



**SAFETY DATA SHEET**  
**(According to Regulation (EU) No. 1907/2006 and**  
**OSHA (US) 29 CFR 1910.1200 and 49 CFR)**

**Product: Lemon Oil**

Version: 10

SDS#0018

Revision date: 3/21/2025

**Section 1: Identification of the Substance/Mixture and of the Company/Undertaking**

**1.1 Product identifier:** Lemon Oil

**HBNO identifier:** 1134

**Chemical name:** Citrus limonum, oil (syn: Citrus limon)

**CAS:** 8008-56-8

**EC Number:** 284-515-8

**EC REACH Registration number:** -

**Index No / Inventory Num.:** -

**1.2 Usage:** This product is only intended for use as an ingredient in the manufacturing of mixtures.

**Strongly discouraged:** Not intended for the general public. Do not ingest as such.

**1.3 Details of the supplier of the safety data sheet:**

IL Health & Beauty Natural Oils Co., Inc.

2644 Hegan Ln, Chico, CA 95928

Tel, USA: 1-530-399-3782

[info@hbno.com](mailto:info@hbno.com)

**1.4 24 Hour Emergency telephone number:**

USA National Poison Control Center (any day/time) 1 (412) 681-6669.

**Section 2: Hazard Identification**

**2.1 Classification of the substance or mixture**

**Classification according to the Regulation (EC) No 1272/2008.**

Flammable liquids, Hazard Category 3; H226

Skin corrosion/irritation, Hazard Category 2; H315

Sensitization — Skin, Hazard Category 1; H317

Aspiration hazard, Hazard Category 1; H304

Hazardous to the aquatic environment — acute hazard, category acute 1

H400 Hazardous to the aquatic environment — long-term hazard, category chronic 1; H410

**2.2 Label Elements**

EC Number: 284-515-8



**SAFETY DATA SHEET**  
**(According to Regulation (EU) No. 1907/2006 and**  
**OSHA (US) 29 CFR 1910.1200 and 49 CFR)**

**Product: Lemon Oil**

Version: 10      SDS#0018      Revision date: 3/21/2025

Lemon, oil



Signal word: Danger

Hazard Statements:

- H226: Flammable liquid and vapor.
- H304: May be fatal if swallowed and enters airways.
- H315: Causes skin irritation.
- H320: Causes eye 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, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P280: Wear protective gloves/eye protection/face protection.
- P301+P310: IF SWALLOWED: Immediately call a POISON CENTER/doctor.
- P331: Do NOT induce vomiting.
- P333+P313: If skin irritation or rash occurs: Get medical advice/attention.
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P501: Dispose of contents/container to an approved waste disposal plant.

**2.3 Other Hazards**

N/A

**Section 3: Composition/Information on Ingredients**

**3.1 Substances**

Concentration range of the constituent (% weight/weight)	EC Number / Registration Number	CAS	Chemical Name
100%	284-515-8	8008-56-8	Citrus limonum, oil



**SAFETY DATA SHEET**  
**(According to Regulation (EU) No. 1907/2006 and**  
**OSHA (US) 29 CFR 1910.1200 and 49 CFR)**

**Product: Lemon Oil**

Version: 10

SDS#0018

Revision date: 3/21/2025

Concentration range of the constituent (% weight/weight)	EC Number / Registration Number	CAS	Chemical Name
<71,00	5989-27-5	227-813-5	(R)-p-Mentha-1,8- diene
<16,50	127-91-3	204-872-5	Pin-2(10)-ene
<12,00	99-85-4	202-794-6	p-Mentha-1,4-diene
<5,00	123-35-3	204-622-5	7-methyl-3- methyleneocta-1,6- diene
<3,00	7785-26-4	232-077-3	(-)-Pin-2(3)-ene
<3,00	5392-40-5	226-394-6	Citral
<1,00	106-24-1	203-377-1	Geraniol
<1,00	106-25-2	203-378-7	Nerol
<1,00	78-70-6	201-134-4	Linalool
<1,00	99-87-6	202-796-7	P-cymene
<1,00	586-62-9	209-578-0	p-Mentha-1,4(8)- diene
<1,00	105-87-3	203-341-5	Geranyl acetate
<1,00	87-44-5	201-746-1	Caryophyllene
<1,00	98-55-5	202-680-6	P-menth-1-en-8-ol
<1,00	99-86-5	202-795-1	p-Mentha-1,3-diene
<0,90	495-62-5	207-805-8	Bisabolene & Farnesene Isomers
<0,50	106-23-0	203-376-6	Citronellal
<0,50	124-19-6	204-688-5	Nonanal

