

# SAFETY DATA SHEET



Revision date: 30-Sep-2020

Revision Number 2

## 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

### Product identifier

**Product Name** LIME CLEAN  
**Product Code(s)** 000000026067

### Other means of identification

**UN number** 1266

### Recommended use of the chemical and restrictions on use

**Recommended use** Fragrances  
**Uses advised against** No information available.

### Details of the supplier of the safety data sheet

#### Supplier

Ixom Operations Pty Ltd (Bronson & Jacobs division) - incorporated in Australia  
Street Address: 166 Totara Street  
Mt Maunganui South  
New Zealand

Telephone Number: +64 9 309 2528  
Facsimile: +64 9 0508 366 364

### For further information, please contact

**Contact Point** Product Safety Department

### Emergency telephone number

**Emergency Telephone** 0 800 734 607 (ALL HOURS)

## 2. HAZARDS IDENTIFICATION

Classified as a Dangerous Good according to NZS 5433:2012 Transport of Dangerous Goods on Land.

Classified as hazardous according to criteria in the Hazardous Substances (Minimum Degrees of Hazard) Notice 2017 and the Hazardous Substances (Classification) Notice 2017.

### GHS Classification

#### **SIGNAL WORD**

Danger

Subclass 3.1 Category C (medium hazard) - Flammable Liquids.  
Subclass 6.1 Category E - Substances which are acutely toxic.

Subclass 6.1 Category E (aspiration hazard) - Substances which may pose an aspiration toxicity hazard.  
Subclass 6.3 Category A - Substances that are irritating to the skin.  
Subclass 6.4 Category A - Substances that are irritating to the eye.  
Subclass 6.5 Category B - Substances that are contact sensitizers.  
Subclass 6.9 Category B - Substances that are harmful to human target organs or systems.  
Subclass 9.1 Category A - Substances that are very ecotoxic in the aquatic environment.  
Subclass 9.2 Category B - Substances that are toxic in the soil environment.

Food Additives and Fragrance Materials(Flammable) Group Standard 2017 - HSR002576

### Label elements



### **Hazard statements**

H226 - Flammable liquid and vapor  
H303 - May be harmful if swallowed  
H304 - May be fatal if swallowed and enters airways  
H315 - Causes skin irritation  
H317 - May cause an allergic skin reaction  
H319 - Causes serious eye irritation  
H373 - May cause damage to organs through prolonged or repeated exposure  
H410 - Very toxic to aquatic life with long lasting effects  
H422 - Toxic to the soil environment

### **Precautionary Statements - Prevention**

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking  
Keep container tightly closed  
Ground/bond container and receiving equipment  
Use explosion-proof electrical, ventilating, lighting equipment  
Use only non-sparking tools  
Take precautionary measures against static discharge  
Do not breathe fume, gas, mist, vapours, spray  
Wash hands thoroughly after handling  
Do not eat, drink or smoke when using this product  
Contaminated work clothing should not be allowed out of the workplace  
Wear protective gloves / protective clothing / eye protection / face protection  
Avoid release to the environment

### **Precautionary Statements - Response**

Specific treatment (see First aid on this SDS)  
IF exposed or concerned: Get medical advice/attention  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
If eye irritation persists: Get medical advice/attention  
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower  
IF ON SKIN: Wash with plenty of soap and water  
If skin irritation or rash occurs: Get medical advice/attention  
Take off contaminated clothing and wash it before reuse  
IF INHALED: Call a POISON CENTER or doctor if you feel unwell  
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician  
Do NOT induce vomiting  
In case of fire: Use CO2, dry chemical, or foam for extinction  
Collect spillage

### **Precautionary Statements - Storage**

Store in a well-ventilated place. Keep cool

Store locked up

#### Precautionary Statements - Disposal

In the case of a substance that is in compliance with a HSNO approval other than a Part 6A (Group Standards) approval, a label must provide a description of one or more appropriate and achievable methods for the disposal of a substance in accordance with the Hazardous Substances (Disposal) Notice 2017. This may also include any method of disposal that must be avoided.

