

001641 COFFEE FLAVOUR NATURAL The Product Makers (Australia) Pty Ltd

Version No: 3.3

Safety Data Sheet according to WHS Regulations (Hazardous Chemicals) Amendment 2020 and ADG requirements

Chemwatch Hazard Alert Code: 4

Issue Date: **25/08/2023** Print Date: **25/08/2023** S.GHS.AUS.EN

SECTION 1 Identification of the substance / mixture and of the company / undertaking

Product Identifier

Product name: 001641 COFFEE FLAVOUR NATURAL Other means of identification: Not Available

Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses:

INTEGRITY CHECK: Product contains BOTH an alcohol and an acid as ingredients.

Details of the manufacturer or supplier of the safety data sheet

Registered company name	The Product Makers (Australia) Pty Ltd
Address	50 - 60 Popes Road Keysborough 3173 Australia Australia
Telephone	61 3 9771 0300
Fax	Not Available
Website	www.theproductmakers.com
Email	info@tpm.com.au

Emergency telephone number

Association / Organisation	The Product Makers (Australia) Pty Ltd
Emergency telephone numbers	61 3 9771 0300
Other emergency telephone numbers	Not Available

SECTION 2 Hazards identification

Classification of the substance or mixture

HAZARDOUS CHEMICAL. NON-DANGEROUS GOODS. According to the WHS Regulations and the ADG Code.

Chemwatch Hazard Ratings

Flammability 0

 Toxicity
 2
 0 = Minimum

 Body Contact
 2
 1 = Low

 Reactivity
 0
 2 = Moderate

 Chronic
 3 = High

 4 = Extreme

Poisons Schedule	Not Applicable
Classification [1]	Skin Corrosion/Irritation Category 2, Sensitisation (Skin) Category 1, Serious Eye Damage/Eye Irritation Category 2A
Legend:	1. Classified by Chemwatch; 2. Classification drawn from HCIS; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI

Label elements Hazard pictogram(s)



Signal word: Warning

Hazard statement(s)

H315: Causes skin irritation.

H317: May cause an allergic skin reaction.H319: Causes serious eye irritation.

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Precautionary statement(s) Prevention

P280: Wear protective gloves, protective clothing, eye protection and face protection.

P261: Avoid breathing mist/vapours/spray.

P264: Wash all exposed external body areas thoroughly after handling.

P272: Contaminated work clothing should not be allowed out of the workplace.

Precautionary statement(s) Response

P302+P352: IF ON SKIN: Wash with plenty of water.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P333+P313: If skin irritation or rash occurs: Get medical advice/attention.

P337+P313: If eve irritation persists: Get medical advice/attention.

P362+P364: Take off contaminated clothing and wash it before reuse.

Precautionary statement(s) Storage

Not Applicable

Precautionary statement(s) Disposal

P501: Dispose of contents/container to authorised hazardous or special waste collection point in accordance with any local regulation.

SECTION 3 Composition / information on ingredients

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
765-70-8	<1	3-methyl-1,2-cyclopentanedione
121-33-5	1-10	vanillin
84625-40-1	1-10	fenugreek oil
14667-55-1	<1	2.3.5-trimethylpyrazine
431-03-8	<1	diacetyl
57-55-6	60-90	propylene glycol
64-19-7	<1	acetic acid glacial

Legend:

1. Classified by Chemwatch; 2. Classification drawn from HCIS; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI; 4. Classification drawn from C&L;

* EU IOELVs available

SECTION 4 First aid measures

Description of first aid measures

Eye Contact

If this product comes in contact with the eyes:

- Wash out immediately with fresh running water.
- Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.
- Seek medical attention without delay; if pain persists or recurs seek medical attention.
- Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

Skin Contact

If skin contact occurs:

- Immediately remove all contaminated clothing, including footwear.
- Flush skin and hair with running water (and soap if available).
- Seek medical attention in event of irritation.