**Section 4: First Aid Measures**

**4.1 Description of First Aid Measures**

**Consumption:**



**SAFETY DATA SHEET**  
**(According to Regulation (EU) No. 1907/2006 and**  
**OSHA (US) 29 CFR 1910.1200 and 49 CFR)**

**Product: Lemon Oil**

Version: 10

SDS#0018

Revision date: 3/21/2025

If swallowed, rinse mouth with water. Seek medical advice immediately and show this container or label. Do NOT induce vomiting.

**Eye contact:**

First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.

**Inhalation:**

Remove person to fresh air and keep at rest.

**Skin contact:**

Remove contaminated clothes. Rinse skin with plenty of water or shower. Refer for medical attention.

**4.2 Most important symptoms and effects, both acute and delayed:**

May produce an allergic reaction.

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

Not available.

**Section 5: Fire Fighting Measures**

**5.1 Extinguishing media:**

Recommended: Foam or dry powder. For safety reasons do not use full water jet.

**5.2 Special hazards arising from the substance or mixture:**

Not applicable.

**5.3 Advice for firefighters:**

Closed containers may build up pressure at elevated temperatures. Avoid inhalation of fumes or vapors. Use appropriate respiratory protection. Prevent run-off from fire fighting to enter drains or water courses.

**Section 6: Accidental release measures**

**6.1 Personal precautions, protective equipment and emergency procedures:**

Do NOT smoke and do NOT expose the product to an open flame or to any other potential source of ignition. Wear appropriate gloves to prevent skin exposure.

Avoid contact with skin and inhalation of its vapors or smoke. Maintain adequate ventilation in the working area after spilling.



**SAFETY DATA SHEET**  
**(According to Regulation (EU) No. 1907/2006 and**  
**OSHA (US) 29 CFR 1910.1200 and 49 CFR)**

**Product: Lemon Oil**

Version: 10      SDS#0018      Revision date: 3/21/2025

**6.2 Environmental precautions:**

Avoid contaminating the environment via the sewers or water sources.

**6.3 Methods and material for containment and cleaning up:**

Cover with an inert, inorganic, non-combustible absorbent material (e.g. dry-lime, sand, soda ash). Ventilate the area and wash spill site after material pickup is complete. Dispose of it in accordance with current laws and regulations.

**6.4 Reference to other sections:**

See also sections 8 and 13.

**Section 7: Handling and storage**

**7.1 Precautions for safe handling:**

Keep away from food, drink and animal feeding stuffs. Do not smoke. Avoid contact with skin and eyes.

Handle in accordance with good industrial hygiene and safety practice.

**7.2 Conditions for safe storage, including any incompatibilities:**

Keep the product in its original container well sealed, in a dry and ventilated area, away from potential sources of ignition and protected from light. Store in accordance with local/national regulations and follow the warnings on the label.

**7.3 Specific end use(s):**

Not available.

**Section 8: Exposure controls/personal protection**

**8.1 Control parameters**

Declaration of substances is not required.

**8.2 Exposure controls**

Spain			
Name of agent	Limit value - 8 hours	Limit value - Short term	Notation
Citral	5 ppm		Skin, Sen, FIV
Pin-2(10)-ene	113 mg/m <sup>3</sup>		-



**SAFETY DATA SHEET**  
**(According to Regulation (EU) No. 1907/2006 and**  
**OSHA (US) 29 CFR 1910.1200 and 49 CFR)**

**Product: Lemon Oil**

Version: 10

SDS#0018

Revision date: 3/21/2025

Pin-2(3)-ene	113 mg/m <sup>3</sup>		-
--------------	-----------------------	--	---

**Personal protection equipment:**

Use personal protection equipment according to Directive 89/686/EEC.

