# SAFETY DATA SHEET

**Revision date:** 31-Oct-2024

**Revision Number** 5

## Section 1: Identification

**Product identifier**

**Product Name** FRAGRANCE LEMON H10038 (KMPER10038)

**Product Code(s)** 000000035031

**Other means of identification**

**Proper shipping name** PERFUMERY PRODUCTS

**UN number or ID number** 1266

**Pure substance/mixture** Mixture

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

**Recommended use** Fragrances.

**Uses advised against** No information available.

**Details of manufacturer or importer**

**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.

## Section 2: Hazard identification

Classified as a hazardous substance in accordance with the criteria of Safe Work Australia - Globally Harmonized System (GHS). Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for Transport by Road and Rail; DANGEROUS GOODS.

**GHS Classification**

| | |
|---|---|
| **Flammable liquids** | Category 3 |
| **Aspiration hazard** | Category 1 |
| **Skin corrosion/irritation** | Category 2 |

| | |
|---|---|
| **Serious eye damage/eye irritation** | Category 1 |
| **Skin sensitization** | Category 1 |
| **Acute aquatic toxicity** | Category 1 |
| **Chronic aquatic toxicity** | Category 1 |

**Label elements**

Flame
Exclamation mark
Health hazard
Corrosion
Environment


**Signal word**
DANGER

**Hazard statements**
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
H318 - Causes serious eye damage
H410 - Very 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/vapors/spray.
Keep container tightly closed.
Ground and bond container and receiving equipment.
Use explosion-proof electrical/ ventilating / lighting/ .? / equipment.
Use non-sparking tools.
Take action to prevent static discharges.
Wash face, hands and any exposed skin thoroughly after handling.
Contaminated work clothing should not be allowed out of the workplace.
Wear protective gloves/clothing and eye/face protection.
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.
Immediately call a POISON CENTER or doctor/physician.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
If skin irritation or rash occurs: Get medical advice/attention.
Take off contaminated clothing and wash it before reuse.
IF SWALLOWED: Immediately call a POISON CENTER or doctor.
Do NOT induce vomiting.
In case of fire: Use extinguishing media as outlined in Section 5 of this Safety Data Sheet to extinguish..
Collect spillage.
**Precautionary Statements - Storage**
Store locked up.
Store in a well-ventilated place. Keep cool.
**Precautionary Statements - Disposal**
Dispose of contents/container to an approved waste disposal plant.

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

Very toxic to aquatic life.

## Section 3: Composition and information on ingredients

| Chemical name | CAS No. | Weight-% |
|---|---|---|
| Pine oil | 8002-09-3 | 30-60 |
| Dipentene | 138-86-3 | 30-60 |
| Lemongrass oils | 8007-02-1 | 10-<30 |
| Cymbopogon winterianus, extract | 91771-61-8 | 1-<10 |
| Diethyl phthalate | 84-66-2 | 1-<10 |
| Citral | 5392-40-5 | 1-<10 |
| Non-hazardous ingredients | Proprietary | Balance |

## Section 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. Immediately call a POISON CENTER or doctor/physician.

**Inhalation** Remove to fresh air. Aspiration into lungs can produce severe lung damage. If breathing is irregular or stopped, administer artificial respiration. Get immediate medical attention. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. If breathing is difficult, (trained personnel should) give oxygen. Delayed pulmonary edema may occur.

**Eye contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. Get immediate medical attention. Remove contact lenses, if present and easy to do. Continue rinsing.

**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** Rinse mouth. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. ASPIRATION HAZARD IF SWALLOWED - CAN ENTER LUNGS AND CAUSE DAMAGE. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. Get immediate medical attention.

**Self-protection of the first aider** Remove all sources of ignition. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Use personal protective equipment as required. See section 8 for more information. Avoid contact with skin, eyes or clothing. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation.

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

**Symptoms** Burning sensation. Itching. Rashes. Hives. Difficulty in breathing. Coughing and/ or wheezing. Dizziness. May cause redness and tearing of the eyes.

**Effects of Exposure** No information available.

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

**Note to physicians** Treat symptomatically. 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. May cause sensitization by skin contact. Can cause corneal burns.

## Section 5: Firefighting 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** CAUTION: Use of water spray when fighting fire may be inefficient.

**Specific hazards arising from the chemical**

**Specific hazards arising from the chemical** Flammable. 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. Product is or contains a sensitizer. May cause sensitization by skin contact. Environmentally hazardous. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

**Hazardous combustion products** Carbon oxides.

**Special protective actions for fire-fighters**

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

**Hazchem code** •3Y

## Section 6: Accidental release measures

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

**Personal precautions** Evacuate personnel to safe areas. Use personal protective equipment as required. See section 8 for more information. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. 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.

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

**For emergency responders** Shut off ignition sources. Clear area of all unprotected personnel. Refer to protective measures listed in Sections 7 and 8.

**Environmental precautions**

**Environmental precautions** Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Refer to protective measures listed in Sections 7 and 8. See Section 12 for additional Ecological Information.

**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. Remove ignition sources. Provide adequate ventilation. 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 labeled containers.