Inhalation

- If fumes, aerosols or combustion products are inhaled remove from contaminated area.
- Other measures are usually unnecessary.

Ingestion

- Immediately give a glass of water.
- First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

Indication of any immediate medical attention and special treatment needed

- Polyethylene glycols are generally poorly absorbed orally and are mostly unchanged by the kidney.
- Dermal absorption can occur across damaged skin (e.g. through burns) leading to increased osmolality, anion gap metabolic acidosis, elevated calcium, low ionised calcium, CNS depression and renal failure.
- Treatment consists of supportive care.

[Ellenhorn and Barceloux: Medical Toxicology]

Propylene glycol is primarily a CNS depressant in large doses and may cause hypoglycaemia, lactic acidosis and seizures.

- The usual measures are supportive care and decontamination (Ipecac/ lavage/ activated charcoal/ cathartics), within 2 hours of exposure should suffice.
- Check the anion gap, arterial pH, renal function and glucose levels.

Ellenhorn and Barceloux: Medical Toxicology

SECTION 5 Firefighting measures

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Extinguishing media

- Alcohol stable foam.

Special hazards arising from the substrate or mixture

Fire Incompatibility

- Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result

Advice for firefighters

Fire Fighting

- Alert Fire Brigade and tell them location and nature of hazard.

Fire/Explosion Hazard

- Combustible.

Combustion products include:

carbon dioxide (CO2)

other pyrolysis products typical of burning organic material

May emit poisonous fumes.

May emit corrosive fumes.

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SECTION 6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

See section 8

Environmental precautions

See section 12

Methods and material for containment and cleaning up

Minor Spills

- Remove all ignition sources.

Major Spills

Moderate hazard.

Personal Protective Equipment advice is contained in Section 8 of the SDS.

SECTION 7 Handling and storage

Precautions for safe handling

Safe handling

- Avoid all personal contact, including inhalation.
- DO NOT allow clothing wet with material to stay in contact with skin

Other information

Store tightly closed under refrigerated conditions in an approved storagearea. Avoid exposure to light.

Shelf Life: 12 Months According to the specified storage conditions.

- Material is hygroscopic, i.e. absorbs moisture from the air.
- Store in original containers.

Conditions for safe storage, including any incompatibilities

Suitable container

- Metal can or drum
- Packaging as recommended by manufacturer.

Storage incompatibility

- Glycols and their ethers undergo violent decomposition in contact with 70% perchloric acid.

Terpenoids and terpenes, are generally unsaturated, are thermolabile, are often volatile and may be easily oxidised or hydrolysed depending on their respective structure. Acetic acid:

- vapours forms explosive mixtures with air (above 39 C.)
- reacts violently with bases such as carbonates and hydroxides (giving off large quantities of heat), oxidisers, organic amines, acetaldehyde, potassium tert-butoxide
- reacts (sometimes violently), with strong acids, aliphatic amines, alkanolamines, alkylene oxides, epichlorohydrin, acetic anhydride, 2-aminoethanol, ammonia, ammonium nitrate, bromine pentafluoride, chlorosulfonic acid, chromic acid, chromic mitrate, ethylenediamine, ethylenediamine, hydrogen peroxide, isocyanates, oleum, perchloric acid, permanganates, phosphorus isocyanate, phosphorus trichloride, sodium peroxide, xylene
- attacks cast iron, stainless steel and other metals, forming flammable hydrogen gas
- attacks many forms of rubber, plastics and coatings

Alcohols

are incompatible with strong acids, acid chlorides, acid anhydrides, oxidising and reducing agents.