#### Other hazards which do not result in classification

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Mixture

Chemical name	CAS No.	Weight-%
d-Limonene	5989-27-5	30-60%
Citral	5392-40-5	1-<10%
Dipentene	138-86-3	1-<10%
Oils, lime	8008-26-2	1-<10%
Lemon, extract	84929-31-7	1-<10%
Other ingredient(s)	-	to 100%

### 4. FIRST AID MEASURES

#### Description of first aid measures

<b>General advice</b>	For advice, contact a Poisons Information Centre (e.g. phone Australia 13 11 26; New Zealand 0800 764 766) or a doctor.
<b>Emergency telephone number</b>	Poisons Information Center, New Zealand: 0800 764 766 Poisons Information Center, Australia: 13 11 26
<b>Inhalation</b>	Remove to fresh air. Call a physician if symptoms occur.
<b>Eye contact</b>	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
<b>Skin contact</b>	Wash skin with soap and water. May cause an allergic skin reaction. Call a physician if symptoms occur.
<b>Ingestion</b>	Clean mouth with water and drink afterwards plenty of water. Do NOT induce vomiting. Drink 1 or 2 glasses of water. Never give anything by mouth to an unconscious person. Immediate medical attention is required.

#### Most important symptoms and effects, both acute and delayed

**Symptoms** Irritation. May cause allergic skin reaction.

#### Indication of any immediate medical attention and special treatment needed

**Note to physicians** Treat symptomatically. Delayed pulmonary edema may occur.

### 5. FIRE FIGHTING MEASURES

#### Suitable Extinguishing Media

**Suitable Extinguishing Media** Alcohol resistant foam is the preferred firefighting medium but, if it is not available, normal protein foam can be used.

**Unsuitable extinguishing media** No information available.

**Specific hazards arising from the chemical**

**Specific hazards arising from the chemical** Flammable. Risk of ignition. Most vapors are heavier than air. Vapors may spread along ground and collect in low or confined areas (sewers, basements, tanks). Pay attention to flashback. Environmentally hazardous.

**Hazardous combustion products** Carbon oxides.

**Special protective actions for fire-fighters**

**Special protective equipment for fire-fighters** Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

**Hazchem code** •3Y

## 6. ACCIDENTAL RELEASE MEASURES

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

**Personal precautions** Avoid contact with skin, eyes and inhalation of vapors. Do not touch or walk through spilled material. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Evacuate personnel to safe areas. Ensure adequate ventilation. Stop leak if you can do it without risk. Take precautionary measures against static discharges. Use personal protective equipment as required.

**For emergency responders** Use personal protection recommended in Section 8.

**Environmental precautions**

**Environmental precautions** See Section 12 for additional Ecological Information.

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

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Use only non-sparking tools.

**Precautions to prevent secondary hazards**

**Prevention of secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

## 7. HANDLING AND STORAGE

**Precautions for safe handling**

**Advice on safe handling** Avoid contact with skin, eyes, and clothing. Do not breathe vapor or mist. Ground and bond all lines and equipment associated with product system. All equipment should be non-sparking and explosion proof. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharges. Use personal protection equipment. Wash thoroughly after handling. Keep out of reach of children.

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

<b>Storage Conditions</b>	Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from direct sunlight. Store away from foodstuffs and sources of heat or ignition. Keep container closed when not in use.
<b>Incompatible materials</b>	Strong oxidizing agents.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Control parameters**

<b>Exposure Limits</b>	No value assigned for this specific material by the New Zealand Workplace Health & Safety Authority.
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**Appropriate engineering controls**

<b>Engineering controls</b>	Ensure adequate ventilation, especially in confined areas.
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**Individual protection measures, such as personal protective equipment**

The selection of PPE is dependent on a detailed risk assessment. The risk assessment should consider the work situation, the physical form of the chemical, the handling methods, and environmental factors.

OVERALLS, SAFETY SHOES, CHEMICAL GOGGLES, GLOVES.



