Vickers Laboratories Ltd - Safety Data Sheet 0080

(in accordance with regulation (EU) 2015/830 and regulation (EC) 1272/2008)

Revision: 1.1 Revision date: 16 April 2021
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Section 1. Identification

1.1 Product Identifier 0080

Product Name LIMONENE

CAS Number 138-86-3
REACH Registration No A registration number is not available as the substance or its uses are exempt, the annual tonnage does not require a registration or the registration is envisaged for a later date.

Molecular Formula $C_{10}H_{16}$ = 136.23

1.2 Relevent identified uses of the substance or mixure & uses advised against

Uses of Material Chemical for industrial and laboratory use. Not suitable for domestic use.

1.3 Supplier Vickers Laboratories Ltd

Grangefield Industrial Estate
Richardshaw Road
Pudsey
West Yorkshire
LS28 6QW
UNITED KINGDOM

Phone 44 0113 2362811
Fax +44(0)113 2362703
Email safety@viclabs.co.uk
Website www.viclabs.co.uk

1.4 Emergency Telephone (08:00-16:30) +44(0) 113 2362811
(24hr) 112
(Have this document to hand)

Section 2. Hazards Identification

2.1 Classification of the substance or mixture

Classification according to regulation 1272/2008/EC

Flammable liquid, category 3	H226: Flammable liquid and vapour.
Skin corrosion/irritation, category 2	H315: Causes skin irritation.
Skin sensitization, category 1	H317: May cause an allergic skin reaction.
Hazard to aquatic environment, category 1	H400: Very toxic to aquatic life.
Hazard to aquatic environment, category 1	H410: Very toxic to aquatic life with long lasting effects.

2.2 Label elements

Labelling according to regulation 1272/2008/EC

Signal word Warning

Hazard Pictograms

Hazard Statements	Flammable liquid and vapour. Causes skin irritation. May cause an allergic skin reaction. Very toxic to aquatic life with long lasting effects.
Precautionary Statements	Wear protective gloves / protective clothing / eye protection / face protection. Wear protective gloves / protective clothing / eye protection. IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.

Section 3. Composition

3.1 Substances

Component	CAS No.	EEC No.	REACH No.	Conc w/w	CLP Classification (1272/2008/CE)
Limonene	138-86-3	205-341-0		98%	Flam. Liq. 3,Skin Irrit. 2,Skin Sens. 1,Aquatic Acute 1,Aquatic Chronic 1

Section 4. First Aid

4.1 Description of first aid measures

Eyes	Irrigate thoroughly with plenty of water for at least 10 minutes, holding the eye open.
Skin	Thoroughly wash off skin with soap and water. Seek medical attention if irritation persists.
Inhalation	Remove from exposure. If breathing stops or shows signs of failing, apply artificial resuscitation.
Ingestion	Do not induce vomiting. Wash out the patients mouth thoroughly with water.
Personal protection for first aiders	Wear protective gloves / eye protection.

4.2 Most important symptoms and effects, both acute & delayed.

No further relevant information available.

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

No further relevant information available.

Section 5. Fire Fighting

5.1 Extinguishing media

Extinguishing Media	Water spray, alcohol resistant foam, dry powder or carbon dioxide. Use water spray to keep fire exposed containers cool.
Unsuitable Media	Nothing specified.

5.2 Special hazards arising from the substance or mixture

Hazards	Combustible : so avoid sources of ignition. Vapour-air mixtures are explosive. Vapours may flow along surfaces to distant ignition sources and flash back.

5.3 Advice for firefighters

Advice for firefighters	Consider all other materials in the vicinity.

Section 6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Protection	Eliminate all sources of ignition and use ventilation to keep gas concentration below the explosive mixture range. Beware of accumulation of vapour which is heavier than air.

6.2 Environmental precautions

Enviromental	Keep material out of sewers, storm drains, surface waters and soil.

6.3 Methods and material for containment and cleaning up

Major Spillage	Contain and absorb on inert material. Transfer absorbent to container for removal. Wash area down with copious amounts of water.
Minor Spillage	Contain and absorb on inert material. Transfer absorbent to container for removal. Wash area down with copious amounts of water.

6.4 Reference to other sections

See section 8.2 for information on protective equipment and section 13 for information on disposal.

Section 7. Storage & Handling

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Do not breath vapours. Do not allow to contaminate clothing.

Ensure Local Exhaust Ventilation maintains vapour concentrations to a minimum.

7.2 Conditions for safe storage, including any incompatibilities

Well ventilated, cool, dry storage . Keep containers closed when not in use.

7.3 Specific end use(s)

See section 1.2.