SECTION 8 Exposure controls / personal protection

Control parameters

Occupational Exposure Limits (OEL)

INGREDIENT DATA

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
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TWA STEL Peak Source Ingredient Material name Notes Australia Exposure Propane-1,2-diol total: (vapour & 150 ppm / 474 Not propylene glycol Not Available Standards particulates) mg/m3 Available Available Australia Exposure Not Not propylene glycol Propane-1,2-diol: particulates only 10 mg/m3 Not Available Available Standards Available Australia Exposure acetic acid 37 mg/m3 / 15 Not Not Acetic acid 10 ppm / 25 mg/m3 Available Available Standards glacial ppm

Occupational Exposure Banding

Ingredient	Occupational Exposure Band Rating	Occupational Exposure Band Limit			
3-methyl- 1,2-cyclopentanedione	E	≤ 0.01 mg/m³			
vanillin	E	≤ 0.01 mg/m³			
fenugreek oil	D	> 0.1 to ≤ 1 ppm			
2,3,5-trimethylpyrazine	E	≤ 0.1 ppm			
diacetyl	E	≤ 0.1 ppm			
Notes:	Occupational exposure banding is a process of assigning chemicals into specific categories or bands based on a chemical's potency and the adverse health outcomes associated with exposure. The output of this process is an occupational exposure band (OEB), which corresponds to a range of exposure concentrations that are expected to protect worker health.				

Exposure controls

Appropriate engineering controls

Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard.

Individual protection measures, such as personal protective equipment









Eye and face protection

- Safety glasses with side shields.

Skin protection

See Hand protection below

Hands/feet protection

- Wear chemical protective gloves, e.g. PVC.

NOTE:

- The material may produce skin sensitisation in predisposed individuals.

The selection of suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer.

Body protection

See Other protection below

Other protection

- Overalls.

SECTION 9 Physical and chemical properties

Information on basic physical and chemical properties

Appearance

Opaque, dark brown liquid.

Physical state	Liquid	Relative density (Water = 1)	1.08
Odour	Characteristic	Partition coefficient n-octanol / water	Not Available
Odour threshold	Characteristic of coffee.	Auto-ignition temperature (°C)	Not Available
pH (as supplied)	Not Available	Decomposition temperature (°C)	Not Available
Melting point / freezing point (°C)	Not Available	Viscosity (cSt)	Not Available
Initial boiling point and boiling range (°C)	Not Available	Molecular weight (g/mol)	Not Available
Flash point (°C)	102	Taste	Not Available
Evaporation rate	Not Available BuAC = 1	Explosive properties	Not Available
Flammability	Not Applicable	Oxidising properties	Not Available
Refractive index	1.449	Surface Tension (dyn/cm or mN/m)	Not Available
Lower Explosive Limit (%)	Not Available	Volatile Component (%vol)	Not Available

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 Vapour pressure (kPa)
 Not Available
 Gas group
 Not Available

 Solubility in water
 Not Available
 pH as a solution (1%)
 Not Available

 Vapour density (Air = 1)
 Not Available
 VOC g/L
 Not Available

SECTION 10 Stability and reactivity

Reactivity:

See section 7

Chemical stability:

- Unstable in the presence of incompatible materials.

Possibility of hazardous reactions :

See section 7

Conditions to avoid:

See section 7

Incompatible materials :

See section

Hazardous decomposition products:

See section 5

SECTION 11 Toxicological information

Information on toxicological effects

Inhaled

The material is not thought to produce adverse health effects or irritation of the respiratory tract (as classified by EC Directives using animal models).

Inhalation of vapours may cause drowsiness and dizziness

Aliphatic alcohols with more than 3-carbons cause headache, dizziness, drowsiness, muscle weakness and delirium, central depression, coma, seizures and behavioural changes. Inhalation hazard is increased at higher temperatures.

Inhalation of vapours or aerosols (mists, fumes), generated by the material during the course of normal handling, may be damaging to the health of the individual.

Ingestion

Ingestion of propylene glycol produced reversible central nervous system depression in humans following ingestion of 60 ml.

If swallowed, the toxic effects of glycols (dihydric alcohols) are similar to those of alcohol, with depression of the central nervous system, nausea, vomiting, and degenerative changes in the liver and kidney.