<b>Eye/face protection</b>	Goggles.
<b>Hand protection</b>	Impervious gloves.
<b>Skin and body protection</b>	Antistatic boots. Wear suitable protective clothing. Overalls.
<b>Respiratory protection</b>	If determined by a risk assessment an inhalation risk exists, wear an organic vapour respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716.
<b>Environmental exposure controls</b>	No information available.

**9. PHYSICAL AND CHEMICAL PROPERTIES****Information on basic physical and chemical properties**

<b>Physical state</b>	Liquid
<b>Appearance</b>	Clear
<b>Color</b>	Colourless to Pale Yellow
<b>Odor</b>	Citrus Floral Fresh
<b>Odor threshold</b>	No information available.

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	No data available	None known
Melting point / freezing point	No data available	
Boiling point / boiling range	No data available	
Flash point	54°C	CC (closed cup)
Evaporation rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air		None known
Upper flammability or explosive limits	No data available	
Lower flammability or explosive limits	No data available	
Vapor pressure	No data available	
Vapor density	No data available	
Relative density	0.893-0.913 @20°C	
Water solubility	No data available	
Solubility(ies)	No data available	None known
Partition coefficient	No data available	None known
Autoignition temperature	No data available	
Decomposition temperature	No data available	None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known

Other information**10. STABILITY AND REACTIVITY**Reactivity

Reactivity No information available.

Chemical stability

Stability Stable under normal conditions.

Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge Yes.

Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

Conditions to avoid

Conditions to avoid Heat, flames and sparks.

Incompatible materials

Incompatible materials Strong oxidizing agents.

Hazardous decomposition products

Hazardous decomposition products Carbon oxides.

**11. TOXICOLOGICAL INFORMATION**

**Acute toxicity****Information on likely routes of exposure**

<b>Product Information</b>	No adverse health effects expected if the chemical is handled in accordance with this Safety Data Sheet and the chemical label. Symptoms or effects that may arise if the chemical is mishandled and overexposure occurs are:
<b>Inhalation</b>	May cause irritation.
<b>Eye contact</b>	Causes serious eye irritation.
<b>Skin contact</b>	Causes skin irritation. May cause sensitization by skin contact.
<b>Ingestion</b>	Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea. Aspiration may cause pulmonary edema and pneumonitis.
<b>Symptoms</b>	Irritation. May cause allergic skin reaction.

**Acute toxicity****Numerical measures of toxicity**

No information available.

**Component Information**

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
d-Limonene	= 5200 mg/kg ( Rat ) = 4400 mg/kg ( Rat )	> 5 g/kg ( Rabbit )	-
Citral	= 4960 mg/kg ( Rat )	= 2250 mg/kg ( Rabbit )	-
Dipentene	= 5300 mg/kg ( Rat )	-	-
Oils, lime	> 5 g/kg ( Rat )	> 5 g/kg ( Rabbit )	-

See section 16 for terms and abbreviations

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

<b>Skin corrosion/irritation</b>	Irritating to skin. Classification is based on mixture calculation methods based on component data.
<b>Serious eye damage/eye irritation</b>	Causes serious eye irritation. Classification is based on mixture calculation methods based on component data.
<b>Respiratory or skin sensitization</b>	May cause sensitization by skin contact. Classification is based on mixture calculation methods based on component data.
<b>Germ cell mutagenicity</b>	No information available.
<b>Carcinogenicity</b>	The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	New Zealand	IARC
d-Limonene - 5989-27-5		Group 3

<b>Reproductive toxicity</b>	No information available.
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<b>STOT - single exposure</b>	No information available.
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<b>STOT - repeated exposure</b>	May cause damage to organs through prolonged or repeated exposure.
<b>Aspiration hazard</b>	May be fatal if swallowed and enters airways.
<b>Chronic effects:</b>	d-Limonene has been classified by the International Agency for Research on Cancer (IARC) as a Group 3 carcinogen (not classifiable as to human carcinogenicity).