## Section 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. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. In case of insufficient ventilation, wear suitable respiratory equipment. Take off contaminated clothing and wash before reuse.

**General hygiene considerations** Do not eat, drink or smoke when using this product. 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. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection.

**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 labeled containers. Do not store near combustible materials. Keep in an area equipped with sprinklers. Store in accordance with the particular national regulations. Store in accordance with local regulations. Store away from incompatible materials described in Section 10. Do not contaminate food or feed stuffs. Store locked up. Keep out of the reach of children. Keep container closed when not in use.

**Incompatible materials** Strong oxidizing agents.

## Section 8: Exposure controls and 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 | New Zealand | ACGIH TLV |
|---|---|---|---|
| Diethyl phthalate<br>84-66-2 | 8hr TWA = 5 mg/m³ | TWA: 5 mg/m³ | TWA: 5 mg/m³ |
| Citral<br>5392-40-5 | - | - | TWA: 5 ppm inhalable fraction and vapor<br>Sk*<br>dermal sensitizer |

| Chemical name | European Union | United Kingdom | Germany DFG |
|---|---|---|---|
| Dipentene<br>138-86-3 | - | - | skin sensitizer |
| Diethyl phthalate<br>84-66-2 | - | TWA: 5 mg/m³<br>STEL: 10 mg/m³ | - |

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**

Ensure adequate ventilation, especially in confined areas. 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.

**Eye/face protection** Tight sealing safety goggles.

**Skin and body protection** Wear suitable protective clothing. Antistatic boots. Overalls.

**Hand protection** Impervious gloves.

**Respiratory protection** 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.

**Environmental exposure controls** No information available.

**Thermal hazards** No information available.

## Section 9: Physical and chemical properties

**Information on basic physical and chemical properties**

| | |
|---|---|
| **Physical state** | Liquid |
| **Appearance** | Clear |
| **Color** | Pale Yellow to Yellow |
| **Odor** | Lemon, Lemongrass, Green |
| **Odor threshold** | No information available |

| Property | Values | Remarks • Method |
|---|---|---|
| **pH** | No data available | None known |
| **pH (as aqueous solution)** | No data available | None known |
| **Melting point / freezing point** | No data available | None known |
| **Boiling point / boiling range** | No data available | None known |
| **Flash point** | 57 °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 | None known |
| **Vapor density** | No data available | None known |
| **Relative density** | 0.892 - 0.912 | @ 20 °C |
| **Water solubility** | No data available | None known |
| **Solubility(ies)** | Miscible in water | 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**

## Section 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** Heating can cause expansion or decomposition of the material, which can lead to the containers exploding.

**Conditions to avoid**

**Conditions to avoid** Heat, flames and sparks. Static discharge (electrostatic discharge). Direct sunlight.

**Incompatible materials**

**Incompatible materials** Strong oxidizing agents.

**Hazardous decomposition products**

**Hazardous decomposition products** Carbon oxides.

## Section 11: Toxicological information

**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. May cause irritation of respiratory tract.

**Eye contact** Causes serious eye damage. May cause irreversible damage to eyes.

**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. Causes skin irritation.

**Ingestion** Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. May be fatal if swallowed and enters airways. Aspiration may cause pulmonary edema and pneumonitis.

**Symptoms** Redness. Burning. Itching. Rashes. Hives. Difficulty in breathing. Coughing and/ or wheezing. Dizziness. May cause redness and tearing of the eyes.

**Acute toxicity** .

**Numerical measures of toxicity - Product Information**
No information available

**Component Information**

| Chemical name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|---|---|---|---|
| Pine oil | = 3200 mg/kg ( Rat ) | = 400 mg/kg ( Rabbit ) | > 3.79 mg/L ( Rat ) 4 h |
| Dipentene | = 5300 mg/kg ( Rat ) | - | - |
| Lemongrass oils | > 5 g/kg ( Rat ) | - | - |
| Cymbopogon winterianus, extract | - | > 2000 mg/kg ( Rat ) | - |
| Diethyl phthalate | = 8600 mg/kg ( Rat ) | > 11200 mg/kg ( Rat ) | > 4.64 mg/L ( Rat ) 6 h |
| 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** Causes skin irritation. Classification based on data available for ingredients.

**Serious eye damage/eye irritation** Causes serious eye damage. Classification based on data available for ingredients.

**Respiratory or skin sensitization** May cause an allergic skin reaction. Classification based on data available for ingredients.

