SAFETY DATA SHEET
(According to Regulation (EC) No. 1907/2006 (REACH))

RM0001  LEMON OIL ITALIAN

1. IDENTIFICATION OF THE SUBSTANCE/ MIXTURE AND OF THE COMPANY / UNDERTAKING

1.1 Product Identifiers

Product Code: RM0001
Product Name: LEMON OIL ITALIAN
CAS No.: 8008-56-8
Index No.: N/A
CLP Reference No.: 02-2119699168-20-0000
REACH Pre-Registration No.: ----
EC No.: 284-515-8
FEMA No.: 2625

1.2 Use

Use in Flavour / Food Application.

1.3 Company / Undertaking Identification

Ultra International B.V.
Malledijk 3H, 3208 LA Spijkenisse, (Loods 12-15), Netherlands
Tel.: +3161 8431850  Fax: +91-120 - 437 4000
E-mail: ultraintl.nl@gmail.com  * www.ultrainternational.com

1.4 Emergency Telephone

+91-9810008844

2. HAZARD IDENTIFICATION

2.1 Classification of the substance / preparation

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS classification]

HAZARD CATEGORY  HAZARD STATEMENTS
Flammable Liquid 3  H226 FLAMMABLE LIQUID AND VAPOUR
Aspiration Hazard 1  H304 MAY BE FATAL IF SWALLOWED AND ENTERS AIRWAYS
Skin Corrosion/Irritation 2  H315 CAUSES SKIN IRRITATION
Skin Sensitization 1  H317 MAY CAUSE AN ALLERGIC SKIN REACTION
Aquatic acute 1  H400 VERY TOXIC TO AQUATIC LIFE
Aquatic Chronic 1  H410 VERY TOXIC TO AQUATIC LIFE WITH LONG LASTING EFFECTS

Classification according to Directive 67/548/EEC or Directive 1999/45/EC

R10  FLAMMABLE
R38  IRRITATING TO SKIN
R43  MAY CAUSE SENSITIZATION BY SKIN CONTACT
R65  HARMFUL: MAY CAUSE LUNG DAMAGE IF SWALLOWED
R50/53  VERY TOXIC TO AQUATIC ORGANISMS, MAY CAUSE LONG-TERM ADVERSE EFFECTS IN THE AQUATIC ENVIRONMENT

2.2 Label Elements

Label elements according to Regulation (EC) No. 1272/2008 (Substance)/Directive 67/548/EEC

Hazard Pictogram / Symbol:

GHS 07  GHS 02  GHS 08  GHS 09

Signal word / Indication(s) of danger:

Danger

Hazard Pictogram / Symbol:

N  Dangerous for the environment  Xn  Harmful

Hazard Statements

H226  FLAMMABLE LIQUID AND VAPOUR
H304  MAY BE FATAL IF SWALLOWED AND ENTERS AIRWAYS
H315  CAUSE SKIN IRRITATION
H317  MAY CAUSE AN ALLERGIC SKIN REACTION
H410  VERY TOXIC TO AQUATIC LIFE WITH LONG LASTING EFFECTS

Precautionary Statements

P210  KEEP AWAY FROM HEAT/SPARKS/OPEN FLAMES/HOT SURFACES. – NO SMOKING
P233  KEEP CONTAINER TIGHTLY CLOSED
SAFETY DATA SHEET

**LEMON OIL ITALIAN**

**Version:** SDS/2010/1
**Date:** 03/02/2010
**Revision:** 1

### 3. COMPOSITION / INFORMATION OF INGREDIENTS

- **Substance Name:** LEMON OIL ITALIAN
- **Product Description:** This product is a 100% natural flavour ingredient.
- **Hazardous components:**
  - D-LIMONENE (CAS No 5989-27-5) Xi, N, R10, R38, R43, R50/53
  - BETA-PINENE (CAS No 127-91-3); Xn, Xi; R43, R50/53, R65
  - GAMMA-TERPINENE (CAS No 99-85-4); Xn, R10, R65

### 4. FIRST AID MEASURES

#### 4.1 Description of First Aid Measures

- **Eye Contact:** Remove contact lenses if worn. Flush immediately with plenty of water.
- **Skin Contact:** Remove contaminated clothing. Wash affected area with mild soap and water.
- **Inhalation:** Remove affected person to fresh air. If discomfort persists, consult physician.
- **Swallowing:** Seek immediate medical care.

#### 4.2 Indication of any immediate medical attention and special treatment method

**Swallowed:** Immediately call a POISON CENTER or Doctor/Physician.

**On skin (or hair):** Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.

### 5. FIRE FIGHTING MEASURES

#### 5.1 Extinguishing Media

- **Suitable:** Carbon Dioxide; Dry Chemical; Universal Type Foam.
- **Unsuitable:** Water spray; others not established.

