

1. PRODUCT AND COMPANY IDENTIFICATION

| | |
|------------------------|--|
| Product name | Lime Essential Oil |
| Botanical name | Citrus aurantifolia |
| CAS # | 8008-26-2 |
| Product use | Domestic and Industrial |
| Supplier | TR GLOBAL PHARMA |
| Address | Marmara Mh. 115 Sk. No:4A/17 Beylikdüzü,İstanbul,Türkiye |
| Telephone number | +90 545 382 14 62 |
| Emergency phone number | +90 545 382 14 62 |

2. HAZARD(S) IDENTIFICATION

GHS Hazard Classification

Flammable liquids - Category 3
Aspiration hazard - Category 1
Skin corrosion/irritation - Category 2
Skin sensitization - Category 1
Serious eye damage/eye irritation - Category 2A
Hazardous to the aquatic environment, acute hazard - Category 2
Hazardous to the aquatic environment, long-term hazard - Category 2

GHS Label Elements



Pictogram
Signal Word

Warning

Hazard Statements

H226 Flammable liquid and vapor.
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H410 Very toxic to aquatic life with long-lasting effects

Precautionary Statements - Prevention

P210 Keep away from heat/sparks/open flames/hot surfaces – No smoking.
P233 Keep container tightly closed.
P240 Ground/bond container and receiving equipment.
P241 Use explosion-proof electrical/ventilating/lighting/equipment.

P242 Use only non-sparking tools.
 P243 Take precautionary measures against static discharge.
 P261 Avoid breathing dust/fumes/gas/mist/vapours/spray.
 P264 Wash skin thoroughly after handling.
 P272 Contaminated work clothing should not be allowed out of the workplace.
 P273 Avoid release to the environment.
 P280 Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary Statements - Response

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor/
 P302+P352 IF ON SKIN: Wash with plenty of water. Take off immediately all contaminated clothing.
 P305+P351+P338 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 this label).
 P331 Do NOT induce vomiting.
 P332+P313 If skin irritation occurs: Get medical advice/attention.
 P337+P313 If eye irritation persists get medical advice/attention.
 P362 Take off contaminated clothing.
 P363 Wash contaminated clothing before reuse.
 P370+P378 In case of fire: Use foam 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> |
|---------------------|---------------|----------------------|
| Limonene | 5989-27-5 | 30-90% |
| beta-Pinene | 127-91-3 | 3-20% |
| gamma-Terpinene | 99-85-4 | 1-12% |
| alpha-Pinene | 80-56-8 | 1-4% |
| Neral | 5392-40-5 | 1-5% |

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 yellowish green liquid |
| Odor | Characteristic lime rind odor |
| Refractive Index | 1.470 – 1.478 |
| Specific Gravity(d20/20): | 0.866 |
| Specific Gravity(d25/25): | 0.850 |
| Flash point | 46°C (114.8°F) |
| Solubility | Soluble in alcohol and oils. Insoluble in water |
| Contents | α -pinene, β -pinene, sabinene, myrcene, limonene, γ -terpinene, terpinolene, octanal, nonanal, tetradecanal, pentadecanal, geranial, trans- α -bergaptene, caryophyllene, β -bisabolene, neryl acetate, geranyl acetate, α -terpineol, linalool. |

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, the smoke from burning essential oils may contain potential carcinogens, such as polycyclic aromatic hydrocarbons (PAHs).

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity

LD50 (Oral) - Rat : >5000 mg/kg

LD50 (Dermal) Rabbit : >5000 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