Overexposure to non-ring alcohols causes nervous system symptoms.

The material has NOT been classified by EC Directives or other classification systems as "harmful by ingestion".

Skin Contact

The material may accentuate any pre-existing dermatitis condition

Skin contact is not thought to have harmful health effects (as classified under EC Directives); the material may still produce health damage following entry through wounds, lesions or abrasions.

A single prolonged exposure is not likely to result in the material causing harm.

Most liquid alcohols appear to act as primary skin irritants in humans.

Open cuts, abraded or irritated skin should not be exposed to this material

Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects.

The material may cause moderate inflammation of the skin either following direct contact or after a delay of some time

Eye

Irritation of the eyes may produce a heavy secretion of tears (lachrymation).

Limited evidence or practical experience suggests, that the material may cause eye irritation in a substantial number of individuals

Chronic

Skin contact with the material is more likely to cause a sensitisation reaction in some persons compared to the general population.

Toxic: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed.

This material can cause serious damage if one is exposed to it for long periods.

A number of common flavor and fragrance chemicals can form peroxides surprisingly fast in air.

Peroxidisable terpenes and terpenoids should only be used when the level of peroxides is kept to the lowest practicable level, for instance by adding antioxidants at the time of production.

Propylene glycol is thought to be sensitizing following the regular use of topical creams by eczema patients.

001641 COFFEE FLAVOUR NATURAL	TOXICITY Not Available	IRRITATION Not Available		
3-methyl-1,2-cyclopentanedione	TOXICITY Oral (Guinea) L	.D50; 1400 mg/kg ^[2]	IRRITATI Not Avail	
	TOXICITY		IRRI	TATION
	dermal (rat) LD	50: >2000 mg/kg ^[1]	Not A	Available
vanillin	Inhalation(Rat) LC50: >0.042 mg/L4h		[1]	
	Oral (Guinea) I	_D50; 1400 mg/kg ^[2]		

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	TOXICITY	IRRIT	IRRITATION			
fenugreek oil	Oral (Rat) LD50: >5000 mg/kg ^[1]	Eye: r	Eye: no adverse effect observed (not irritating		[1]	
Terrugices on		Skin (abbit): 500 mg/24l	n moderate		
		Skin: a	dverse effect obs	erved (corrosive)[1]		
2,3,5-trimethylpyrazine	TOXICITY	IRRITAT	-			
	Oral (Rat) LD50: 806 mg/kg ^[2]	Not Avai	able			
	TOXICITY		RRITATION			
diacetyl	Dermal (rabbit) LD50: >5000 mg/k	(g ^[2]	g ^[2] Skin (rabbit): 500 mg/24h - mod			
	Oral (Mouse) LD50; 250 mg/kg ^[2]	[2]				
	TOXICITY	TOXICITY		IRRITATION		
	Dermal (rabbit) LD50: 11890 mg/k	Dermal (rabbit) LD50: 11890 mg/kg ^[2]		Eye (rabbit): 100 mg - mild		
	Inhalation(Rat) LC50: >44.9 mg/l4	.h[1] E	ye (rabbit): 500 m	g/24h - mild		
propylene glycol	Oral (Rat) LD50: 20000 mg/kg ^[2]	E	ye: no adverse eff	ect observed (not irrita	ting) ^{[1}	
		S	kin(human):104 m	g/3d Intermit Mod		
		Skin(human):500 mg/7days mild				
		Skin: no adverse effect observed (not irritati			ating)[
	TOXICITY		IRRITATION			
	Dermal (rabbit) LD50: 1060 mg/kg	_j [2]	Eye (rabbit): 0.05mg (open)-SEVERE			
acetic acid glacial	Inhalation(Mouse) LC50; 1.405 mg	g/L4h ^[2]	Skin (human):50mg/24hr - mild			
	Oral (Rat) I D50: 3310 mg/kg ^[2]	Oral (Rat) LD50: 3310 mg/kg ^[2]		Skin (rabbit):525mg (open)-SEVERE		
	Ciai (itai) Eboo. oo io iiiging		(9 ()		

Legend:

1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2. Value obtained from manufacturer's SDS. Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances

VANII I IN

Miosis, somnolence, muscle weakness, coma, respiratory stimulation, maternal effects involving ovaries, fallopian tubes, uterus, cervix and vagina recorded.

