

# SAFETY DATA SHEET



Revision date: 13-Dec-2021

Revision Number 3

## 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

### Product identifier

**Product Name** LEMON FLAVOUR NAT E44417 (FALEM44417)

**Product Code(s)** 000000037202

### Other means of identification

**Proper shipping name** EXTRACTS, FLAVOURING, LIQUID

**UN number** 1197

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

**Recommended use** Food flavour.

**Uses advised against** No information available.

### Supplier

Ixom Operations Pty Ltd (Bronson & Jacobs division) - incorporated in Australia  
ABN:51 600 546 512  
70 Marple Avenue  
Villawood NSW 2163  
Australia

Telephone Number: +61 2 8717 2929

Facsimile: +61 2 9755 9611

### Emergency telephone number

Emergency telephone number **1 800 033 111 (ALL HOURS)**

Please ensure you refer to the limitations of this Safety Data Sheet as set out in the "Other Information" section at the end of this Data Sheet.

## 2. HAZARDS IDENTIFICATION

### GHS Classification

Classified as dangerous goods in accordance with the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG).

Classified as a hazardous chemical in accordance with the criteria of Safe Work Australia - Globally Harmonized System (GHS).

<b>Flammable liquids</b>	Category 2
<b>Aspiration hazard</b>	Category 1
<b>Skin corrosion/irritation</b>	Category 2

Serious eye damage/eye irritation	Category 2
Skin sensitization	Category 1
Acute aquatic toxicity	Category 2
Chronic aquatic toxicity	Category 2

**SIGNAL WORD**

Danger

**Label elements**

Flame  
Health hazard  
Exclamation mark  
Environment



**Hazard statements**

H225 - Highly flammable liquid and vapor  
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

The following health/environmental hazard categories fall outside the scope of the Workplace Health and Safety Regulations:

H411 - Toxic to aquatic life with long lasting effects

**Precautionary Statements - Prevention**

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

**Precautionary Statements - Response**

Specific treatment (see First aid on this SDS)  
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: Wash with plenty of soap and water  
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower  
If skin irritation or rash occurs: Get medical advice/attention  
Wash contaminated clothing before reuse  
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 locked up  
Store in a well-ventilated place. Keep cool

**Precautionary Statements - Disposal**

Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable

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

Poisons Schedule (SUSMP) 5

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Mixture**

Chemical name	CAS No.	Weight-%
Ethyl alcohol	64-17-5	>60
Lemon oil	8008-56-8	10-<30
Citral	5392-40-5	1-<10
Flavour ingredients at non-hazardous concentrations	-	to 100

### 4. FIRST AID MEASURES

**Description of first aid measures**

- General advice** For advice, contact a Poisons Information Centre (e.g. phone Australia 13 11 26; New Zealand 0800 764 766) or a doctor. Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.
- Inhalation** Aspiration into lungs can produce severe lung damage. If breathing has stopped, give artificial respiration. Get medical attention immediately. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. If breathing is difficult, (trained personnel should) give oxygen. Get immediate medical advice/attention. Delayed pulmonary edema may occur. Remove to fresh air.
- Eye contact** Do not rub affected area. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.
- Skin contact** Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. May cause an allergic skin reaction. In the case of skin irritation or allergic reactions see a physician.
- Ingestion** ASPIRATION HAZARD IF SWALLOWED - CAN ENTER LUNGS AND CAUSE DAMAGE. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. Get immediate medical advice/attention. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting.
- Self-protection of the first aider** Remove all sources of ignition. See section 8 for more information. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Use personal protective equipment as required. Avoid contact with skin, eyes, and clothing.

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

- Symptoms** Irritation. May cause allergic skin reaction. Redness. Rashes. Hives. Aspiration risk: may cause lung damage if swallowed.

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

- Note to physicians** Treat symptomatically. May cause sensitization by skin contact. Because of the danger of aspiration, emesis or gastric lavage should not be employed unless the risk is justified by

the presence of additional toxic substances. Delayed pulmonary edema may occur.

## 5. FIRE FIGHTING MEASURES

### Suitable Extinguishing Media

**Suitable Extinguishing Media** Foam. Carbon dioxide (CO2). Dry chemical.

**Unsuitable extinguishing media** CAUTION: Use of water spray when fighting fire may be inefficient.

### Specific hazards arising from the chemical

**Specific hazards arising from the chemical** Risk of ignition. Keep product and empty container away from heat and sources of ignition. Containers may explode when heated. In the event of fire, cool tanks with water spray. Runoff may create fire or explosion hazard. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. Product is or contains a sensitizer. May cause sensitization by skin contact. 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** 3YE

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

**Personal precautions** ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Avoid contact with skin, eyes, and clothing. Ensure adequate ventilation. Use personal protective equipment as required. Wash thoroughly after handling. See section 8 for more information.

