

15268 Jelly Belly 3D Crushed Pineapple Griffiths Equipment Limited

Chemwatch: **5426-02** Version No: **2.1.1.1** Safety Data Sheet according to HSNO Regulations Chemwatch Hazard Alert Code: 2

Issue Date: **16/09/2020** Print Date: **21/09/2020** S.GHS.NZL.EN

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

Product Identifier

Product name	15268 Jelly Belly 3D Crushed Pineapple
Synonyms	15268
Other means of identification	Not Available

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

Relevant identified uses Air Freshener. Use according to manufacturer's directions.

Details of the supplier of the safety data sheet

Registered company name	Griffiths Equipment Limited
Address	19 Bell Ave, Mount Wellington Auckland 1060 New Zealand
Telephone	+64 9 525 4575
Fax	Not Available
Website	www.griffithsequipment.co.nz
Email	sales@griffithsequipment.co.nz

Emergency telephone number

Association / Organisation	NZ NATIONAL POISONS CENTRE
Emergency telephone numbers	0800 POISON or 0800 764-766
Other emergency telephone numbers	International: +64 3 479-7227

SECTION 2 Hazards identification

Classification of the substance or mixture

Classification ^[1]	Skin Sensitizer Category 1, Chronic Aquatic Hazard Category 3	
Legend:	1. Classified by Chernwatch; 2. Classification drawn from CCID EPA NZ; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI	
Determined by Chemwatch using GHS/HSNO criteria	6.5B (contact), 9.1C	

Label elements

Warning

Hazard statement(s) H317 May cause an allergic skin reaction. H412 Harmful to aquatic life with long lasting effects.

Precautionary statement(s) Prevention

Signal word

P280	Wear protective gloves/protective clothing/eye protection/face protection.
P261	Avoid breathing dust/fumes.

P273	Avoid release to the environment.	
P272	Contaminated work clothing should not be allowed out of the workplace.	
Precautionary statement(s) Response		
	shouse	
P321	Specific treatment (see advice on this label).	

P302+P352	IF ON SKIN: Wash with plenty of water.
P333+P313	If skin irritation or rash occurs: 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
123-68-2	2.5-<5	allyl caproate
2705-87-5	1-<2.5	allyl cyclohexanepropionate
77-83-8	0.5-<1	ethyl methylphenylglycidate
142-19-8	0.25-<0.5	allyl heptanoate
8028-48-6	0.025-<0.25	orange, sweet, extract
628-63-7	0.025-<0.25	n-amyl acetate
Not Available	balance	Ingredients determined not to be hazardous

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. If spontaneous vomiting appears imminent or occurs, hold patient's head down, lower than their hips to help avoid possible aspiration of vomitus.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5 Firefighting measures

Extinguishing media

- Alcohol stable foam.
- Dry chemical powder.
- BCF (where regulations permit).
- Carbon dioxide.
- Water spray or fog Large fires only.

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	
	Alert Fire Brigade and tell them location and nature of hazard.
	Wear breathing apparatus plus protective gloves.
Fire Fighting	Prevent, by any means available, spillage from entering drains or water courses.

Prevent, by any means available, spinage from entening drains of water course.
 Use water delivered as a fine spray to control fire and cool adjacent area.

	 DO NOT approach containers suspected to be hot. Cool fire exposed containers with water spray from a protected location. If safe to do so, remove containers from path of fire. Equipment should be thoroughly decontaminated after use.
Fire/Explosion Hazard	 Combustible solid which burns but propagates flame with difficulty; it is estimated that most organic dusts are combustible (circa 70%) - according to the circumstances under which the combustion process occurs, such materials may cause fires and / or dust explosions. Organic powders when linely divided over a range of concentrations regardless of particulate size or shape and suspended in air or some other oxidizing medium may form explosive dust-air mixtures and result in a fire or dust explosion (including secondary explosions). Avoid generating dust, particularly clouds of dust in a confined or unventilated space as dusts may form an explosive mixture with air, and any source of ignition, i.e. flame or spark, will cause fire or explosion. Dust clouds generated by the fine grinding of the solid are a particular bazard; accumulations of fine dust (420 micron or less) may burn rapidly and firerely if ignited - particles exceeding this limit will generally not form flammable dust clouds; once initiated, however, larger particles up to 1400 microns diameter will contribute to the propagation of an explosive limit (LEL) and upper explosive limit (UEL) are applicable to dust clouds but only the LEL is of practical use; - this is because of the inherent difficulty of achieving homogeneous dust clouds at high temperatures (for dusts the LEL is often called the "Minimum Explosible Concentration", MEC). When processed with flammable liquids/vapors/mists ignitable (hybrid) mixtures may be formed with combustible dusts. Ignitable mixtures will increase the rate of explosion pressure rise and the Minimum Ignition Energy (the minimum amount of energy required to ignite dust clouds ME) will be lower than the pure dust in air mixture. The Lower Explosive Limit (LEL) of the vapour/dust mixture will be lower than the individual LELs for the vapors/mists or dusts. A dust explosion may release of large quantities of gaseous products; this in turn creates a subs