#### 5.2 Special hazards arising from substance

- Combustible liquid
- Possibility of development of hazardous gases or vapors in event of fire
- Following may develop: CO and CO₂

#### 5.3 Advice for fire fighters

- Do not stay in dangerous zone without self protective clothing and breathing apparatus
- Spray extinguishing media directly into base of fire
- Cool containers exposed to flame with water
- Prevent fire fighting water entering surface water or ground water

### 6. ACCIDENTAL RELEASE MEASURES

#### 6.1 Personal Precautions, protective equipment and emergency procedures

- Wear personal protective clothing. Keep away unprotected individuals. Eliminate source of ignition. Keep area well ventilated and isolate the spill.

#### 6.2 Environmental precautions

- Prevent entry into drains, ground/surface water or sewerage system.

#### 6.3 Methods and material for containment and cleaning up

- Pick up with absorbents material (Sand) or with pump for large spills.
6.4 Reference to other sections
- Refer to Section 7, 8 & 13

7. HANDLING AND STORAGE

7.1 Precautions for safe handling
- Measures to prevent fire
  - Keep away from heat/sparks/open flames/hot surfaces. - No smoking
  - Use explosion proof electrical/ ventilating/lighting/equipment etc.
- Measures to prevent aerosols and dust generation
  - Ensure good ventilation at workplaces
- Measures to protect the environment
  - Prevent entry into drains, ground/surface water or sewerage system.
- General Occupational hygiene
  - Wear protective gloves/protective clothing/eye protection/face protection. Take off contaminated clothing and wash before reuse.

7.2 Conditions for safe use, including any incompatibilities
- Information on storage conditions
  - Should be stored in cool, dark, dry, well ventilated places in full, tightly sealed containers protected from light & source of ignition
- Information on packing materials
  - Should be packed in Aluminium, HDPE Food Grade Cans, MS Coated Drums, and GI Drums, Avoid long contact with Iron
- Requirements for storage rooms and vessels
  - Should be stored in suitable containers (lines inside) e.g. MS Coated Drums, GI Drums etc. No special requirement for storage rooms.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

8.1 Appropriate engineering controls
- Engineering controls should be used as the primary means to control exposures

8.2 Personal protective equipments
- Skin protection
  - Safety gloves
- Eye protection
  - Tight safety goggles
- Body protection
  - Protective clothing
- Respiratory protection
  - Dust mask

8.3 Environmental exposure controls
- Prevent entry into drains, ground/surface water or sewerage system.

9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance
  - Physical state: Liquid
  - Colour: Pale Yellow to Deep Yellow
- Odour
  - Characteristic
- Odour Threshold
  - Medium
- pH
  - N/A
- Melting Point °C
  - N/A
- Boiling Point °C
  - N/A
- Flash Point (Closed Cup) °C
  - 50 ºC
- Vapour Pressure
  - N/A
- Vapour Density
  - N/A
- Specific Gravity /Relative Density
  - 0.845 - 0.860 @ 20 ºC
- Refractive Index
  - 1.468 - 1.480 @ 20 ºC
- Optical Rotation
  - +57° - +65.6°
- Surface tension
  - N/A
- Solubility
  - Water: Insoluble
  - Alcohol: 1:3 in 95% alcohol
- Viscosity
  - N/A
- Partition Coefficient
  - N/A
Explosive Limits
- Lower Explosion Limit: Not Determined
- Upper Explosion Limit: Not Determined
Auto Ignition Temperature: N/A
Flammability: Flammable
Granulometry: N/A
Oxidising Properties: N/A

10. STABILITY AND REACTIVITY

10.1 Reactivity
- Not reactive, stable at room temperature.

10.2 Chemical stability
- Stable

10.3 Possibility of hazardous reactions
- Reactions with strong oxidizers

10.4 Conditions to avoid
- No decomposition if stored and handled properly

10.5 Incompatible materials
- Avoid strong acids, strong bases, and all oxidising agents

10.6 Hazardous decomposition products
- No dangerous decomposition products expected by intended use

11. TOXICOLOGICAL INFORMATION

11.1 Acute toxicity oral (LD50)
- > 5 gm/kg bw (Rat)

11.2 Acute toxicity inhalation
- Not Determined

11.3 Acute toxicity dermal (LD50)
- > 10 gm/kg bw (Rabbit)

11.4 Skin irritation/Corrosion
- Irritating

11.5 Respiratory sensitization
- N/A

11.6 Skin sensitization
- Sensitizing

11.7 CMR Effects
- Carcinogenicity: No
- Mutagenicity: No
- Toxic to reproduction: No

11.8 Eye irritation / Corrosion
- Not irritating

11.9 Exposure limits
- There is a blanket recommendation of 10 mg/m³ for inspirable dusts or mists when limits have not otherwise been established.

