	<b>SAFETY DATA SHEET</b> (According to Regulation (EC) No. 1907/2006 (REACH))	Version : <b>SDS/2010/1</b> Date: <b>19/08/2013</b> Revision : Date: Page No. : Page 1 of 6
	<b>FR1001 LEMON OIL SPRING</b>	

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

1.1	<b>Product Identifiers</b>	<b>Product Code</b> FR1001 <b>Product Name</b> LEMON OIL SPRING <b>CAS No.</b> 8008-56-8 <b>Index No.</b> N/A <b>CLP Reference No.</b> --- <b>REACH Registration No.</b> --- <b>EC No.</b> 284-515-8 <b>FEMA No.</b> 2625
1.2	<b>Use</b>	Use in Flavour / Food Application.
1.3	<b>Company / Undertaking Identification</b>	<b>Ultra International B.V.</b> Malledijk 3H, 3208 LA Spijkenisse, (Loods 12-15), Netherlands Tel : +3161 6915330 Fax : +91-120 - 437 4000 E-mail : <a href="mailto:ultraintl.nl@gmail.com">ultraintl.nl@gmail.com</a> www.ultrainternational.com +91-9810008844
1.4	<b>Emergency Telephone</b>	

### 2. HAZARD IDENTIFICATION

#### 2.1 Classification of the substance / preparation

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

#### HAZARD CATEGORY

Flammable Liquid 3  
 Aspiration Hazard 1  
 Skin Corrosion/Irritation 2  
 Skin Sensitization 1  
 Aquatic acute 1  
 Aquatic Chronic 1

#### HAZARD STATEMENTS

**H226** FLAMMABLE LIQUID AND VAPOUR  
**H304** MAY BE FATAL IF SWALLOWED AND ENTERS AIRWAYS  
**H315** CAUSES SKIN IRRITATION  
**H317** MAY CAUSE AN ALLERGIC SKIN REACTION  
**H400** VERY TOXIC TO AQUATIC LIFE  
**H410** VERY TOXIC TO AQUATIC LIFE WITH LONG LASTING EFFECTS

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

<b>R10</b>	FLAMMABLE
<b>R38</b>	IRRITATING TO SKIN
<b>R43</b>	MAY CAUSE SENSITIZATION BY SKIN CONTACT
<b>R65</b>	HARMFUL: MAY CAUSE LUNG DAMAGE IF SWALLOWED
<b>R50/53</b>	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

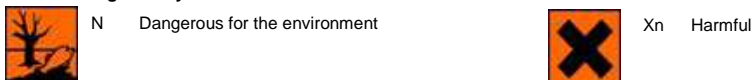
#### Hazard Pictogram / Symbol:



#### Signal word / Indication(s) of danger:


Danger

#### Hazard Pictogram / Symbol:



#### Hazard Statements

H226	FLAMMABLE LIQUID AND VAPOUR
H304	MAY BE FATAL IF SWALLOWED AND ENTERS AIRWAYS
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**Precautionary Statements**

<b>P241</b>	:	USE EXPLOSION-PROOF ELECTRICAL/ VENTILATING/LIGHTING/.../EQUIPMENT
<b>P210</b>	:	KEEP AWAY FROM HEAT/SPARKS/OPEN FLAMES/HOT SURFACES. – NO SMOKING
<b>P 261</b>	:	AVOID BREATHING DUST/FUME/GAS/MIST/VAPOURS/SPRAY
<b>P301+310</b>	:	IF SWALLOWED: IMMEDIATELY CALL A POISON CENTER OR DOCTOR/PHYSICIAN
<b>P303+361+353</b>	:	IF ON SKIN (OR HAIR): REMOVE/TAKE OFF IMMEDIATELY ALL CONTAMINATED CLOTHING. RINSE SKIN WITH WATER/SHOWER
<b>P 333+313</b>	:	IF SKIN IRRITATION OR RASH OCCURS: GET MEDICAL ADVICE/ATTENTION
<b>P 273</b>	:	AVOID RELEASE TO THE ENVIRONMENT
<b>P 233</b>	:	KEEP CONTAINER TIGHTLY CLOSED
<b>P 280</b>	:	WEAR PROTECTIVE GLOVES/PROTECTIVE CLOTHING/EYE PROTECTION FACE PROTECTION
<b>P 331</b>	:	DO NOT INDUCE VOMITTING
<b>P 501</b>	:	DISPOSE OFF CONTAINERS TO ..... (IN ACCORDANCE WITH LOCAL/REGIONAL/NATIONAL/INTERNATIONAL REGULATION)

