

Revision date: 01/01/2025 Product Name: D-LIMONENE

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

Product identifier

Product Name D-LIMONENE
Product Number 772-3263

Relevant identified use of the substance/mixture and uses advised against

Use of Substance/Mixture Flavor and fragrance agents

Details of supplier of the SDS

Company O'Laughlin Corporation Limited

Address Suite 903, The Chinese Bank Building, 61-65 Des Voeux Road, Central, Hong Kong

Telephone (852) 2527 1031
Fax (852) 2529 0231
Website www.olaughlinco.com

Emergency telephone number

(852) 2527 1031

Section 2: Hazards Identification

Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Flammable liquids, Category 3, H226

Acute toxicity - oral, Category 5, H304

Skin irritation, Category 2, H315

Sensitisation - skin, Category 1, H317

Short-term (acute) aquatic hazard, Category 1, H400

Hazardous to the aquatic environment - chronic toxicity, Category 3, H412

Labelling elements

Labelling according to Regulation (EC) No 1272/2008









Pictogram

Signal word Warning

Hazard Statement

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.

H412 - Harmful to aquatic life with long lasting effects.

Precautionary statement

Prevention



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P273 - Avoid release to the environment.

P280 - Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response

P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER/doctor/...

P302 + P352 - Wash with plenty of soap and water.

P331 - Do NOT induce vomiting.

P333 + P313 - If skin irritation or rash occurs: Get medical advice/ attention.

Storage

P403 - Store in a well-ventilated place. Keep cool.

Disposal

P501 - Dispose of contents/container in accordance with local/ regional/ national/ international regulations.

Hazards Not Otherwise Classified No information available

Supplemental Hazard Information No information available

Section 3: Composition/information on ingredients

Substance Name	D-LIMONENE
CAS Number	5989-27-5
EC Number	227-813-5
% (w/w)	100

Remarks: The rest unspecified ingredients are impurities, and they are not hazard.

Section 4: First Aid Measures

Description of first aid measures

Skin contact Wash off with soap and plenty of water. Consult a physician.

Eye contact Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

Ingestion Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.Inhalation If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

General information

Consult a physician. Show this safety data sheet to the doctor in attendance.

Indication of any immediate medical and special treatment needed: No information available.

Section 5: Fire-fighting Measures

Flammable properties

Flash point 51°C

Firefighting

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable extinguish media Do not use a solid water stream as it may scatter and spread fire.

Protective equipment and precautions for firefighters

Specific hazards during firefighting Carbon oxides.



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Specific protective equipment for firefighters Firefighters must use standard protective equipment including flame

retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. Structural firefighter's protective clothing will

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only provide limited protection. Wear self-contained breathing apparatus with a full-face piece operated in the positive pressure

demand mode when fighting fires.

Specific methods Use water spray to cool unopened containers

General fire hazards Static charges generated by emptying package in or near flammable

vapor may cause flash fire.

Section 6: Accidental Release Measures

Personal precautions Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure

adequate ventilation. Evacuate personnel to safe areas. For personal protection see

section 8.

Environmental precautions Do not let product enter drains.

Methods for cleaning up Soak up with inert absorbent material and dispose of as hazardous waste. Keep in

suitable, closed containers for disposal.

Section 7: Handling and Storage

Storage Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers

which are opened must be carefully resealed and kept upright to prevent leakage.

Handling Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Normal measures for

preventive fire protection.

Specific end use(s) No information available.

Section 8: Exposure Controls/Personal Protection

Control parameters: Components with workplace control parameters.

Exposure controls

Appropriate engineering controls Handle in accordance with good industrial hygiene and safety practice. Wash hands

before breaks and at the end of workday.

Personal protective equipment

Eye/face protection Safety glasses with side-shields conforming to EN166 Use equipment for eye

protection tested and approved under appropriate government standards such as

NIOSH (US) or EN 166(EU).

Hand protection Type of gloves recommended: Butyl rubber. Minimum breakthrough time/ gloves: 480

min. Minimum thickness/ gloves 0.11 mm.

Body protection Impervious clothing, the type of protective equipment must be selected according to

the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection Where risk assessment shows air-purifying respirators are appropriate use a full-face

respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of



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protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US)

or CEN (EU).

Thermal hazards Wear suitable protective clothing to prevent heat.

official regulations.

