



Safety Data Sheet Lemon Oil

Revision Date: 09/15/2025

Section 1. Identification

Product identifier

Product Identity

Lemon Oil

Other means of identification

Not Applicable

Relevant identified uses of the substance or mixture and uses advised against

See Technical Data Sheet.

Details of the supplier of the safety data sheet

Company Name

Howard Products, Inc.

560 Linne Road

Paso Robles, CA 93446

Emergency

CHEMTREC (USA)

(800) 424-9300

24 hour Emergency Telephone No.

EMERGENCY PHONE: 1-805-227-1000

Customer Service:

FAX PHONE: 1-805-227-1007

Section 2. Hazard(s) identification

Classification of the substance or mixture under OSHA's Hazard Communication Standard (1910.1200) revised 2024 (GHS revision 7).

Skin sensitizer category 1; H317

May cause an allergic skin reaction.

Aquatic toxicity (chronic), category 3; H412

Harmful to aquatic life with long lasting effects.

Label elements



Warning

H317 May cause an allergic skin reaction.

H412 Harmful to aquatic life with long lasting effects.

[Prevention]

P261 Avoid breathing dust, fume, gas, mist, vapors, spray.

P272 Contaminated work clothing should not be allowed out of the workplace.

P273 Avoid release to the environment.

P280 Wear protective gloves, eye protection, and face protection.

[Response]

P302+352 IF ON SKIN: Wash with plenty of soap and water.



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P333+313 If skin irritation or a rash occurs: Get medical advice or attention.

P362+364 Take off contaminated clothing and wash it before reuse.

[Storage]

No GHS storage statements

[Disposal]

P501 Dispose of contents or container in accordance with local and national regulations.

Other hazards

This product contains no PBT/vPvB/vPvM chemicals.

This product contains no endocrine disrupting chemicals.

Does not contain component(s) that meet a 'definition' of per & poly fluoroalkyl substance (PFAS) per the Organisation for Economic Co-operation and Development (OECD) list of Per- and Polyfluoroalkyl Substances (PFASs).

Section 3. Composition/information on ingredients

This product contains the following substances that present a hazard within the meaning of the OSHA's Hazard Communication Standard (1910.1200) revised 2024 (GHS revision 7).

Ingredient/Chemical Designations	Weight %	GHS Classification	Notes
Distillates Hydrotreated Heavy Paraffin CAS Number: 64742-54-7 Synonyms: Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil-unspecified	65 - 85	Not Classified	-----
Distillates (petroleum), hydrotreated light CAS Number: 64742-47-8 Synonyms: No available information	10 - 30	Aspiration hazard, category 1;H304	-----
Lemon Terpenes CAS Number: 68917-33-9 Synonyms: Terpenes and Terpenoids, lemon-oil	1 - 5	Flammable Liquid, category 3;H226 Aspiration hazard, category 1;H304 Skin corrosion/irritation category 2;H315 Skin sensitizer category 1;H317 Aquatic toxicity (chronic), category 2;H411	-----

The actual concentration or concentration range is withheld as a trade secret.

*PBT/vPvB - PBT, vPvM or vPvB-substance.

The full texts of the phrases are shown in Section 16.

Section 4. First aid measures

Description of first aid measures

General

In all cases of doubt, or when symptoms persist, seek medical attention.
Never give anything by mouth to an unconscious person.

Inhalation

Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, give artificial respiration. If unconscious, place in the recovery position and obtain immediate medical attention. Give nothing by mouth.



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Eyes	Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.
Skin	Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognized skin cleanser.
Ingestion	If victim is conscious and alert, give 2-4 cupfuls of milk or water. DO NOT INDUCE VOMITING.
Most important symptoms and effects, both acute and delayed	
Overview	No specific symptom data available. No chronic toxicity or long term toxicity information available. Treat symptomatically. See section 2 for further details.
Skin	May cause an allergic skin reaction.

Section 5. Fire-fighting measures

Extinguishing media

Use media appropriate for surrounding area.

Special hazards arising from the substance or mixture

Hazardous decomposition: No hazardous decomposition data available.

Avoid breathing dust, fume, gas, mist, vapors, spray.

Advice for fire-fighters

Not Applicable

ERG Guide No. ----

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Put on appropriate personal protective equipment (see section 8).