For certain benzyl derivatives:

The members of this group are rapidly absorbed through the gastrointestinal tract, metabolised primarily in the liver, and excreted primarily in the urine either unchanged or as conjugates of benzoic acid derivatives.

For vanillin:

Vanillin generally does not cause irritation or sensitisation of the skin but sometimes does cause inflammation.

A member or analogue of a group of hydroxy and alkoxy-substituted benzyl derivatives generally regarded as safe (GRAS) based in part on their self-limiting properties as flavouring substances in food; their rapid absorption.

2.3.5-TRIMETHYLPYRAZINE

A member or an analogue of a group of pyrazine derivatives generally regarded as safe.

DIACETYL

Artificial butter flavouring normally contains diacetyl and acetoin.

ACETIC ACID GLACIAL

For acid mists, aerosols, vapours

Test results suggest that eukaryotic cells are susceptible to genetic damage when the pH falls to about 6.5.

The material may produce severe irritation to the eye causing pronounced inflammation.

The material may cause severe skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin.

Prolonged or repeated exposure to acetic acid may produce irritation and/ or corrosion at the site of contact as well as systemic toxicity.

001641 COFFEE FLAVOUR NATURAL & 3-METHYL-1,2-CYCLOPENTANEDIONE & VANILLIN & FENUGREEK OIL & DIACETYL

The following information refers to contact allergens as a group and may not be specific to this product.

001641 COFFEE FLAVOUR NATURAL & VANILLIN

Adverse reactions to fragrances in perfumes and fragranced cosmetic products include allergic contact dermatitis, irritant contact dermatitis, sensitivity to light, immediate contact reactions, and pigmented contact dermatitis.

Fragrance allergens act as haptens, low molecular weight chemicals that cause an immune response only when attached to a carrier protein.

001641 COFFEE FLAVOUR NATURAL & PROPYLENE GLYCOL

The acute oral toxicity of propylene glycol is very low; large amounts are needed to cause perceptible health damage in humans.

3-METHYL-1.2-CYCLOPENTANEDIONE & 2.3.5-TRIMETHYL PYRAZINE & DIACETYL & ACETIC ACID GLACIAL

Asthma-like symptoms may continue for months or even years after exposure to the material ends

3-METHYL-1,2-CYCLOPENTANEDIONE & FENUGREEK OIL

No significant acute toxicological data identified in literature search.

3-METHYL-1,2-CYCLOPENTANEDIONE & DIACETYL

A member or analogue of EFSA Chemical Group 10 secondary aliphatic saturated or unsaturated alcohols, ketones, ketals and esters with a secondary or tertiary oxygenated functional group used as flavourings

No safety concern would arise for the consumer from the use of these compounds up to the highest proposed level in feeds.

Hazards for skin and eye contact and respiratory exposure are recognised for the majority of the compounds under application.

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FENUGREEK OIL & DIACETYL & PROPYLENE GLYCOL

The material may cause skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin.

