SAFETY DATA SHEET



Revision date: 04-May-2022

Revision Number 5

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product identifier

Product Name COMPOUND A295890

Product Code(s) 000000032050

Other means of identification

UN number 1266

Pure substance/mixture Mixture

Recommended use of the chemical and restrictions on use

Recommended use Fragrances.

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).

Flammable liquids	Category 2
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 1

Skin sensitization	Category 1
Specific target organ toxicity (single exposure)	Category 3
Acute aquatic toxicity	Category 2
Chronic aquatic toxicity	Category 2

SIGNAL WORD

Danger

Label elements

Flame Corrosion Exclamation mark



Hazard statements

H225 - Highly flammable liquid and vapor

H315 - Causes skin irritation

H317 - May cause an allergic skin reaction

H318 - Causes serious eye damage

H336 - May cause drowsiness or dizziness

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

Ground/bond container and receiving equipment

Use explosion-proof electrical, ventilating, lighting equipment

Use only non-sparking tools

Take precautionary measures against static discharge

Avoid breathing dust / fume / gas / mist / vapours / spray

Wear protective gloves / protective clothing / eye protection / face protection

Wash hands thoroughly after handling

Contaminated work clothing should not be allowed out of the workplace

Keep container tightly closed

Use only outdoors or in a well-ventilated area

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

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 before reuse

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Call a POISON CENTER or doctor/physician if you feel unwell

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 container tightly closed

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

Toxic to aquatic life with long lasting effects

Poisons Schedule (SUSMP) None allocated

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

Chemical name	CAS No.	Weight-%
Lemongrass oils	8007-02-1	10-<30
Ethyl acetate	141-78-6	10-<30
Isobutyl acetate	110-19-0	10-<30
Litsea cubeba oil	68855-99-2	1-<10
3-Methyl butyl acetate	123-92-2	1-<10
d-Limonene	5989-27-5	1-<10
Ethyl formate	109-94-4	1-<10
Dipentene	138-86-3	1-<10
Citral	5392-40-5	1-<10
Fragrance ingredients present 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.

Inhalation Remove to fresh air and keep at rest in a position comfortable for breathing. If breathing is

irregular or stopped, administer artificial respiration. Get medical attention immediately if

symptoms 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. Remove contact lenses, if present

and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. Call a physician if symptoms occur.

Ingestion Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth

to an unconscious person. Do NOT induce vomiting. Get medical attention if symptoms

occur.

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.

Most important symptoms and effects, both acute and delayed

Symptoms Irritation. Vapors may cause drowsiness and dizziness. May cause redness and tearing of

the eyes. May cause allergic skin reaction. Redness. Rashes. Hives.

Indication of any immediate medical attention and special treatment needed

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

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 CAUTION: Use of water spray when fighting fire may be inefficient.

Oxides of carbon.

Specific hazards arising from the chemical

Specific hazards arising from the

chemical

Highly 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. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

rogulation

Special protective actions for fire-fighters

Special protective equipment for

Hazardous combustion products

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 Evacuate personnel to safe areas. Ensure adequate ventilation. Avoid contact with skin,

eyes, and clothing. Avoid breathing vapors or mists. Use personal protective equipment as required. See section 8 for more information. 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. Use personal protection

recommended in Section 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.

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.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Avoid contact with skin and eyes. Avoid breathing vapors or mists. Use personal protection

equipment. 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. May form flammable vapour mixtures with air. Vapour may travel a considerable distance to source of ignition and flash back. Use spark-proof tools and explosion-proof equipment. Use with local exhaust ventilation. Keep in an area equipped with sprinklers. Use according to package label instructions. Handle in accordance with good industrial hygiene and safety practice. Use only outdoors.

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.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up.

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. Do not store near combustible materials. Protect from direct sunlight. 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.

Store at around 15°C.

Incompatible materials Oxidizing agents.

Poisons Schedule (SUSMP) None allocated

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure LimitsNo value assigned for this specific material by Safe Work Australia. However, Workplace

Exposure Standard(s) for constituent(s):

Ethyl acetate: 8hr TWA = 720 mg/m³ (200 ppm), 15 min STEL = 1440 mg/m³ (400 ppm)

Isobutyl acetate: 8hr TWA = 713 mg/m³ (150 ppm)

Isoamyl acetate (Isopentyl acetate): 8hr TWA = 270 mg/m³ (50 ppm), 15 min STEL = 541 mg/m³ (100 ppm)

Ethyl formate: 8hr TWA = 303 mg/m³ (100 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.

STEL (Short Term Exposure Limit) - the airborne concentration of a particular substance calculated as a time-weighted average over 15 minutes, which should not be exceeded at any time during a normal eight hour work day. According to current knowledge this concentration should neither impair the health of, nor cause undue discomfort to, nearly all workers.

These 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. The 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, Evewash stations, 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.











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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state Liquid **Appearance** Clear

Color Amber to Dark amber Fresh, Fruity, Citrus, Floral Odor No information available. **Odor threshold**

Remarks • Method Property Values

Not Applicable Hq None known pH (as aqueous solution) No data available None known Melting point / freezing point No data available None known No data available Boiling point / boiling range None known 14 °C Flash point CC (closed cup) None known **Evaporation rate** No data available Flammability (solid, gas) No data available None known None known

Flammability Limit in Air

Upper flammability or explosive No data available

limits

Lower flammability or explosive No data available

limits

Vapor pressure No data available None known Vapor density No data available None known Relative density 0.927 - 0.947 @20°C None known None known Water solubility No data available Solubility(ies) Immiscible 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

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. 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). Avoid contact with

combustible substances. Direct sunlight.

Incompatible materials

Incompatible materials Oxidizing agents.