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

**Ecotoxicity** Keep out of waterways. Very toxic to aquatic life with long lasting effects.

**Terrestrial ecotoxicity** There is no data for this product.

Chemical name	Algae/aquatic plants	Fish	Crustacea
d-Limonene	-	LC50: 0.619 - 0.796mg/L (96h, Pimephales promelas) LC50: =35mg/L (96h, Oncorhynchus mykiss)	-
Citral	EC50: =16mg/L (72h, Desmodosmus subspicatus) EC50: =19mg/L (96h, Desmodosmus subspicatus)	LC50: 4.6 - 10mg/L (96h, Leuciscus idus)	EC50: =7mg/L (48h, Daphnia magna)

### Persistence and degradability

**Persistence and degradability** No information available.

### Bioaccumulative potential

**Bioaccumulation** No information available.

### Mobility

**Mobility in soil** No information available.

### Component Information

Chemical name	Partition coefficient
Citral	2.76

### Other adverse effects

**Other adverse effects** No information available.

## 13. DISPOSAL CONSIDERATIONS

### Waste treatment methods

**Waste from residues/unused products** Dispose of product in packaging in a way that is consistent with the Hazardous Substances (Disposal) Notice 2017 and the Act. Treat the substance using a method that changes the characteristics or composition of the substance so that the substance is no longer a hazardous substance; or export the substance from New Zealand as waste. Class 2, 3 and 4 substances - may not be disposed of into or onto a landfill or sewage facility. They may only be burnt in certain situations. Class 2.1.1, 3.1 and 4.1.1 substances may only be discharged into the environment as waste if the substance will not at any time come into contact with class 1 or class 5 substances; and there will be no ignition source in the vicinity of the disposal site at any time and if the substance were to ignite, no person, or place where a person may legally be, would be exposed to an unsafe level of heat



radiation.

**Contaminated packaging**

Packages may only be reused or recycled if the package has been treated to remove any residual contents of the hazardous substance (class 1, 2, 3, 4, or 5); or the contents of the residue in the package are below the threshold for the substance to be classified as hazardous (class 6, 8, or 9 substance)

**14. TRANSPORT INFORMATION****ROAD AND RAIL TRANSPORT**

Classified as a Dangerous Good according to NZS 5433:2012 Transport of Dangerous Goods on Land.

UN number 1266  
 Proper shipping name PERFUMERY PRODUCTS  
 Hazard class 3  
 Packing group III  
 Hazchem code •3Y

**IATA**

Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air; DANGEROUS GOODS.

UN number 1266  
 UN proper shipping name PERFUMERY PRODUCTS  
 Transport hazard class(es) 3  
 Packing group III

**IMDG**

Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; DANGEROUS GOODS.

UN number 1266  
 UN proper shipping name PERFUMERY PRODUCTS  
 Transport hazard class(es) 3  
 Packing group III  
 IMDG EMS Fire F-E  
 IMDG EMS Spill S-D  
 Marine pollutant Yes

**15. REGULATORY INFORMATION****Safety, health and environmental regulations/legislation specific for the substance or mixture****New Zealand**

**National regulations** See section 8 for national exposure control parameters

Chemical name	New Zealand HSNO Chemical Classification
d-Limonene - 5989-27-5	3.1C,6.1E (All),6.1E (O),6.3B,6.4A,6.5B,9.1A (All),9.1A (C),9.1A (F),9.2B 3.1C,6.3B,6.4A,6.5B,9.1A (All),9.1A (C),9.1A (F),9.2B 6.5B,9.1B (All),9.1B (F),9.1B (C),9.2C
Citral - 5392-40-5	3.1D,6.1D (All),6.1D (O),6.1E (D),6.3A,6.5B,6.9B (All),6.9B (O),9.1D (All),9.1D (F),9.2D,9.3C 3.1D,6.3B,6.5B,6.9B (All),6.9B (O)
Dipentene - 138-86-3	3.1C,6.3B,6.4A,6.5B,9.1A (All),9.1A (A),9.1A (C),9.1A (F)
Oils, lime - 8008-26-2	3.1C,6.1E (All),6.1E (O),6.3A,6.4A,6.5B

