1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade Name: Lemon Fragrance Oil

1.2 Relevant identified product use

Intended use: Compound used in customer substance/mixture/product

1.3 Details of the manufacturer/supplier of the safety data sheet

Supplier: Natures Garden Fragrances
42109 State Route 18
Wellington, OH 44090
PHONE: 440-647-0100  FAX: 440-647-0220
http://www.naturesgardencandles.com
Department E-mail address: info@naturesgardencandles.com

2. Hazards Identification

2.1 Classification of the substance or mixture

This mixture has not been tested as a whole. The effects, listed below, are based on evaluation of individual components in accordance with the provisions of the regulation(s) noted below.

Classification according to GHS Regulation (EC) No 1272/2008

- Flammable Liquids, Category 3: H226: Flammable liquid and vapor
- Acute Toxicity Oral, Category 5: H303: May be harmful if swallowed
- Aspiration Hazard, Category 1: H304: May be fatal if swallowed and enters airways
- Acute Toxicity Dermal, Category 5: H313: May be harmful in contact with skin
- Skin Corrosion/Irritation, Category 2: H315: Causes skin irritation
- Sensitization, Skin, Category 1B: H317: May cause an allergic skin reaction
- Eye Damage/Eye Irritation, Category 2A: H319: Causes serious eye irritation
- Acute Toxicity Inhalation, Category 5: H333: May be harmful if inhaled
- Germ Cell Mutagenicity, Category 2: H341: Suspected of causing genetic defects
- Carcinogenicity, Category 2: H351: Suspected of causing cancer
- Aquatic Chronic Toxicity, Category 2: H410: Very toxic to aquatic life with long lasting effects

Classification EU (67/548/EEC, 199/45/EC)

- N  Dangerous for the Environment
  - R50/53 : Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
- Xi  Irritant
  - R38 : Irritating to skin
  - R43 : May cause sensitization by skin contact
- Xn  Harmful
  - R65 : Harmful: may cause lung damage if swallowed

2.2 Label elements

Labeling (REGULATION (EC) No 1272/2008)
Safety Data Sheet
Product: Lemon Fragrance Oil

Hazard pictograms

Signal Word: Danger

Hazard statements
H226 Flammable liquid and vapor
H303 May be harmful if swallowed
H304 May be fatal if swallowed and enters airways
H313 May be harmful in contact with skin
H315 Causes skin irritation
H317 May cause an allergic skin reaction
H319 Causes serious eye irritation
H333 May be harmful if inhaled
H341 Suspected of causing genetic defects
H351 Suspected of causing cancer
H410 Very toxic to aquatic life with long lasting effects

Precautionary Statements

Prevention:
P201 Obtain special instructions before use
P202 Do not handle until all safety precautions have been read and understood
P233 Keep container tightly closed
P235 Keep cool
P240 Ground/bond container and receiving equipment
P241 Use explosion-proof electrical/ventilating/light/.../equipment
P242 Use only non-sparking tools
P243 Take precautionary measures against static discharge
P264 Wash hands thoroughly after handling
P272 Contaminated work clothing should not be allowed out of the workplace
P273 Avoid release to the environment
P281 Use personal protective equipment as required

Response:
P301 + P310 + P331 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician Do NOT induce vomiting
P302 + P352 IF ON SKIN: Wash with soap and water
P303 + P361 + P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing Rinse skin with water/shower
P304 + P312 IF INHALED: Call a POISON CENTER or doctor/physician if you feel unwell
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes Remove contact lenses if present and easy to do. Continue rinsing
P308 + P313 IF exposed or concerned: Get medical advice/attention
P312 Call a POISON CENTER or doctor/physician if you feel unwell
P313 Get medical advice/attention
P333 + P313 If skin irritation or a rash occurs: Get medical advice/attention
P337 + P313 If eye irritation persists: Get medical advice/attention
Safety Data Sheet

Product: Lemon Fragrance Oil

2.3 Other Hazards

no data available

3. Composition/Information on Ingredients

3.1 Mixtures

This product is a complex mixture of ingredients, which contains among others the following substance(s), presenting a health or environmental hazard within the meaning of the UN Globally Harmonized System of Classification and Labeling of Chemicals (GHS):