Hazardous decomposition products

Hazardous decomposition products Oxides of carbon.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Information on likely routes of exposure

Product InformationNo 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 Breathing in vapour can result in headaches, dizziness, drowsiness, and possible nausea.

Breathing in high concentrations can produce central nervous system depression, which can lead to loss of coordination, impaired judgement and if exposure is prolonged,

unconsciousness.

Eye contact Causes serious eye damage. Corrosive to the eyes and may cause severe damage

including blindness.

Skin contact Causes skin irritation. May cause sensitization by skin contact.

Ingestion Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

Symptoms Irritation. Vapors may cause drowsiness and dizziness. May cause redness and tearing of

the eyes. May cause allergic skin reaction. Redness. Rashes. Hives.

Numerical measures of toxicity - Product Information

No information available.

Numerical measures of toxicity - Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Lemongrass oils	> 5000 mg/kg (Rat)	> 5000 mg/kg (Rabbit)	-
Ethyl acetate	= 5620 mg/kg (Rat)	> 18000 mg/kg (Rabbit) > 20 mL/kg (Rabbit)	= 4000 ppm (Rat) 4 h
Isobutyl acetate	= 15400 mg/kg (Rat)	> 17400 mg/kg (Rabbit)	-
Litsea cubeba oil	> 5000 mg/kg (Rat)	= 4800 mg/kg (Rabbit)	-
3-Methyl butyl acetate	= 16600 mg/kg (Rat)	> 5000 mg/kg (Rabbit)	-
d-Limonene	= 5200 mg/kg (Rat) = 4400 mg/kg (Rat)	> 5000 mg/kg (Rabbit)	-
Ethyl formate	= 1850 mg/kg (Rat)	> 5000 mg/kg (Rabbit)	-
Dipentene	= 5300 mg/kg (Rat)	-	-
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 is based on mixture calculation methods based on

component data.

Serious eye damage/eye irritation Causes serious eye damage. Classification is based on mixture calculation methods based

on component data.

Respiratory or skin sensitization May cause an allergic skin reaction. 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 May cause drowsiness or dizziness. Classification is based on mixture calculation methods

based on component data.

STOT - repeated exposureNo information available.

Aspiration hazard No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity

Avoid contaminating waterways. Toxic to aquatic life with long lasting effects.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Ethyl acetate	EC50: =3300mg/L (48h, Desmodesmus subspicatus)	LC50: 220 - 250mg/L (96h, Pimephales promelas) LC50: =484mg/L (96h, Oncorhynchus mykiss) LC50: 352 - 500mg/L (96h, Oncorhynchus mykiss)	-	EC50: =560mg/L (48h, Daphnia magna)
Isobutyl acetate	-	LC50: =17mg/L (96h, Oryzias latipes) LC50: =101mg/L (48h, Leuciscus idus melanotus) LC50: 101 - 123mg/L (48h, Leuciscus idus melanotus)	-	EC50: =168mg/L (24h, Daphnia magna)
d-Limonene	-	LC50: 0.619 - 0.796mg/L (96h, Pimephales promelas) LC50: =35mg/L (96h, Oncorhynchus mykiss)	-	-
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
Isobutyl acetate	1.72
d-Limonene	4.23
Citral	2.76

Mobility

Mobility in soil No information available.

Other adverse effects

Other adverse effects No information available.

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.

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

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

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 1266

Proper shipping name PERFUMERY PRODUCTS

Hazard class Packing group Ш **Special Provisions** 163 Hazchem code •3YE

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

PERFUMERY PRODUCTS UN proper shipping name

Transport hazard class(es) 3 Packing group Ш

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

PERFUMERY PRODUCTS **UN** proper shipping name

Transport hazard class(es) 3 **Packing group** Ш F-E **IMDG EMS Fire 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) None allocated

Major hazard (accident/incident planning) regulation

Verify that license requirements are met

Hazardous chemical

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

Threshold quantity (T) 50 000

National pollutant inventory

Subject to reporting requirement

Chemical name	National pollutant inventory
Ethyl acetate - 141-78-6	10 tonne/yr Threshold category 1
Isobutyl acetate - 110-19-0	20 MW Threshold category 2b total
	60000 MWH Threshold category 2b total
	1 tonne/h Threshold category 2a total
	25 tonne/yr Threshold category 1a total
	400 tonne/yr Threshold category 2a total
	2000 tonne/yr Threshold category 2b total
3-Methyl butyl acetate - 123-92-2	20 MW Threshold category 2b total
	60000 MWH Threshold category 2b total
	1 tonne/h Threshold category 2a total
	25 tonne/yr Threshold category 1a total
	400 tonne/yr Threshold category 2a total
	2000 tonne/yr Threshold category 2b total
d-Limonene - 5989-27-5	20 MW Threshold category 2b total
	60000 MWH Threshold category 2b total
	1 tonne/h Threshold category 2a total
	25 tonne/yr Threshold category 1a total
	400 tonne/yr Threshold category 2a total
	2000 tonne/yr Threshold category 2b total
Ethyl formate - 109-94-4	20 MW Threshold category 2b total
	60000 MWH Threshold category 2b total
	1 tonne/h Threshold category 2a total
	25 tonne/yr Threshold category 1a total
	400 tonne/yr Threshold category 2a total
	2000 tonne/yr Threshold category 2b total
Dipentene - 138-86-3	20 MW Threshold category 2b total
	60000 MWH Threshold category 2b total
	1 tonne/h Threshold category 2a total
	25 tonne/yr Threshold category 1a total
	400 tonne/yr Threshold category 2a total
	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.

Legend:

AllC - 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: 5 Yearly Revised Primary SDS

Change in Hazardous Chemical Classification

Issuing Date: 04-May-2022

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 and Australian Botanical Products.

End of Safety Data Sheet