Industrial hygiene: When using do not smoke. Keep away from food and drink. Always observe good

personal hygiene measures, such as washing after handling the material and before

eating, drinking, and/ or smoking. Routinely wash work clothing and protective

equipment to remove contaminants.

Section 9: Physical and Chemical Properties

Appearance Colorless liquid.

Odor Citral orange minty wordy.

Flash point 51 °C

Specific Gravity 0.8370 - 0.8450 at 25 °C

Acid Value 5.0mg KOH/g max.

Refractive Index 1.4710 - 1.4770 at 20 °C

Solubility (ies) Insoluble in water.

Auto ignition temperatureNo information available.ViscosityNo information available.

Section 10: Stability and Reactivity

Reactivity Stable under normal temperatures and pressures.

Chemical stability Stable at room temperature in closed containers under normal storage and

handling conditions.

Possibility of hazardous reactions No hazardous reactions known.

Conditions to avoid No information available.

Incompatible materials Strong oxidizing agents, strong bases, mineral acids.

Hazardous decomposition products No information available.

Section 11: Toxicological Information

Information on likely routes of exposure:

Inhalation May cause irritation to the respiratory system.

Skin contactCauses skin irritation.Eye contactNo information available.IngestionHarmful if swallowed.

Information on toxicological effects:

Oral/Parenteral Toxicity

Dermal Toxicity

LD50, Rabbit, 2000 mg/kg

LD50, Rabbit, 2000 mg/kg

LD50, Rabbit, 2000 mg/kg

No information available.

Carcinogenicity



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OSHA No component of this product present at levels greater than or equal to 0.1% is

identified as a carcinogen or potential carcinogen by OSHA.

IARC

ACGIH

No information available.

NTP

No information available.

Reproductive toxicity

TOST - single exposure

TOST - repeated exposure

Aspiration hazard

No information available.

No information available.

No information available.

Section 12: Ecological Information

Eco toxicity

Persistence and degradability

Bio accumulative potential

Mobility in soil

Results of PBT&vPvB assessment

Other adverse effects

No information available.

No information available.

No information available.

No information available.

Section 13: Disposal Considerations

Disposal instructionsDo not discharge into drains, water course or onto the ground. Do not allow

this material to drain into sewers/ water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/

container in accordance with local/regional/national/international

regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous water code No information available.

its container must be disposed of in a safe manner.

Contaminated packaging Empty containers should be taken to an approved waste handling site for

recycling or disposal. Since emptied containers may retain product residue,

follow label warnings even after container is emptied

Section 14: Transport Information

	ADN	ADR	RID	DOT BULK	DOT NON-BULK	IATA	IMDG
UN Number	2052						
Shipping Name	FLAMMABLE LIQUID, N.O.S. (Limonene)						
Hazard Class	3						
Packing group	III						
Environmental Hazards	NO						

Section 15: Regulatory Information

US federal regulations: This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication



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Standard, 29 CFR 1910.1200.

CERCLA Hazards Substance List (40 CFR 302.4)

OSHA Specifically Regulated Substance (29 CFR 1910.1001-1050)

Not listed

SARA 302 Extremely hazardous substances

Not listed

SARA 311/312 Hazard Chemical

SARA 313 (TRI reporting)

Not regulated

Other federal regulations

CAA Section 112 Hazardous Air Pollutant List

CAA Section 112 (r) Accidental Release Prevention (40 CFR 68.130)

Safe Drinking Water Act (SDWA)

Not regulated

Not regulated

US State regulations

US. Massachusetts RTK-Substance List

US. New Jersey Worker and Community Right-to-Know Act

US. Pennsylvania Worker and Community Right-to-Know Law

US. Rhode Island RTK

US. California Proposition 65

Not listed

Not listed

International Inventories

Country or region	Inventory name	On inventory (yes/no)		
Australia	AICS	Yes		
Canada	DSL	Yes		
Canada	NDSL	No		
China	IECSC	Yes		
Europe	EINECS	Yes		
Europe	ELINCS	No		
Japan	ENCS	Yes		
Korea	ECL	Yes		
New Zealand	New Zealand Inventory	Yes		
Philippines	PICCS	Yes		
US and Puerto Rico	TSCA	Yes		

Section 16: Other Information

Revision Information

Date of this version: Jan.1, 2025

Declaration to Reader

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. However, the information is provided without any warranty, express or implied, regarding its correctness.



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