardous decomposition

When heated to decomposition produces toxic fumes/carbon monoxide smoke.

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects**Acute toxicity**

Lemongrass Oil:
LD50 Oral - 2885 mg/kg.

Skin corrosion/irritation

Adverse skin effects should be prevented by normal care and personal hygiene

Serious eye damage/eye irritation

Possible irritation should be prevented by wearing safety glasses.

Respiratory or skin sensitisation

Inhalation of high concentrations of vapor may result in irritation of eyes, nose and throat, headache, nausea, and dizziness.

Germ cell mutagenicity

No data available.

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 known or anticipated 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.

Reproductive toxicity

No data available.

Specific target organ toxicity - single exposure

No data available.

Specific target organ toxicity - repeated exposure

No data available.

Aspiration hazard

No data available.

Additional information

No data available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Avoid any pollution of ground, surface or underground water.

Persistence and degradability

No data available.

Bioaccumulative potential

No data available.

Mobility in soil

No data available.

Other adverse effects

No data available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Product

Dispose of product in accordance with local, state or provincial and federal regulations. Check with local municipal authority to ensure compliance.

Contaminated packaging

Do not reuse container.

14. TRANSPORT INFORMATION

US DOT (Land)

UN/ID #	1169
Proper Shipping Name	Extract, aromatic, liquid
Hazard Class	3
Packing Group	III
Poison Inhalation Hazard	No

IMDG/IMO (Sea)

UN/ID #	1169
Proper Shipping Name	Extract, aromatic, liquid
Hazard Class	3
Packing Group	III
EMS-No	F-E, S-D
Poison Inhalation Hazard	No

15. REGULATORY INFORMATION

SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazard Categories

Fire Hazard, Acute Health Hazard

California Proposition 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

16. OTHER INFORMATION

Creation date: 12/23/2020

Revision date: 12/23/2020

Disclaimer & Caution:

The information contained in Material Safety Data Sheet is obtained from current and reliable sources. The information contained herein is true and to the best of WFMed's knowledge. Nothing herein should be interpreted as a recommendation to infringe existing patents or violate any laws or regulations. Final determination of the suitability of the material is the sole responsibility of the user. Customers should purchase products from WFMed with the clear understanding that all products must be used at the customer's own discretion and only after referencing Material Safety Data Sheets (MSDS) and all other relevant technical information specific to the product. WFMed shall not be held responsible for any damages to the property or for any adverse physical effects (including injury or bodily harm) caused by insufficient knowledge or the improper use of a product. The user of the product is solely responsible for compliance with all laws and regulations applying to the use of the products, including intellectual property rights of third parties. As with any manufacturing process, WFMed strongly recommends small lab scale testing for evaluation purposes prior to full commercial manufacturing. The information on the WFMed website is obtained from current and reliable sources but makes no representation as to its comprehensiveness or accuracy. Nothing contained herein should be considered as a recommendation by WFMed as to the fitness for any use. As the ordinary or otherwise uses of this product is outside the control of WFMed no representation or warranty, expressed or implied is made as to the effect(s) of such use(s) (including damage or injury), or the results obtained. The liability of WFmed is limited to the value of the goods and does not include any consequential loss. WFmed shall not be liable for any errors or delays in the content, or for any actions taken in reliance thereon.