**3. COMPOSITION / INFORMATION OF INGREDIENTS**

<b>Substance Name</b>	:	LEMON OIL SPRING
<b>Substance Description</b>	:	This product is a 100% flavoring agent.
<b>Hazardous Components</b>	:	d-Limonene( CAS N° 5989-27-5);Xi,N;R10,R38,R43,R50/53 ; Alpha-pinene (CAS N° 80-56-8);Xn,N;R10,R43,R50/53,R65 ; beta-pinene (CAS N° 127-91-3);Xn,Xi;R43,R50/53,R65 ; gamma-terpinene(CAS N° 99-85-4);Xn,R10,R65; Citral(Cas N° 5392-40-5)Xi,R38,R43;
<b>CAS No.</b>	:	8008-56-8
<b>EC No.</b>	:	284-515-8
<b>Botanical Name</b>	:	<i>Citrus limon (L.)</i>
<b>Stabilizers</b>	:	N/A
<b>Synonyms</b>	:	Lemon oil Argentina Lemon peel oil
<b>Index No.</b>	:	N/A
<b>CLP Reference No.</b>	:	---
<b>REACH Registration No.</b>	:	---

**4. FIRST AID MEASURES**


<b>4.1 Description of First Aid Measures</b>	
<b>Eye Contact</b>	: Remove contact lenses if worn. Flush immediately with plenty of water.
<b>Skin Contact</b>	: Remove contaminated clothing. Wash affected area with mild soap and water.
<b>Inhalation</b>	: Remove affected person to fresh air. If discomfort persists, consult physician.
<b>Swallowing</b>	: Seek immediate medical care.
<b>4.2 Indication of any immediate medical attention and special treatment method</b>	
	IF SWALLOWED: Immediately call a POISON CENTER or Doctor/Physician.
	IF ON SKIN (or hair): Remove /take off immediately all contaminated clothing. Rinse skin with water /shower.

**5. FIRE FIGHTING MEASURES**

<b>5.1 Extinguishing Media</b>	
- Suitable	: Carbon Dioxide; Dry Chemical; Universal Type Foam.
- Unsuitable	: Water spray; others not established.
<b>5.2 Special hazards arising from substance</b>	Combustible liquid Possibility of development of hazardous gases or vapors in event of fire Following may develop: CO and CO2
<b>5.3 Advice for fire fighters</b>	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**

<b>6.1 Personal Precautions, protective equipment and emergency procedures</b>	Wear personal protective clothing. Keep away unprotected individuals. Eliminate source of ignition. Keep area well ventilated and isolate the spill.
<b>6.2 Environmental precautions</b>	Prevent entry into drains, ground/surface water or sewerage system.
<b>6.3 Methods and material for containment and cleaning up</b>	Pick up with absorbents material (Sand) or with pump for large spills.
<b>6.4 Reference to other sections</b>	Refer to Section 7, 8 & 13

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**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**

**Exposure controls**

**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
<b>Odour</b>	Characteristic
<b>Odour Threshold</b>	Medium
<b>pH</b>	N/A
<b>Melting Point °C</b>	N/A
<b>Boiling Point °C</b>	160°C
<b>Flash Point (Closed Cup) °C</b>	50 ° C
<b>Vapour Pressure</b>	218.8 Pa @ 25°C
<b>Vapour Density</b>	N/A
<b>Specific Gravity /Relative Density</b>	0.840 - 0.865 @ 20 ° C
<b>Refractive Index</b>	1.468 - 1.480 @ 20 ° C
<b>Optical Rotation</b>	+57° - +65.6°
<b>Surface tension</b>	N/A
<b>Solubility</b>	
-Water	Insoluble
-Alcohol	1:3 in 95% alcohol
<b>Viscosity</b>	1.28mm <sup>2</sup> /s @ 20°C
<b>Partition Coefficient</b>	3.3 – 6.3