**Other information** Ventilate the area. Refer to protective measures listed in Sections 7 and 8.

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

### Environmental precautions

**Environmental precautions** Refer to protective measures listed in Sections 7 and 8. Prevent product from entering drains. Prevent further leakage or spillage if safe to do so.

### Methods and material for containment and cleaning up

**Methods for containment** Stop leak if you can do it without risk. Do not touch or walk through spilled material. A vapor suppressing foam may be used to reduce vapors. Dike far ahead of spill to collect runoff water. Keep out of drains, sewers, ditches and waterways. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.

**Methods for cleaning up** Take precautionary measures against static discharges. Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labelled containers. Use non-sparking tools.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

#### **Advice on safe handling**

Use personal protection equipment. Avoid breathing vapors or mists. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use grounding and bonding connection when transferring this material to prevent static discharge, fire or explosion. Use with local exhaust ventilation. Use spark-proof tools and explosion-proof equipment. Keep in an area equipped with sprinklers. Use according to package label instructions. In case of insufficient ventilation, wear suitable respiratory equipment. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes, and clothing. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse.

#### **General hygiene considerations**

Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product.

### Conditions for safe storage, including any incompatibilities

#### **Storage Conditions**

Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from direct sunlight. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep in properly labelled containers. Keep in an area equipped with sprinklers. Store locked up. Store away from foodstuffs. Keep out of the reach of children. Keep container closed when not in use.

This material is a Scheduled Poison and must be stored, maintained and used in accordance with the relevant regulations.

#### **Incompatible materials**

Oxidizing agents.

#### **Poisons Schedule (SUSMP)**

5

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### **Exposure Limits**

No value assigned for this specific material by Safe Work Australia. However, Workplace Exposure Standard(s) for constituent(s):

Chemical name	Australia	ACGIH TLV
Ethyl alcohol 64-17-5	8hr TWA = 1880 mg/m <sup>3</sup> (1000 ppm)	

As published by Safe Work Australia Workplace Exposure Standards for Airborne Contaminants.

TWA - The time-weighted average airborne concentration of a particular substance when calculated over an eight-hour working day, for a five-day working week.

These Workplace Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These workplace exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

**Appropriate engineering controls**

**Engineering controls** Apply technical measures to comply with the occupational exposure limits.

If in the handling and application of this material, safe exposure levels could be exceeded, the use of engineering controls such as local exhaust ventilation must be considered and the results documented. If achieving safe exposure levels does not require engineering controls, then a detailed and documented risk assessment using the relevant Personal Protective Equipment (PPE) (refer to PPE section below) as a basis must be carried out to determine the minimum PPE requirements.

**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, RESPIRATOR.



<b>Eye/face protection</b>	Goggles.
<b>Skin and body protection</b>	Chemical resistant apron. Antistatic boots. Wear suitable protective clothing. Overalls.
<b>Hand protection</b>	Impervious gloves.
<b>Respiratory protection</b>	If determined by a risk assessment an inhalation risk exists, wear an organic vapour/particulate 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>	Pale Yellow to Yellow
<b>Odor</b>	Characteristic Lemon
<b>Odor threshold</b>	No information available.

<b><u>Property</u></b>	<b><u>Values</u></b>	<b><u>Remarks • Method</u></b>
<b>pH</b>	No data available	None known
<b>pH (as aqueous solution)</b>	No data available	None known
<b>Melting point / freezing point</b>	No data available	None known
<b>Boiling point / boiling range</b>	No data available	None known
<b>Flash point</b>	20°C	CC (closed cup)
<b>Evaporation rate</b>	No data available	None known
<b>Flammability (solid, gas)</b>	No data available	None known
<b>Flammability Limit in Air</b>		None known
<b>Upper flammability or explosive limits</b>	No data available	
<b>Lower flammability or explosive limits</b>	No data available	

Vapor pressure	No data available	None known
Vapor density	No data available	None known
Relative density	0.8052 - 0.8252	@ 20 °C
Water solubility	No data available	None known
Solubility(ies)	No data available	None known
Partition coefficient	No data available	None known
Autoignition temperature	No data available	None known
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. Direct sunlight.

Incompatible materials

Incompatible materials Oxidizing agents.

Hazardous decomposition products

Hazardous decomposition products Carbon oxides.

## 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Information on likely routes of exposure

**Product Information** 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:

**Inhalation** Aspiration into lungs can produce severe lung damage. May cause pulmonary edema. Pulmonary edema can be fatal. Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract.