Acute Toxicity	×	Carcinogenicity	×
Skin Irritation/Corrosion	~	Reproductivity	×
Serious Eye Damage/Irritation	~	STOT - Single Exposure	×
Respiratory or Skin sensitisation	~	STOT - Repeated Exposure	×
Mutagenicity	×	Aspiration Hazard	×

Legend:

X - Data either not available or does not fill the criteria for classification

Data available to make classification

SECTION 12 Ecological information

Toxicity

004644 COFFEE EL AVOLID MATURAL	Endpoint	Test Duration (hr)	Species Value			Source		
001641 COFFEE FLAVOUR NATURAL	Not Available	Not Available	Not Availa	ble Not Ava	ilable	Not Availab	ole	
	Endpoint	Test Duration (hr)	Species	Value	Source			
3-methyl-1,2-cyclopentanedione	EC50	48h	Crustacea	43.74mg/l	2			
	EC50(ECx)	48h	Crustacea	43.74mg/l	2			
	Endpoint	Test Duration (hr)	Species		Val	ue	Source	
	EC50	72h	Algae or oth	ner aquatic plan	ts 120)mg/l	2	
vanillin	EC50	48h	Crustacea		>10	0<100mg/l	2	
	LC50	96h	Fish		53-	61.3mg/l	4	
	NOEC(ECx)	72h	Algae or otl	ner aquatic plan	ts >2r	ng/l	1	
	Endpoint	Test Duration (hr)	Species	Value		Source		
fenugreek oil	Not Available	Not Available	Not Available Not Availab			Not Availab	le	
	Endpoint	Test Duration (hr)	Species	Value		Source		
2,3,5-trimethylpyrazine	Not Available	Not Available	Not Available Not Available		ilable	Not Availab	ole	
	Endpoint	Test Duration (hr)	Species	Value		Source		
diacetyl	Not Available	Not Available	Not Availa	ble Not Ava	ilable	e Not Available		
	Endpoint	Test Duration (hr)	Species		Val	ue	Source	
	EC50	72h		ner aquatic plan		300mg/I	2	
	EC50	48h	Crustacea			4.4mg/L	4	
propylene glycol	EC50	96h	Algae or oth	ner aquatic plan			2	
	LC50	96h	Fish)mg/l	4	
	NOEC(ECx)	336h	Algae or otl	ner aquatic plan		300mg/l	1	
	Endpoint	Test Duration (hr)	Species		Valu	ie	Source	
	EC50	72h	•	er aquatic plant		:3mg/l	2	
	EC50	48h	Crustacea			mg/l	2	
acetic acid glacial	EC50	96h		er aquatic plant		mg/l	4	
	LC50	96h	Fish	1 1		s-67.6mg/l	2	
	EC50(ECx)	24h	Algae or oth				2	

Legend: Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 4. US EPA, Ecotox database - Aquatic Toxicity Data 5. ECETOC Aquatic Hazard Assessment Data 6. NITE (Japan) - Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data

Propylene glycol is known to exert high levels of biochemical oxygen demand (BOD) during degradation in surface waters. For vanillin:

log Kow 1.26

Environmental Fate: Vanillin is susceptible to photodegradation in air, is rather stable to hydrolysis in water, but is readily biodegradable under aerobic conditions.

For Terpenes such as Limonene and Isoprene:

Atmospheric Fate: Contribute to aerosol and photochemical smog formation.

For Acetic Acid: Acetic acid and its salts (the acetates) can be grouped together because of their close structural relationships, their natural occurrence in plants and animals, and their fundamental role in cell metabolism.

DO NOT discharge into sewer or waterways.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
3-methyl-1,2-cyclopentanedione	LOW	LOW
vanillin	LOW	LOW

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Ingredient	Persistence: Water/Soil	Persistence: Air	
2,3,5-trimethylpyrazine	HIGH	HIGH	
diacetyl	HIGH	HIGH	
propylene glycol	LOW	LOW	
acetic acid glacial	LOW	LOW	

Bioaccumulative potential

Ingredient	Bioaccumulation
3-methyl-1,2-cyclopentanedione	LOW (LogKOW = 1.288)
vanillin	LOW (LogKOW = 1.21)
2,3,5-trimethylpyrazine	LOW (LogKOW = 3.0469)
diacetyl	LOW (LogKOW = -1.34)
propylene glycol	LOW (BCF = 1)
acetic acid glacial	LOW (LogKOW = -0.17)