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**Explosive Limits**

-Lower Explosion Limit	0.70 Vol%
-Upper Explosion Limit	6.10 Vol%
<b>Auto ignition Temperature</b>	1012.9 - 1017.5 hPa of 235°C
<b>Flammability</b>	Flammable
<b>Granulometry</b>	N/A
<b>Oxidising Properties</b>	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**

<b>11.1 Acute toxicity oral (LD50)</b>	> 5 gm/kg bw (Rat)
<b>11.2 Acute toxicity inhalation</b>	Not Determined
<b>11.3 Acute toxicity dermal (LD50)</b>	> 10 gm/kg bw (Rabbit)
<b>11.4 Skin Irritation/Corrosion</b>	Irritating
<b>11.5 Respiratory sensitization</b>	N/A
<b>11.6 Skin sensitization</b>	Sensitizing
<b>11.7 CMR Effects</b>	
Carcinogenicity	No
Mutagenicity	No
Toxic to reproduction	No
<b>11.8 Eye Irritation / Corrosion</b>	Not irritating
<b>11.9 Exposure limits</b>	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)	:	5.4µg/L
PNEC Aqua (marine water)	:	0.54µg/L
PNEC Aqua (intermittent release)	:	5.77µg/L
PNEC Sediment (fresh water)	:	1.3 mg/kg sediment dw
PNEC Sediment (marine water)	:	0.13 mg/Kg sediment dw
PNEC Soil	:	0.261 mg/Kg soil dw
PNEC Oral	:	13.3 mg/Kg food
NOAEL	:	N/A
EC50 (48hrs)	:	7.2 mg/L (Daphnia magna)
LC50 (96hrs)	:	0.3 mg/L (Fish)

**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

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**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** 2319  
**DG Class** 3  
**Packing Group** III  
**Proper Shipping Name** Terpene, Hydrocarbons, N.O.S  
**Classification Code** 3Y  
**Hazard Labels**



**14.2 Sea Transport (IMDG-Code/GGVSee)**

**UN Number** 2319  
**DG Class** 3  
**Packing Group** III  
**Proper Shipping Name** Terpene, Hydrocarbons, N.O.S  
**Marine Pollutant** Yes  
**Hazard Labels**



**14.3 Air Transport (ICAO-IAT/DGR)**

**UN Number** 2319  
**DG Class** 3  
**Packing Group** III  
**Proper Shipping Name** Terpene, Hydrocarbons, N.O.S

**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 13 0000  
**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

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## 16. OTHER INFORMATION

### 16.1 Changes to previous version

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

### 16.2 Abbreviations and acronyms

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

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

#### Hazard Codes

<b>N</b>	DANGEROUS FOR THE ENVIRONMENT
<b>Xn</b>	HARMFUL

#### Risk Phrases

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

#### Safety Phrases

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

#### Hazard Statements

<b>H226</b>	FLAMMABLE LIQUID AND VAPOUR
<b>H304</b>	MAY BE FATAL IF SWALLOWED AND ENTERS AIRWAYS
<b>H315</b>	CAUSES SKIN IRRITATION
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#### Precautionary Statements

<b>P241</b>	:	USE EXPLOSION-PROOF ELECTRICAL/ VENTILATING/LIGHTING/.../EQUIPMENT
<b>P210</b>	:	KEEP AWAY FROM HEAT/SPARKS/OPEN FLAMES/HOT SURFACES. – NO SMOKING
<b>P 261</b>	:	AVOID BREATHING DUST/FUME/GAS/MIST/VAPOURS/SPRAY
<b>P301+310</b>	:	IF SWALLOWED: IMMEDIATELY CALL A POISON CENTER OR DOCTOR/PHYSICIAN
<b>P303+361+353</b>	:	IF ON SKIN (OR HAIR): REMOVE/TAKE OFF IMMEDIATELY ALL CONTAMINATED CLOTHING. RINSE SKIN WITH WATER/SHOWER
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<b>P 501</b>	:	DISPOSE OFF CONTAINERS TO..... (IN ACCORDANCE WITH LOCAL/REGIONAL/NATIONAL/INTERNATIONAL REGULATION)

### 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.