Section 8. Workplace Exposure & Personal Protection

8.1 Control parameters

Component	CAS No	Concentration	Workplace Exposure Limits			
			Long Term (8hr TWA)		Short Term 15min period)	
Limonene	138-86-3	98%	-	-	-	-

Exposure data source(s)	No occupational exposure data currently available.

8.2 Exposure controls

Respiratory Protection	Use L.E.V. or natural ventilation to reduce vapour concentrations to a minimum.
Hand Protection	Wear gloves.
Eye Protection	Use safety glasses with side shields.
Skin Protection	Avoid contact with skin. If skin contact or contamination of clothing is likely, protective clothing must be worn.
Special Hazards	No special precautions required.

Section 9. Physical & Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance	Clear colourless liquid
Odour	Characteristic.
pH	Not applicable
Boiling Point	176°C Approx.
Melting Point	-89°C
Flash Point	43°C (Closed cup)
Upper Flammable Limit	6.1%
Lower Flammable Limit	0.7%
Auto Ignition	Not applicable
Explosive Properties	No.
Oxidising Properties	No.
Vapour Pressure	Not applicable
Relative Density	0.8600

Water Solubility	Insoluble in water.

9.2 Other information

No data available.

Section 10. Stability & Reactivity

10.1	Reactivity	No data available.
10.2	Chemical Stability	Stable under normal conditions
10.3	Possibility of hazardous reactions	No data available.
10.4	Conditions to Avoid	Hot surfaces, naked flames or other sources of ignition.
10.5	Incompatable Materials	Strong oxidising agents.
10.6	Hazardous Decomposition Products	Not determined.

Section 11. Toxicological Information

11.1 Information on toxicological effects

Eyes	Both the vapour and liquid may, be irritating to the eyes.
Skin	Contact with the liquid will be irritating to the skin. May cause skin sensitisation.
LD50 Skin	Not available
Ingestion	May be harmful by ingestion.
LD50 Oral	5300mg/kg Rat
Inhalation	Presents no significant health hazard by inhalation.
LD50 Inhalation	Not available
TCLo	Not available
Carcinogenicity	Not considered to be a carcinogen.
Mutagenicity	Not considered to be a mutagen.
Reproductive Effects	None identified.

Section 12. Ecological

12.1	Toxicity	Very toxic for fish and other aquatic organisms.
	LC50 Algal	Not available
	LC50 Crustacea	17mg/kg Daphnia (48 hours)
	LC50 Fish	80mg/kg Rainbow Trout (96 hours)
12.2	Persistence and degradability	No data available.
12.3	Bioaccumulative potential	No data available.
12.4	Mobility in soil	No data available.
12.5	Results of PBT & vPvB assessment	Assessment not required.
12.6	Other adverse effects	None known at present.

Section 13. Disposal Considerations

13.1 Waste treatment methods

Disposal Methods	Burn in a chemical incinerator equipped with afterburners and scrubbers. Exert extra care in igniting as this material is highly flammable.
Contaminated Packaging	Wash out containers with water. Use a licensed waste disposer.

Section 14. Transport Information

14.1	**UN Number**	2052
14.2	**Proper Shipping Name**	Dipentene
14.3	**Transport classes**	
	UN classification	3
	Subsidiary hazard(s)	None
	Transport category	3
	ADR Hazard ID	30
	Tunnel Restriction Code	D/E
14.4	**Packing Group**	III
14.5	**Environment hazards**	See section 12.
14.6	**Special precautions for user**	No special precautions required.
14.7	**Transport in bulk**	Not transported in bulk.

Section 15. Regulatory Information

15.1 Safety, health and environment regulations specific for subtance/mixture.

Classification, Labeling & Packaging of Substances & Mixtures Regulations (1272/2008/CE)

Classification: Flammable liquid, category 3; Skin corrosion/irritation, category 2; Skin sensitization, category 1; Hazard to aquatic environment, category 1; Hazard to aquatic environment, category 1

Signal word: Warning

Hazard Pictograms

Hazard Statements: H226, H315, H317, H410
Flammable liquid and vapour. Causes skin irritation. May cause an allergic skin reaction. Very toxic to aquatic life with long lasting effects.

Precautionary Statements: P280, P280, P302+P352, P332+P313, P362
Wear protective gloves / protective clothing / eye protection / face protection. Wear protective gloves / protective clothing / eye protection. IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.

15.2 Chemical safety assessment

Assessment not required.

Section 16. Other Information

The information contained in this document only covers the hazards presented by this material, it DOES NOT constitute a workplace risk assessment. See sections 11 for toxicological information and section 12 for ecological information.

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