12. ECOLOGICAL INFORMATION

12.1 Toxicity
- PNEC Aqua (fresh water): Not estimated
- PNEC Aqua (marine water): Not estimated
- PNEC Aqua (intermittent release): Not estimated
- PNEC Sediment (fresh water): Not estimated
- PNEC Sediment (marine water): Not estimated
- PNEC Soil: Not estimated
- PNEC Oral: Not estimated
- NOAEL: N/A
- EC50 (48hrs): Not estimated
- LC50 (96hrs): Not estimated

12.2 Persistence and degradability
- Readily biodegradable in water

12.3 Mobility in Soil
- Low mobility

12.4 Results of PBT and vPvB assessment
- N/A

13. DISPOSAL CONSIDERATION

13.1 Waste treatment methods
- Product/packaging disposal
  - Handle in accordance with official provisions

Printed By: SAP Business One
Waste treatment options
Recycling is preferred to disposal or burning

Waste code /Waste designations according to EWC/AVV
15 02 02* absorbents, filter materials (including oil filters not otherwise specified), wiping cloths, protective clothing contaminated by dangerous substances

13.2 Recommendations
Empty contaminated packing thoroughly as they may be recycled
Moistened solids to be disposed off adhering to necessary technical regulations after consulting concerned authorities

14. TRANSPORT INFORMATION

14.1 Land Transport (ADR/RID/GGVSE)

UN Number: 1197
DG Class: 3
Packing Group: III
Proper Shipping Name: Extracts, Flavouring, Liquid
Classification Code: 3Y
Hazard Labels:

14.2 Sea Transport (IMDG-Code/GGVsee)

UN Number: 1197
DG Class: 3
Packing Group: III
Proper Shipping Name: Extracts, Flavouring, Liquid
Marine Pollutant: Yes
Hazard Labels:

14.3 Air Transport (ICAO-IAT/DGR)

UN Number: 1197
DG Class: 3
Packing Group: III
Proper Shipping Name: Extracts, Flavouring, Liquid
Hazard Labels:

14.4 Special precautions for users
Wear protective gloves/protective clothing/eye protection/face protection. Take off contaminated clothing and wash before reuse. Prevent entry into drains, ground/surface water or sewerage system.

14.5 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:
N/A

14.6 Other Information
Custom Tariff Code: 3301 90 30
EmS Code: -

15. REGULATORY INFORMATION

EU regulations:
The product has been classified and labelled according to criteria provided in Directive 67/548/EEC and 1272/2008/EC, and following the recommendations of EFFA (European Flavor and Fragrance Association).

Other Regulations: German Regulation (VwVws)

Water Hazard Class: WGK 3
## 16. OTHER INFORMATION

### 16.1 Changes to previous version

Changes applicable according to regulation (EC) No 1907/2006 (REACH)

### 16.2 Abbreviations and acronyms

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GHS</td>
<td>Globally Harmonized System of Classification and labeling of Chemicals</td>
</tr>
<tr>
<td>CAS</td>
<td>Chemical abstract Service (division of American Chemical society)</td>
</tr>
<tr>
<td>CLP</td>
<td>Classification, Labelling and Packaging</td>
</tr>
<tr>
<td>LD50</td>
<td>Lethal concentration, 50 percent</td>
</tr>
<tr>
<td>EC50</td>
<td>Effective concentration, 50 percent</td>
</tr>
<tr>
<td>PNEC</td>
<td>Predicted No Effect Concentration</td>
</tr>
<tr>
<td>NOAEL</td>
<td>No Observed Adverse Effect Levels</td>
</tr>
<tr>
<td>ADR</td>
<td>European Agreement concerning the International Carriage of Dangerous Goods by Road</td>
</tr>
<tr>
<td>RID</td>
<td>Regulations Concerning the International Transport of Dangerous Goods by Rail</td>
</tr>
<tr>
<td>IMDG</td>
<td>International Maritime Code for Dangerous Goods</td>
</tr>
<tr>
<td>IATA</td>
<td>International Air Transport Association</td>
</tr>
<tr>
<td>IATA-DGR</td>
<td>Dangerous Goods Regulations by the International Air Transport Association (IATA)</td>
</tr>
<tr>
<td>ICAO</td>
<td>International Civil Aviation Organization</td>
</tr>
</tbody>
</table>

### 16.4 Wording of relevant hazard statement and/or precautionary statements referred to in section 2 to 15

#### Hazard Codes

<table>
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<tbody>
<tr>
<td>N</td>
<td>DANGEROUS FOR THE ENVIRONMENT</td>
</tr>
<tr>
<td>Xn</td>
<td>HARMFUL</td>
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</table>