**Engineering Controls-Ventilation:**

The areas where the product is handled and stored should be adequately ventilated.

**Respiratory Protection:**

Use personal breathing apparatus whenever deemed necessary.

**Skin Protection:**

Avoid contact with skin. Compatible chemical-resistant gloves are recommended. Wash contaminated gloves before reuse.

**Eye/Face protection:**

Chemical safety goggles are recommended. Wash contaminated goggles before reuse.

**Section 9: Physical and chemical properties**

**9.1 Information on basic physical and chemical properties**

Appearance: Liquid

Color: Yellow

Odor: Citric

Density: 0.853 g/cm<sup>3</sup> (20 °C)

Flash point: 48 °C

Additional information: N/A

**Section 10: Stability and reactivity**

**10.1 Reactivity:** Not available.

**10.2 Chemical stability:** Stable under normal operating conditions.

**10.3 Possibility of hazardous reactions:** Hazardous Polymerization: It does not undergo any dangerous reactions under normal conditions.



**SAFETY DATA SHEET**  
**(According to Regulation (EU) No. 1907/2006 and**  
**OSHA (US) 29 CFR 1910.1200 and 49 CFR)**

**Product: Lemon Oil**

Version: 10

SDS#0018

Revision date: 3/21/2025

- 10.4 Conditions to avoid:** Heat, flames, and other sources of ignition.  
**No special precautions other than good housekeeping of chemicals.**
- 10.5 Incompatible materials:** Oxidizing mineral acids, strong reducing agents, strong oxidizing agents.
- 10.6 Hazardous decomposition products:** Carbon monoxide and other unidentified organic compounds may be formed upon combustion.

**Section 11: Toxicological information**

**11.1 Information on toxicological effects**

Acute toxicity:	This substance does not meet the criteria for classification in accordance with Regulation (EC) No 1272/2008.
Skin corrosion/irritation:	This substance meets the criteria for classification in accordance with Regulation (EC) No 1272/2008.
Serious eye damage/irritation:	This substance does not meet the criteria for classification in accordance with Regulation (EC) No 1272/2008.
Respiratory or skin sensitization:	This substance meets the criteria for classification in accordance with Regulation (EC) No 1272/2008.
Germ cell mutagenicity:	This substance does not meet the criteria for classification in accordance with Regulation (EC) No 1272/2008.
Carcinogenicity:	This substance does not meet the criteria for classification in accordance with Regulation (EC) No 1272/2008.
Reproductive toxicity:	This substance does not meet the criteria for classification in accordance with Regulation (EC) No 1272/2008.
STOT-single exposure:	This substance does not meet the criteria for classification in accordance with Regulation (EC) No 1272/2008.
STOT-repeated exposure:	This substance does not meet the criteria for classification in accordance with Regulation (EC) No 1272/2008.
Aspiration toxicity:	This substance meets the criteria for classification in accordance with Regulation (EC) No 1272/2008.

**Section 12: Ecological information**

- 12.1 Acute aquatic toxicity:** Not determined.



**SAFETY DATA SHEET**  
**(According to Regulation (EU) No. 1907/2006 and**  
**OSHA (US) 29 CFR 1910.1200 and 49 CFR)**

**Product: Lemon Oil**

Version: 10

SDS#0018

Revision date: 3/21/2025

- 12.2 Persistence and degradability:** Not available.
- 12.3 Bioconcentration Factor:** Not determined.
- 12.4 Mobility in soil:** Not available.
- 12.5 Results of PBT and vPvB assessment:** Not determined.
- 12.6 Other adverse effects:** Do not allow the material to enter streams, sewers, or other waterways.