<table>
<thead>
<tr>
<th>CAS#</th>
<th>EC#</th>
<th>Conc. Range</th>
<th>GHS Classification</th>
<th>EU Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>68647-72-3</td>
<td>232-433-8</td>
<td>30 - 40 %</td>
<td>H226; H304; H315; H317; H400; H410</td>
<td>R10; N - R50/53; Xi - R38, R43; Xn - R65</td>
</tr>
<tr>
<td>120-51-4</td>
<td>204-402-9</td>
<td>10 - 20 %</td>
<td>H302; H313; H400; H411</td>
<td>N - R51/53; Xn - R22</td>
</tr>
<tr>
<td>5392-40-5</td>
<td>226-394-6</td>
<td>10 - 20 %</td>
<td>H313; H315; H317; H319; H401</td>
<td>Xi - R38, R43</td>
</tr>
<tr>
<td>18479-58-8</td>
<td>242-362-4</td>
<td>10 - 20 %</td>
<td>H227; H303; H316; H319; H402</td>
<td>Xi - R38</td>
</tr>
<tr>
<td>8050-15-5</td>
<td>232-476-2</td>
<td>5 - 10 %</td>
<td>H402; H412</td>
<td>R52/53</td>
</tr>
<tr>
<td>68917-33-9</td>
<td>284-515-8</td>
<td>2 - 5 %</td>
<td>H226; H304; H315; H400; H410</td>
<td>R10; N - R50/53; Xi - R38, R43; Xn - R65</td>
</tr>
<tr>
<td>8000-29-1</td>
<td>289-753-6</td>
<td>1 - 2 %</td>
<td>H227; H303; H304; H313; H315; H318; H341; H351; H401; H411</td>
<td>N - R51/53; Xi - R38, R41, R43; Xn - R40, R65, R68</td>
</tr>
<tr>
<td>105-87-3</td>
<td>203-341-5</td>
<td>1 - 2 %</td>
<td>H315; H317; H401; H412</td>
<td>N - R51/53; Xi - R38, R43</td>
</tr>
<tr>
<td>8007-02-1</td>
<td>289-752-0</td>
<td>1 - 2 %</td>
<td>H227; H303; H315; H318; H401; H411</td>
<td>N - R51/53; Xi - R36, R38, R43</td>
</tr>
</tbody>
</table>

Total Hydrocarbon Content (% w/w) = 39.33

4. First Aid Measures

4.1 Description of first aid measures

Inhalation: Remove from exposure site to fresh air and keep at rest. Obtain medical advice.

Eye Exposure: Flush immediately with water for at least 15 minutes. Contact physician if symptoms persist.
### Skin Exposure:
Remove contaminated clothes. Wash thoroughly with water (and soap). Contact physician if symptoms persist.

### Ingestion:
Rinse mouth with water and obtain medical advice.

#### 4.2 Most important symptoms and effects, both acute and delayed

**Symptoms:**
No data available

**Risks:**
Refer to Section 2.2 "Hazard Statements"

#### 4.3 Indication of any immediate medical attention and special treatment needed

**Treatment:**
Refer to Section 2.2 "Response"

### 5. Fire-Fighting measures

#### 5.1 Extinguishing media
**Suitable:**
Carbon dioxide (CO2), Dry chemical, Foam

**Unsuitable:**
Do not use a direct water jet on burning material

#### 5.2 Special hazards arising from the substance or mixture

**During fire fighting:**
Water may be ineffective

### 6. Accidental Release Measures

#### 6.1 Personal precautions, protective equipment and emergency procedures
Avoid inhalation and contact with skin and eyes. A self-contained breathing apparatus is recommended in case of a major spill.

#### 6.2 Environmental precautions
Keep away from drains, soil, and surface and groundwater.

#### 6.3 Methods and materials for containment and cleaning up
Clean up spillage promptly. Remove ignition sources. Provide adequate ventilation. Avoid excessive inhalation of vapors. Gross spillages should be contained by use of sand or inert powder and disposed of according to the local regulations.

#### 6.4 Reference to other sections
Not Applicable

### 7. Handling and Storage

#### 7.1 Precautions for safe handling
Apply according to good manufacturing and industrial hygiene practices with proper ventilation. Do not drink, eat or smoke while handling. Respect good personal hygiene.

#### 7.2 Conditions for safe storage, including any incompatibilities

Store in a cool, dry and ventilated area away from heat sources and protected from light in tightly closed original container. Avoid plastic and uncoated metal container. Keep air contact to a minimum.

#### 7.3 Specific end uses
No information available
8. Exposure Controls/Personal Protection

8.1 Control parameters

Exposure Limits: Contains no substances with occupational exposure limit values

Engineering Controls: Use local exhaust as needed.

8.2 Exposure controls - Personal protective equipment

Eye protection: Tightly sealed goggles, face shield, or safety glasses with brow guards and side shields, etc. as may be appropriate for the exposure

Respiratory protection: Avoid excessive inhalation of concentrated vapors. Apply local ventilation where appropriate.

Skin protection: Avoid Skin contact. Use chemically resistant gloves as needed.

9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance: Conforms to Standard
Odor: Conforms to Standard
Color: Colorless to Pale Yellow
Viscosity: Liquid
Freezing Point: Not determined
Boiling Point: Not determined
Melting Point: Not determined
Flashpoint: 135 F (57.22 C)
Auto flammability: Not determined
Explosive Properties: None Expected
Oxidizing properties: None Expected

Vapor Pressure (mmHg@20 C): 0.4441
%VOC: 40.5867
Specific Gravity @ 25 C: 0.9120
Density @ 25 C: 0.9090
Refractive Index @ 20 C: 1.4900
Soluble in: Oil

10. Stability and Reactivity

10.1 Reactivity None
10.2 Chemical stability Stable
10.3 Possibility of hazardous reactions None known
10.4 Conditions to avoid None known
10.5 Incompatible materials Strong oxidizing agents, strong acids, and alkalis
10.6 Hazardous decomposition products None known
11. Toxicological Information