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. Clean up all spills immediately. Avoid contact with skin and eyes. Control personal contact with the substance, by using protective equipment. Use dry clean up procedures and avoid generating dust. Place in a suitable, labelled container for waste disposal.
Major Spills	 Moderate hazard. CAUTION: Advise personnel in area. Alert Emergency Services and tell them location and nature of hazard. Control personal contact by wearing protective clothing. Prevent, by any means available, spillage from entering drains or water courses. Recover product wherever possible. IF DRY: Use dry clean up procedures and avoid generating dust. Collect residues and place in sealed plastic bags or other containers for disposal. IF WET: Vacuum/shovel up and place in labelled containers for disposal. ALWAYS: Wash area down with large amounts of water and prevent runoff into drains. If contamination of drains or waterways occurs, advise Emergency Services.

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

SECTION 7 Handling and storage

Precautions for safe handling	
Safe handling	 Organic powders when finely divided over a range of concentrations regardless of particulate size or shape and suspended in air or some other oxidizing medium may form explosive dust-air mixtures and result in a fire or dust explosion (including secondary explosions) Minimise airborne dust and eliminate all ignition sources. Keep away from heat, hot surfaces, sparks, and flame. Establish good housekeeping practices. Remove dust accumulations on a regular basis by vacuuming or gentle sweeping to avoid creating dust clouds. Use continuous suction at points of dust generation to capture and minimise the accumulation of dusts. Particular attention should be given

	 to overhead and hidden horizontal surfaces to minimise the probability of a "secondary" explosion. According to NFPA Standard 654, dust layers 1/32 in (0.8 mm) thick can be sufficient to warrant immediate cleaning of the area. Do not use air hoses for cleaning. Minimise dry sweeping to avoid generation of dust clouds. Vacuum dust-accumulating surfaces and remove to a chemical disposal area. Vacuums with explosion-proof motors should be used. Control sources of static electricity. Dusts or their packages may accumulate static charges, and static discharge can be a source of ignition. Solids handling systems must be designed in accordance with applicable standards (e.g. NFPA including 654 and 77) and other national guidance. Do not empty directly into flammable solvents or in the presence of flammable vapors. The operator, the packaging container and all equipment must be grounded with electrical bonding and grounding systems. Plastic bags and plastics cannot be grounded, and antistatic bags do not completely protect against development of static charges. Empty containers may contain residual dust which has the potential to accumulate following settling. Such dusts may explode in the presence of an appropriate ignition source. Do NOT cut, drill, grind or weld such containers. In addition ensure such activity is not performed near full, partially empty or empty containers without appropriate workplace safety authorisation or permit. Limit all unnecessary personal contact. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. Avoid contar with incompatible materials. Work clothes should be laundered separately. Avida ywash hands with soap and water after handling. Work clothes should be laundered separately. Use good occupational work practice. Observe manufacturer's storage and handling recommendations contained wi
Other information	 Store in original containers. Keep containers securely sealed. Store in a cool, dry area protected from environmental extremes. Store away from incompatible materials and foodstuff containers. Protect containers against physical damage and check regularly for leaks. Observe manufacturer's storage and handling recommendations contained within this SDS. For major quantities: Consider storage in bunded areas - ensure storage areas are isolated from sources of community water (including stormwater, ground water, lakes and streams). Ensure that accidental discharge to air or water is the subject of a contingency disaster management plan; this may require consultation with local authorities.

Conditions for safe storage, including any incompatibilities

Suitable container	 Polyethylene or polypropylene container. Packing as recommended by manufacturer. Check all containers are clearly labelled and free from leaks.
Storage incompatibility	 Avoid reaction with oxidising agents, bases and strong reducing agents. Avoid strong acids, acid chlorides, acid anhydrides and chloroformates.

SECTION 8 Exposure controls / personal protection

Control parameters

Occupational Exposure Limits (OEL)

Notes:

INGREDIENT DATA								
Source	Ingredient	Material name	TWA		STEL	Peak		Notes
New Zealand Workplace Exposure Standards (WES)	n-amyl acetate	n-Amyl acetate	100 ppm / 532 mg/m3		Not Available	Not A	vailable	Not Available
Emergency Limits								
Ingredient	Material name		TEEL-1		TEEL-2		TEEL-3	
n-amyl acetate	Amyl acetate		100 ppm		670 ppm		4000* ppm	
Ingredient	Original IDLH			Revised IDLH				
allyl caproate	Not Available			Not A	Not Available			
allyl cyclohexanepropionate	Not Available			Not A	Not Available			
ethyl methylphenylglycidate	Not Available			Not A	Not Available			
allyl heptanoate	Not Available			Not A	Not Available			
orange, sweet, extract	Not Available			Not Available				
n-amyl acetate	1,000 ppm	1,000 ppm		Not Available				
Occupational Exposure Banding	I							
Ingredient	Occupational Exposure Band Rating		Oce	cupational Exposure	Band Li	mit		
allyl caproate	E			≤ 0.1 ppm				
allyl cyclohexanepropionate	E			≤ 0.	.1 ppm			

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.