#### Risk Phrases

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<tr>
<td>R10</td>
<td>FLAMMABLE</td>
</tr>
<tr>
<td>R38</td>
<td>IRRITATING TO SKIN</td>
</tr>
<tr>
<td>R 43</td>
<td>MAY CAUSE SENSITIZATION BY SKIN CONTACT.</td>
</tr>
<tr>
<td>R 65</td>
<td>HARMFUL: MAY CAUSE LUNG DAMAGE IF SWALLOWED</td>
</tr>
<tr>
<td>R 50/53</td>
<td>VERY TOXIC TO AQUATIC ORGANISMS, MAY CAUSE LONG-TERM ADVERSE EFFECTS IN THE AQUATIC ENVIRONMENT</td>
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#### Safety Phrases

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<tbody>
<tr>
<td>S24</td>
<td>AVOID CONTACT WITH SKIN</td>
</tr>
<tr>
<td>S37</td>
<td>WEAR SUITABLE GLOVES</td>
</tr>
<tr>
<td>S61</td>
<td>AVOID RELEASE TO THE ENVIRONMENT. REFER TO SPECIAL INSTRUCTIONS/SAFETY DATA SHEET</td>
</tr>
<tr>
<td>S62</td>
<td>IF SWALLOWED, DO NOT INDUCE VOMITTING: SEEK MEDICAL ADVICE IMMEDIATELY AND SHOW THIS CONTAINER OR LABEL.</td>
</tr>
</tbody>
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#### Hazard Statements

<table>
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<th>Description</th>
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</thead>
<tbody>
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<td>H226</td>
<td>FLAMMABLE LIQUID AND VAPOUR</td>
</tr>
<tr>
<td>H304</td>
<td>MAY BE FATAL IF SWALLOWED AND ENTERS AIRWAYS</td>
</tr>
<tr>
<td>H315</td>
<td>CAUSES SKIN IRRITATION</td>
</tr>
<tr>
<td>H317</td>
<td>MAY CAUSE AN ALLERGIC SKIN REACTION</td>
</tr>
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<td>H400</td>
<td>VERY TOXIC TO AQUATIC LIFE</td>
</tr>
<tr>
<td>H410</td>
<td>VERY TOXIC TO AQUATIC LIFE WITH LONG LASTING EFFECTS</td>
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#### Precautionary Statements

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<tr>
<td>P210</td>
<td>KEEP AWAY FROM HEAT/SPARKS/OPEN FLAMES/HOT SURFACES. – NO SMOKING</td>
</tr>
<tr>
<td>P233</td>
<td>KEEP CONTAINER TIGHTLY CLOSED</td>
</tr>
<tr>
<td>P241</td>
<td>USE EXPLOSION-PROOF ELECTRICAL/ VENTILATING/LIGHTING/.../EQUIPMENT</td>
</tr>
<tr>
<td>P261</td>
<td>AVOID BREATHING DUST/FUME/GAS/MIST/VAPOURS/SPRAY</td>
</tr>
<tr>
<td>P273</td>
<td>AVOID RELEASE TO THE ENVIRONMENT</td>
</tr>
<tr>
<td>P280</td>
<td>WEAR PROTECTIVE GLOVES/PROTECTIVE CLOTHING/EYE PROTECTION/FACE PROTECTION</td>
</tr>
<tr>
<td>P301+310</td>
<td>IF SWALLOWED: IMMEDIATELY CALL A POISON CENTER OR DOCTOR/PHYSICIAN</td>
</tr>
<tr>
<td>P303+361+353</td>
<td>IF ON SKIN (OR HAIR): REMOVE/TAKE OFF IMMEDIATELY ALL CONTAMINATED CLOTHING. RINSE SKIN WITH WATER/SHOWER</td>
</tr>
<tr>
<td>P331</td>
<td>DO NOT INDUCE VOMITTING</td>
</tr>
<tr>
<td>P333+313</td>
<td>IF SKIN IRRITATION OR RASH OCCURS: GET MEDICAL ADVICE/ATTENTION</td>
</tr>
<tr>
<td>P405</td>
<td>STORE LOCKED UP</td>
</tr>
<tr>
<td>P501</td>
<td>DISPOSE OFF CONTAINERS TO….. (IN ACCORDANCE WITH LOCAL/REGIONAL/NATIONAL/INTERNATIONAL REGULATION)</td>
</tr>
</tbody>
</table>

### 16.5 Training advice appropriate for workers

N/A

### 16.6 Quality Declaration

The information contained herein is based on the present state of our knowledge. It characterizes the product with regards to the appropriate safety precaution. It does not represent a guarantee of the properties of the product.