11.1 Toxicological Effects

Acute Toxicity Estimates (ATEs) based on the individual Ingredient Toxicity Data utilizing the “Additivity Formula”

- **Acute toxicity - Oral** - mg/kg  
  (LD50: 3,048.78) May be harmful if swallowed

- **Acute toxicity - Dermal** - mg/kg  
  (LD50: 3,496.50) May be harmful in contact with skin

- **Acute toxicity - Inhalation** - mg/L/4hr  
  (LC50: 74.82) May be harmful if inhaled

- **Skin corrosion / irritation**  
  Causes skin irritation

- **Serious eye damage / irritation**  
  Causes serious eye irritation

- **Respiratory sensitization**  
  Not classified - the classification criteria are not met

- **Skin sensitization**  
  May cause an allergic skin reaction

- **Germ cell mutagenicity**  
  Suspected of causing genetic defects

- **Carcinogenicity**  
  Suspected of causing cancer

- **Reproductive toxicity**  
  Not classified - the classification criteria are not met

- **Specific target organ toxicity - single exposure**  
  Not classified - the classification criteria are not met

- **Specific target organ toxicity - repeated exposure**  
  Not classified - the classification criteria are not met

- **Aspiration hazard**  
  May be fatal if swallowed and enters airways

12. Ecological Information

12.1 Toxicity

- **Acute aquatic toxicity**  
  Not classified - the classification criteria are not met

- **Chronic aquatic toxicity**  
  Very toxic to aquatic life with long lasting effects

- **Toxicity Data on soil**  
  no data available

- **Toxicity on other organisms**  
  no data available

12.2 Persistence and degradability  
  no data available

12.3 Bioaccumulative potential  
  no data available

12.4 Mobility in soil  
  no data available

12.5 Other adverse effects  
  no data available

13. Disposal Conditions

13.1 Waste treatment methods

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

<table>
<thead>
<tr>
<th>Regulator</th>
<th>Class</th>
<th>Pack Group</th>
<th>Sub Risk</th>
<th>UN-nr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. DOT (Non-Bulk)</td>
<td>Not Regulated</td>
<td>Not Dangerous Goods</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Safety Data Sheet

### Product: Lemon Fragrance Oil

### Chemicals NOI

**ADR/RID (International Road/Rail)**
- Environmentally Hazardous Substance, 9 III UN3082
- IATA (Air Cargo)
  - Perfumery Products 3 III Flammable Liquid UN1266
  - Environmentally Hazardous Substance, 9 III UN3082
- IMDG (Sea)
  - Perfumery Products 3 III Flammable Liquid UN1266
  - Environmentally Hazardous Substance, 9 III UN3082

**15. Regulatory Information**

**Additional European Regulations:**
- European Union (EINECS, ELINCS or NLP): 100.06% (by Wt) of the components are listed or exempt.

**Additional Asian Regulations:**
- Australian AICS: 100.00% (by Wt) of the ingredients on AICS or notified.
- Chinese IECS: 100.00% (by Wt) of the ingredients on IECS.
- Japan ENCS: 100.00% (by Wt) of the ingredients on ENCS, fall within the 1000 kilogram per annum exemption or have been notified.
- Korea KECL: 100.00% (by Wt) of the ingredients on KECL, fall within the 100 kilogram per annum exemption or have been notified.
- New Zealand NZIoC: 100.00% (by Wt) of the ingredients on NZIoC.
- Philippines PICCS: 100.00% (by Wt) of the ingredients on PICCS.

The Status of the following ingredient(s) is NOT known for the registration lists noted;

**NONE**

**16. Other Information**

GHS H-Statements referred to under section 3

<table>
<thead>
<tr>
<th>Total Fractional Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>(TFV) Risk</td>
</tr>
<tr>
<td>(4.06) Aspiration Hazard, Category 1</td>
</tr>
<tr>
<td>(17.61) Sensitization, Skin, Category 1B</td>
</tr>
<tr>
<td>(1.39) Germ Cell Mutagenicity, Category 2</td>
</tr>
<tr>
<td>(1.55) Aquatic Chronic Toxicity, Category 1</td>
</tr>
<tr>
<td>(TFV) Risk</td>
</tr>
<tr>
<td>(6.12) Skin Corrosion/Irritation, Category 2</td>
</tr>
<tr>
<td>(5.62) Eye Damage/Eye Irritation, Category 2A</td>
</tr>
<tr>
<td>(1.39) Carcinogenicity, Category 2</td>
</tr>
</tbody>
</table>

**Department E-mail address:** info@naturesgardencandles.com
Remarks

This safety data sheet is based on the properties of the material known to Natures Garden Fragrances™ at the time the data sheet was issued. The safety data sheet is intended to provide information for a health and safety assessment of the material and the circumstances, under which it is packaged, stored or applied in the workplace. For such a safety assessment Natures Garden Fragrances™ holds no responsibility. This document is not intended for quality assurance purposes.