Use good personal hygiene practices. Wash hands before eating, drinking, smoking, or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

Environmental precautions

Methods and material for containment and cleaning up

Wipe up with cloth or sponge.

Section 7. Handling and storage

Precautions for safe handling

Store in a cool dry place.



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See section 2 for further details. - [Prevention]

Conditions for safe storage, including any incompatibilities

Incompatible materials: No data available.

See section 2 for further details. - [Storage]

Specific end use(s)

No data available.

Section 8. Exposure controls / personal protection

Control parameters

Exposure Limits

CAS No.	Ingredient	Source	Value
64742-47-8	Distillates (petroleum), hydrotreated light	OSHA	500 ppm, 2000 mg/m ³
		ACGIH	TWA 200 mg/m ³ (as Kerosine)
		NIOSH	No Established Limit
64742-54-7	Distillates Hydrotreated Heavy Parrafin	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
68917-33-9	Lemon Terpenes	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit

Contains mineral oil. The exposure limits for oil mist are 5 mg/m³ OSHA PEL and 5 mg/m³ ACGIH.

Exposure controls

Respiratory

If workers are exposed to concentrations above the exposure limit, they must use the appropriate, certified respirators.

Eyes

Safety glasses with side shields

Skin

Wear PVC or rubber gloves to keep skin contact to a minimum. Refer to the manufacturer's recommendations regarding the suitability of any gloves used.

Engineering Controls

Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and any vapor below occupational exposure limits suitable respiratory protection must be worn.

Other Work Practices

Use good personal hygiene practices. Wash hands before eating, drinking, smoking, or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

See section 2 for further details.



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Section 9. Physical and chemical properties

Information on basic physical and chemical properties

Physical State	Liquid
Color	Orange
Odor	Orange
Odor threshold	Not Available
Melting point / freezing point	Not Established
Initial boiling point and boiling range	>400 F
Flammability (solid, gas)	Not Applicable
Upper/lower flammability or explosive limits	Lower Explosive Limit: Not Established Upper Explosive Limit: Not Established
Flash Point	326 F (163.33 C) Tag Closed Cup
Auto-ignition temperature	Not Established
Decomposition temperature	Not Established
pH	Not Established
Viscosity (cSt)	Not Established Not Established
Solubility in Water	Negligible
Partition coefficient n-octanol/water (Log Kow)	Not Available
Vapor pressure (Pa)	Not Established
Relative Density	0.86
Vapor Density	Not Established
Evaporation rate (Ether = 1)	< 1
VOC Content	Not Established

Other information

DMSO extract by IP346: Less than 3.0 wt % (mineral oil component only)

Section 10. Stability and reactivity

Reactivity

Hazardous Polymerization will not occur.

Chemical stability

Stable under normal circumstances.

Possibility of hazardous reactions

No data available.

Conditions to avoid

Avoid high temperatures. Do not mix with other chemicals.



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Incompatible materials

No data available.

Hazardous decomposition products

No hazardous decomposition data available.

Section 11. Toxicological information

Acute toxicity

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation Vapor LC50, mg/L/4hr	Inhalation Dust/Mist LC50, mg/L/4hr	Inhalation Gas LC50, ppm
Distillates Hydrotreated Heavy Paraffin - (64742-54-7)	> 5,000.00, Rat - Category: NA	> 5,000.00, Rabbit - Category: NA	No data available.	No data available.	No data available.
Distillates (petroleum), hydrotreated light - (64742-47-8)	> 5,000.00, Rat - Category: NA	>2,000.00, Rabbit - Category: 5	No data available.	No data available.	No data available.
Lemon Terpenes - (68917-33-9)	4,400.00, Rat - Category: 5	No data available.	No data available.	No data available.	No data available.