**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. Risk of serious damage to the lungs (by aspiration).

## Section 12: Ecological information

**Ecotoxicity**

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

| Chemical name | Algae/aquatic plants | Fish | Toxicity to microorganisms | Crustacea |
|---|---|---|---|---|
| Pine oil | - | - | - | EC50: 17 - 28mg/L (48h, Daphnia magna) |
| Diethyl phthalate | EC50: =23mg/L (72h, Desmodesmus subspicatus)<br>EC50: =21mg/L (96h, Desmodesmus subspicatus)<br>EC50: 42 - 255mg/L (72h, Pseudokirchneriella subcapitata)<br>EC50: 2.11 - 4.29mg/L (96h, Pseudokirchneriella subcapitata) | LC50: =17mg/L (96h, Pimephales promelas)<br>LC50: =16.8mg/L (96h, Pimephales promelas)<br>LC50: =22mg/L (96h, Lepomis macrochirus)<br>LC50: =16.7mg/L (96h, Lepomis macrochirus)<br>LC50: =12mg/L (96h, Oncorhynchus mykiss) | - | EC50: 36 - 74mg/L (48h, Daphnia magna)<br>EC50: =86mg/L (48h, Daphnia magna) |
| Citral | EC50: =16mg/L (72h, Desmodesmus subspicatus)<br>EC50: =19mg/L (96h, Desmodesmus subspicatus) | - | - | EC50: =7mg/L (48h, Daphnia magna) |

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

| Chemical name | Earthworm | Avian | Honeybees |
|---|---|---|---|
| Diethyl phthalate | Acute Toxicity: LC50 0.66 - 1.09 mg/cm2 (Eisenia foetida 48 h filter paper)<br>Source: IUCLID | - | - |

**Persistence and degradability**

**Persistence and degradability** No information available.

**Bioaccumulative potential**

**Bioaccumulation**

**Component Information**

| Chemical name | Partition coefficient |
|---|---|
| Diethyl phthalate | 2.2 |
| Citral | 2.76 |

**Mobility**

**Mobility** No information available.

**Other adverse effects**

**Other adverse effects** No information available.

## Section 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. Dispose of in accordance with federal, state and local regulations.

*See section 8 for more information*

## Section 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 or ID number** 1266
**Proper shipping name** PERFUMERY PRODUCTS
**Transport hazard class(es)** 3
**Packing group** III
**Environmental hazard** Yes
**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** | P |

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**
No information available

## Section 15: Regulatory information

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

**National regulations**

**Australia**

Classified as a hazardous substance in accordance with the criteria of Safe Work Australia - Globally Harmonized System (GHS). Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for Transport by Road and Rail; DANGEROUS GOODS.

See section 8 for national exposure control parameters

**Standard for Uniform Scheduling of Medicines and Poisons (SUSMP)**
No poisons schedule number allocated

**Poison Schedule Number** Not applicable

**Australian Industrial Chemicals Introduction Scheme (AICIS)**

| Chemical name | Australian Industrial Chemicals Introduction Scheme (AICIS) | Additional information |
|---|---|---|
| Pine oil - 8002-09-3 | Present | - |
| Dipentene - 138-86-3 | Present | Specific information requirement: Obligations to provide information apply. You must tell us within 28 days if the circumstances of your importation or manufacture (introduction) are different to those in our assessment. |
| Lemongrass oils - 8007-02-1 | Present | - |
| Cymbopogon winterianus, extract - 91771-61-8 | Present | - |
| Diethyl phthalate - 84-66-2 | Present | Specific information requirement: Obligations to provide information apply. You must tell us within 28 days if the circumstances of your importation or manufacture (introduction) are different to those in our assessment. |
| Citral - 5392-40-5 | Present | - |

**Illicit Drug Precursors/Reagents**
This product does not contain any substance(s) on the Illicit Drug Precursors/Reagents list.

**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 |
|---|---|
| Dipentene - 138-86-3 | 20 MW Threshold category 2b total<br>60000 MWH Threshold category 2b total<br>1 tonne/h Threshold category 2a total<br>25 tonne/yr Threshold category 1a total<br>400 tonne/yr Threshold category 2a total<br>2000 tonne/yr Threshold category 2b total |

**International Inventories**

| | |
|---|---|
| **AIIC** | All the constituents of this material are listed on the Australian Inventory of Industrial Chemicals. |
| **NZIoC** | Contact supplier for inventory compliance status. |
| **TSCA** | Contact supplier for inventory compliance status. |
| **DSL/NDSL** | Contact supplier for inventory compliance status. |
| **EINECS/ELINCS** | Contact supplier for inventory compliance status. |
| **ENCS** | Contact supplier for inventory compliance status. |
| **IECSC** | Contact supplier for inventory compliance status. |
| **KECL** | Contact supplier for inventory compliance status. |
| **PICCS** | Contact supplier for inventory compliance status. |

**Legend:**
**AIIC- Australian Inventory of Industrial Chemicals**
**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

**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

## Section 16: Other information

**Reason(s) For Issue:** 5 Yearly Revised Primary SDS

**Prepared By** This Safety Data Sheet has been prepared by IXOM Operations Pty Ltd (Toxicology and SDS Services).

**Revision date:** 31-Oct-2024

**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**
SVHC: Substances of Very High Concern for Authorization:
PBT: Persistent, Bioaccumulative, and Toxic (PBT) Substances
vPvB: Very Persistent and very Bioaccumulative (vPvB) Substances
STOT: Specific Target Organ Toxicity
ATE: Acute Toxicity Estimate
LC50: 50% Lethal Concentration
LD50: 50% Lethal Dose

**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)
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)
National Institute of Technology and Evaluation (NITE)
Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
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)
U.S. 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
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 and Australian Botanical Products.**

**End of Safety Data Sheet**