**Eye contact** Causes serious eye irritation. Specific test data for the substance or mixture is not available.

**Skin contact** May cause sensitization by skin contact. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. Repeated exposure may cause skin dryness or cracking. Specific test data for the substance or mixture is not available. Causes skin irritation. (based on components).

**Ingestion** Potential for aspiration if swallowed. May cause lung damage if swallowed. Aspiration may cause pulmonary edema and pneumonitis. May be fatal if swallowed and enters airways. Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

**Symptoms** Irritation. May cause allergic skin reaction. Redness. Rashes. Hives. Aspiration risk: may cause lung damage if swallowed.

**Numerical measures of toxicity - Product Information**

No information available.

**Numerical measures of toxicity - Component Information**

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Ethyl alcohol	= 7060 mg/kg ( Rat )	-	= 124.7 mg/L ( Rat ) 4 h
Lemon oil	= 2840 mg/kg ( Rat )	> 5 g/kg ( Rabbit )	-
Citral	= 4960 mg/kg ( Rat )	= 2250 mg/kg ( Rabbit )	-

See section 16 for terms and abbreviations

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

**Skin corrosion/irritation** Irritating to skin. Classification is based on mixture calculation methods based on component data.

**Serious eye damage/eye irritation** Irritating to eyes. Classification is based on mixture calculation methods based on component data.

**Respiratory or skin sensitization** May cause sensitization by skin contact. Classification is based on mixture calculation methods based on component data.

**Germ cell mutagenicity** No information available.

**Carcinogenicity** No information available.

**Reproductive toxicity** No information available.

**STOT - single exposure** No information available.

**STOT - repeated exposure** No information available.

**Aspiration hazard** May be fatal if swallowed and enters airways.

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**



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

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Ethyl alcohol	-	LC50: 12.0 - 16.0mL/L (96h, Oncorhynchus mykiss) LC50: >100mg/L (96h, Pimephales promelas) LC50: 13400 - 15100mg/L (96h, Pimephales promelas)	-	LC50: 9268 - 14221mg/L (48h, Daphnia magna) EC50: =2mg/L (48h, Daphnia magna) EC50: =10800mg/L (24h, Daphnia magna)
Citral	EC50: =16mg/L (72h, Desmodesmus subspicatus) EC50: =19mg/L (96h, Desmodesmus 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.

**Component Information**

Chemical name	Partition coefficient
Ethyl alcohol	-0.32
Citral	2.76

**Mobility**

**Mobility in soil** No information available.

**Other adverse effects**

**13. DISPOSAL CONSIDERATIONS**

**Waste treatment methods**

**Waste from residues/unused products** Should not be released into the environment. Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

**Contaminated packaging** Empty containers pose a potential fire and explosion hazard. Do not cut, puncture or weld containers.

**14. TRANSPORT INFORMATION**

**ADG**

Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for Transport by Road and Rail; DANGEROUS GOODS.

**UN number** 1197  
**Proper shipping name** EXTRACTS, FLAVOURING, LIQUID  
**Hazard class** 3  
**Packing group** II  
**Hazchem code** 3YE

**IATA**

UN number 1197  
UN proper shipping name EXTRACTS, FLAVOURING, LIQUID  
Transport hazard class(es) 3  
Packing group II

**IMDG**

UN number 1197  
UN proper shipping name EXTRACTS, FLAVOURING, LIQUID  
Transport hazard class(es) 3  
Packing group II  
IMDG EMS Fire F-E  
IMDG EMS Spill S-D

**15. REGULATORY INFORMATION**

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

**National regulations**

**Australia**

Classified as dangerous goods in accordance with the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG).

Classified as a hazardous chemical in accordance with the criteria of Safe Work Australia - Globally Harmonized System (GHS).

See section 8 for national exposure control parameters

**Poisons Schedule (SUSMP)** 5

**Major hazard (accident/incident planning) regulation**

Verify that license requirements are met

Hazardous chemical

Threshold quantity (T)

Liquids that meet the criteria for Class 3 Packing Group II or III

50 000

**National pollutant inventory**

Subject to reporting requirement

Chemical name	National pollutant inventory
Ethyl alcohol - 64-17-5	10 tonne/yr Threshold category 1

**International Inventories**

**AICC**

All the constituents of this material are listed on the Australian Inventory of Industrial Chemicals.

**Legend:**

- 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

**Reason(s) For Issue:** Reissue of an obsolete SDS

**Issuing Date:** 13-Dec-2021

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

**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**

EPA (Environmental Protection Agency)  
Acute Exposure Guideline Level(s) (AEGl(s))  
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**