Mobility in soil

Ingredient	Mobility
3-methyl-1,2-cyclopentanedione	HIGH (KOC = 1)
vanillin	LOW (KOC = 38.45)
2,3,5-trimethylpyrazine	LOW (KOC = 717.6)
diacetyl	HIGH (KOC = 1)
propylene glycol	HIGH (KOC = 1)
acetic acid glacial	HIGH (KOC = 1)

SECTION 13 Disposal considerations

Waste treatment methods

Product / Packaging disposal

- Containers may still present a chemical hazard/ danger when empty.
- Legislation addressing waste disposal requirements may differ by country, state and/ or territory.
- DO NOT allow wash water from cleaning or process equipment to enter drains.
- Recycle wherever possible or consult manufacturer for recycling options.

SECTION 14 Transport information

Labels Required

Marine Pollutant

NO

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	Land transport (ADG): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS	Air transport (ICAO-IATA / DGR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS	Sea transport (IMDG-Code / GGVSee): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS
UN number: Not Applicable			
UN proper shipping name: Not Applicable			
Transport hazard class(es): Not Applicable			
Subsidiary risk: Not Applicable			
Packing group: Not Applicable			

Transport in bulk in accordance with MARPOL Annex V and the IMSBC Code

Product name	Group	
3-methyl-1,2-cyclopentanedione	Not Available	
vanillin	Not Available	
fenugreek oil	Not Available	
2,3,5-trimethylpyrazine	Not Available	
diacetyl	Not Available	
propylene glycol	Not Available	
acetic acid glacial	Not Available	

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Transport in bulk in accordance with the IGC Code

Ship Type
Not Available

SECTION 15 Regulatory information

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

3-methyl-1,2-cyclopentanedione is found on the following regulatory lists

- Australian Inventory of Industrial Chemicals (AIIC)

vanillin is found on the following regulatory lists

- Australian Inventory of Industrial Chemicals (AIIC)

fenugreek oil is found on the following regulatory lists

- Australian Inventory of Industrial Chemicals (AIIC)

2,3,5-trimethylpyrazine is found on the following regulatory lists

- Australian Inventory of Industrial Chemicals (AIIC)

diacetyl is found on the following regulatory lists

- Australian Inventory of Industrial Chemicals (AIIC)

propylene glycol is found on the following regulatory lists

- Australian Inventory of Industrial Chemicals (AIIC)

acetic acid glacial is found on the following regulatory lists

- Australia Hazardous Chemical Information System (HCIS) Hazardous Chemicals
- Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) -Schedule 2
- Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) -Schedule 4
- Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) Schedule 5
- Australian Inventory of Industrial Chemicals (AIIC)

National Inventory Status

National Inventory	Status
Australia - AIIC / Australia Non-Industrial Use	Yes
Canada - DSL	Yes
Canada - NDSL	No (3-methyl-1,2-cyclopentanedione; vanillin; fenugreek oil; 2,3,5-trimethylpyrazine; diacetyl; propylene glycol; acetic acid glacial)
China - IECSC	Yes
Europe - EINEC / ELINCS / NLP	Yes
Japan - ENCS	No (fenugreek oil; 2,3,5-trimethylpyrazine)
Korea - KECI	No (2,3,5-trimethylpyrazine)
New Zealand - NZIoC	Yes
Philippines - PICCS	Yes
USA - TSCA	Yes
Taiwan - TCSI	Yes
Mexico - INSQ	No (fenugreek oil)
Vietnam - NCI	Yes
Russia - FBEPH	No (fenugreek oil)
Legend:	Yes = All CAS declared ingredients are on the inventory No = One or more of the CAS listed ingredients are not on the inventory. These ingredients may be exempt or will require registration.

SECTION 16 Other information

Revision Date: 25/08/2023 **Initial Date:** 10/04/2017

Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment.

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