Carcinogen Data

CAS No.	Ingredient	Source	Value
64742-47-8	Distillates (petroleum), hydrotreated light	OSHA	Regulated Carcinogen: No;
		NTP	Known: No; Suspected: No;
		IARC	No
		ACGIH	A3
64742-54-7	Distillates Hydrotreated Heavy Paraffin	OSHA	Regulated Carcinogen: No;
		NTP	Known: No; Suspected: No;
		IARC	No
		ACGIH	No Established Limit
68917-33-9	Lemon Terpenes	OSHA	Regulated Carcinogen: No;
		NTP	Known: No; Suspected: No;
		IARC	No
		ACGIH	No Established Limit

Classification	Category	Hazard Description
Acute toxicity (oral)	---	Not Applicable
Acute toxicity (dermal)	---	Not Applicable
Acute toxicity (inhalation)	---	Not Applicable
Skin corrosion/irritation	---	Not Applicable
Serious eye damage/irritation	---	Not Applicable
Respiratory sensitization	---	Not Applicable



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Skin sensitization	1	May cause an allergic skin reaction.
Germ cell mutagenicity	---	Not Applicable
Carcinogenicity	---	Not Applicable
Reproductive toxicity	---	Not Applicable
STOT-single exposure	---	Not Applicable
STOT-repeated exposure	---	Not Applicable
Aspiration hazard	---	Not Applicable

Possible routes of entry:

All routes of entry possible.

Symptoms and effects, both acute and delayed:

No specific symptom data available.

No chronic toxicity or long term toxicity information available. Treat symptomatically.

Skin May cause an allergic skin reaction.

Section 12. Ecological information

Toxicity

Harmful to aquatic life with long lasting effects.

Aquatic Ecotoxicity

Ingredient	96 hr LC50 fish, mg/L	48 hr EC50 crustacea, mg/L	ErC50 algae, mg/L
Distillates Hydrotreated Heavy Paraffin - (64742-54-7)	101.00, Pimephales promelas	> 10,000, Daphnia magna	100.00, Pseudokirchneriella subcapitata
Distillates (petroleum), hydrotreated light - (64742-47-8)	20.00, Oncorhynchus mykiss	1.40, Daphnia magna	8.30, Pseudokirchneriella subcapitata
Lemon Terpenes - (68917-33-9)	0.70, Fish (Piscis)	No data available.	No data available.

Persistence and degradability

There is no data available on the preparation itself.

Bioaccumulative potential

Not Available

Mobility in soil

No data available.

Results of PBT and vPvB assessment

This product contains no PBT/vPvB/vPvM chemicals.



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Other adverse effects

Ecotoxicity:

The toxicity of this material to aquatic organisms has not been evaluated. Consequently, this material should be kept out of sewage and drainage systems and all bodies of water.

Section 13. Disposal considerations

Waste treatment methods

Waste should not be released to sewers. Observe all federal, state, and local regulations when disposing of this substance.

Section 14. Transport information

	DOT (Domestic Surface Transportation)	IMO / IMDG (Ocean Transportation)	ICAO/IATA
UN number	Not Regulated	Not Regulated	Not Regulated
UN proper shipping name	Not Regulated	Not Regulated	Not Regulated
Transport hazard class(es)	Class: Not Applicable Sub Class: Not Applicable	Class: Not Applicable Sub Class: Not Applicable	Class: Not Applicable Sub Class: Not Applicable
Packing group	Not Applicable	Not Applicable	Not Applicable

Environmental hazards

IMDG Marine Pollutant: Yes;

Special precautions for user

Not Applicable

Section 15. Regulatory information

Regulatory Overview The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented.

Classification of the substance or mixture under OSHA's Hazard Communication Standard (1910.1200) revised 2024 (GHS revision 7).

Toxic Substance Control Act (TSCA)

CAS Number	Ingredient	Toxic Substance Control Act (TSCA)	Comments	Status
0064742-47-8	Distillates (petroleum), hydrotreated light	Yes	UVCB	ACTIVE
0064742-54-7	Distillates Hydrotreated Heavy Paraffin	Yes	UVCB	ACTIVE
0068917-33-9	Lemon Terpenes	Yes	UVCB	ACTIVE



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EPCRA 302 Extremely Hazardous:

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

EPCRA 313 Toxic Chemicals:

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Carcinogens (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Developmental Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Female Repro Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Male Repro Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 Label Warning:

This product contains no chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

Section 16. Other information

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The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

The full text of the phrases appearing in section 3 is:

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.

H411 Toxic to aquatic life with long lasting effects.

Information contained herein was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the requirements of all applicable legislation and regulatory instruments. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages which may result from the use of or reliance on any information contained in this document.

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