Lemon, extract - 84929-31-7	3.1C,6.1E (All),6.1E (O),6.3A,6.5B,9.1A (All),9.1A (A),9.1A (C),9.1A (F)
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**International Inventories**

<b>NZIoC</b>	All the constituents of this material are listed on the New Zealand Inventory of Chemicals.
<b>TSCA</b>	Contact supplier for inventory compliance status.
<b>DSL/NDSL</b>	Contact supplier for inventory compliance status.
<b>EINECS/ELINCS</b>	Contact supplier for inventory compliance status.
<b>ENCS</b>	Contact supplier for inventory compliance status.
<b>IECSC</b>	Contact supplier for inventory compliance status.
<b>KECL</b>	Contact supplier for inventory compliance status.
<b>PICCS</b>	Contact supplier for inventory compliance status.
<b>AICS</b>	All the constituents of this material are listed on the Australian Inventory of Industrial Chemicals.

**Legend:**

- NZIoC** - New Zealand Inventory of Chemicals  
**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List  
**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
**ENCS** - Japan Existing and New Chemical Substances  
**IECSC** - China Inventory of Existing Chemical Substances  
**KECL** - Korean Existing and Evaluated Chemical Substances  
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**- Australian Inventory of Industrial Chemicals**

**International Regulations**

**The Montreal Protocol on Substances that Deplete the Ozone Layer** Not applicable

**The Stockholm Convention on Persistent Organic Pollutants** Not applicable

**The Rotterdam Convention** Not applicable

**16. OTHER INFORMATION****Prepared By**

This Safety Data Sheet has been prepared by Ixom Operations Pty Ltd (Toxicology and SDS Services).

**Issuing Date:**

30-Sep-2020

**Reason(s) For Issue:**

Revised Primary SDS

**Revision Note:**

The symbol (\*) in the margin of this SDS indicates that this line has been revised.

**Key or legend to abbreviations and acronyms used in the safety data sheet****Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation
C	Carcinogen		

**Key literature references and sources for data used to compile the SDS**

Agency for Toxic Substances and Disease Registry (ATSDR)  
U.S. Environmental Protection Agency ChemView Database  
European Food Safety Authority (EFSA)  
EPA (Environmental Protection Agency)  
Acute Exposure Guideline Level(s) (AELG(s))

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U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act  
U.S. Environmental Protection Agency High Production Volume Chemicals  
Food Research Journal  
Hazardous Substance Database  
International Uniform Chemical Information Database (IUCLID)  
Japan GHS Classification  
Australian Industrial Chemicals Introduction Scheme (AICIS)  
NIOSH (National Institute for Occupational Safety and Health)  
National Library of Medicine's ChemID Plus (NLM CIP)  
National Library of Medicine's PubMed database (NLM PUBMED)  
National Toxicology Program (NTP)  
New Zealand's Chemical Classification and Information Database (CCID)  
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications  
Organization for Economic Co-operation and Development High Production Volume Chemicals Program  
Organization for Economic Co-operation and Development Screening Information Data Set  
RTECS (Registry of Toxic Effects of Chemical Substances)  
World Health Organization

**Disclaimer**

**This SDS summarises to our best knowledge at the date of issue, the chemical health and safety hazards of the material and general guidance on how to safely handle the material in the workplace. Since Ixom Operations Pty Ltd cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, assess and control the risks arising from its use of the material.**

**If clarification or further information is needed, the user should contact their Bronson & Jacobs representative or Ixom Operations Pty Ltd at the contact details on page 1.**

**Ixom Operations Pty Ltd's responsibility for the material as sold is subject to the terms and conditions of sale, a copy of which is available upon request.**

**Bronson and Jacobs incorporating the businesses of Woods and Woods and Keith Harris.**

**End of Safety Data Sheet**