**Section 13: Disposal considerations**

**13.1 Waste treatment methods**

**Container disposal:** Containers must be disposed of as hazardous waste. Do not reuse empty containers. Dilute the remaining material and neutralize. Empty residue into a suitable disposal site.

**Disposal conditions:** Dispose of in accordance with all state and local environmental regulations. This material and its container must be disposed of in a safe way.

**Section 14: Transport information**

**NON-BULK AND LIMITED QUANTITY TRANSPORT EXCEPTIONS**

**(for Class 3 Flammable and Combustible Liquids that are Marine Pollutants)**

**Products in inner packaging less than the following quantities are not subject to regulation for transport:**

DOT GROUND - Single or Inner Packaging less than 450 L /119 gal

AIR - Single or Inner Packaging 30 mL / 1 fl oz or less

MARINE - Single or Inner Packaging 5 L / 1.3 gal or less

***Citations:***

*Per 49 CFR 171.8 Definitions*

*Non-bulk packaging* means a packaging which has a maximum capacity of 450 L (119 gallons) or less as a receptacle for a liquid.

*Per 49 CFR 173.150(f) Exceptions for Class 3 Flammable and Combustible Liquids (DOT Ground Transport only) — (Page 4-23 to 4-25 DGI Manual)*

(f1) A flammable liquid with a flash point at or above 38 °C (100 °F) may be re-classed as a combustible liquid.



**SAFETY DATA SHEET**  
**(According to Regulation (EU) No. 1907/2006 and**  
**OSHA (US) 29 CFR 1910.1200 and 49 CFR)**

**Product: Lemon Oil**

Version: 10

SDS#0018

Revision date: 3/21/2025

(f2) Shipments of combustible liquids in non-bulk single or inner packagings (less than 450 L / 119 gal) are not subject to ground transport regulations.

*Per 49 CFR 171.4(c) Marine Pollutants Exceptions —(Page C-3 DGI Manual)*

(c1) (Ground Transport): Requirements specific to marine pollutants do not apply to non-bulk packaging (less than 450 L / 119 gal) transported by motor vehicle.

(c2) (Sea Transport): Single or combination packagings containing a net quantity per single or inner packagings of 5 L or less are not subject to marine pollutant regulations.

**Bulk Transport**

**14.1 International Carriage of Dangerous Goods by Road (ADR)**

UN No.:UN1197

Proper Shipping Name: Extracts, liquid

Packing Group: III

Class: 3

Tunnel restriction code: (D/E)

Label:  

**14.2 Sea Transport (IMDG)**

UN No.:UN1197

Proper Shipping Name: Extracts, liquid

Packing Group: III

Class: 3

Marine Pollutant: Yes

Label:  

**14.3 Air Transport (ICAO/IATA)**

UN No.:UN1197

Proper Shipping Name: Extracts, liquid



**SAFETY DATA SHEET**  
**(According to Regulation (EU) No. 1907/2006 and**  
**OSHA (US) 29 CFR 1910.1200 and 49 CFR)**

**Product: Lemon Oil**

Version: 10

SDS#0018

Revision date: 3/21/2025

Packing Group: III

Class: 3

Label:



**Section 15: Regulatory information**

**15.1 Safety, health, and environmental regulations/legislation specific for the substance or mixture:**

Not available

**15.2 Chemical safety assessment:**

Not available.

**Section 16: Other information**

Key literature references and sources for data:

1. Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.
2. Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC.
3. Occupational Safety and Health Administration (US); 29 CFR 1910 and 49 CFR, March 28, 2012, modifying the Hazard Communication Standard (HCS) and aligning it with the Globally Harmonized System of Classification and Labelling of Chemicals (GHS) as established by the United Nations (UN).

*Information in this SDS is from available published sources and is believed to be accurate. No warranty, express or implied, is made and our company assumes no liability resulting from the use of this SDS. This information is offered in good faith. Each user of this material needs to evaluate the conditions of use and design the appropriate protective mechanisms to prevent employee exposures, property damage or release to the environment and must determine suitability of this information for his application.*