Ingredient	Occupational Exposure Band Rating	Occupational Exposure Band Limit	
ethyl methylphenylglycidate	E	≤ 0.1 ppm	
allyl heptanoate	E	≤ 0.1 ppm	
orange, sweet, extract	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	General exhaust is adequate under normal operating conditions.
Personal protection	
Eye and face protection	 No special equipment for minor exposure i.e. when handling small quantities. OTHERWISE: Safety glasses with side shields. Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59], [AS/NZS 1336 or national equivalent]
Skin protection	See Hand protection below
Hands/feet protection	No special equipment needed when handling small quantities. OTHERWISE: Wear general protective gloves, e.g. light weight rubber gloves.
Body protection	See Other protection below
Other protection	No special equipment needed when handling small quantities. OTHERWISE: • Overalls. • Barrier cream. • Eyewash unit.

Recommended material(s)

GLOVE SELECTION INDEX

Glove selection is based on a modified presentation of the:

"Forsberg Clothing Performance Index".

The effect(s) of the following substance(s) are taken into account in the *computer-generated* selection:

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Material	СРІ
PVA	A
BUTYL/NEOPRENE	С
NATURAL RUBBER	С
NEOPRENE	С
NITRILE	С
NITRILE+PVC	С
PVC	С

* CPI - Chemwatch Performance Index

A: Best Selection

B: Satisfactory; may degrade after 4 hours continuous immersion

C: Poor to Dangerous Choice for other than short term immersion

NOTE: As a series of factors will influence the actual performance of the glove, a final selection must be based on detailed observation. * Where the glove is to be used on a short term, casual or infrequent basis, factors such

⁵ where the glove is to be used on a short term, casual or intrequent basis, factors such as "feel" or convenience (e.g. disposability), may dictate a choice of gloves which might otherwise be unsuitable following long-term or frequent use. A qualified practitioner should be consulted.

Respiratory protection

Type A-P Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

Required Minimum Protection Factor	Half-Face Respirator	Full-Face Respirator	Powered Air Respirator
up to 10 x ES	A P1 Air-line*	-	A PAPR-P1 -
up to 50 x ES	Air-line**	A P2	A PAPR-P2
up to 100 x ES	-	A P3	-
		Air-line*	-
100+ x ES	-	Air-line**	A PAPR-P3

* - Negative pressure demand ** - Continuous flow

A(All classes) = Organic vapours, B AUS or B1 = Acid gasses, B2 = Acid gas or hydrogen cyanide(HCN), B3 = Acid gas or hydrogen cyanide(HCN), E = Sulfur dioxide(SO2), G = Agricultural chemicals, K = Ammonia(NH3), Hg = Mercury, NO = Oxides of nitrogen, MB = Methyl bromide, AX = Low boiling point organic compounds(below 65 degC)

- Respirators may be necessary when engineering and administrative controls do not adequately prevent exposures.
- The decision to use respiratory protection should be based on professional judgment that takes into account toxicity information, exposure measurement data, and frequency and likelihood of the worker's exposure - ensure users are not subject to high thermal loads which may result in heat stress or distress due to personal
- protective equipment (powered, positive flow, full face apparatus may be an option).
 Published occupational exposure limits, where they exist, will assist in determining the adequacy of the selected respiratory protection. These may be government mandated or vendor recommended.
- Certified respirators will be useful for protecting workers from inhalation of particulates when properly selected and fit tested as part of a complete respiratory protection program.
- Use approved positive flow mask if significant quantities of dust becomes airborne.
- Try to avoid creating dust conditions.

SECTION 9 Physical and chemical properties

Appearance	Yellow solid with a fruity odour.		
Physical state	Solid	Relative density (Water = 1)	Not Available
Odour	Not Available	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Available
pH (as supplied)	Not Applicable	Decomposition temperature	Not Available
Melting point / freezing point (°C)	Not Available	Viscosity (cSt)	Not Available
Initial boiling point and boiling range (°C)	Not Applicable	Molecular weight (g/mol)	Not Applicable
Flash point (°C)	Not Available	Taste	Not Available
Evaporation rate	Not Available	Explosive properties	Not Available
Flammability	Not Available	Oxidising properties	Not Available
Upper Explosive Limit (%)	Not Available	Surface Tension (dyn/cm or mN/m)	Not Applicable
Lower Explosive Limit (%)	Not Available	Volatile Component (%vol)	Not Available
Vapour pressure (kPa)	Not Available	Gas group	Not Available
Solubility in water	Not Available	pH as a solution (1%)	Not Applicable
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. Product is considered stable. Hazardous polymerisation will not occur.
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

SECTION 11 Toxicological information

Information on toxicological effects

Inhaled	The material is not thought to produce respiratory irritation (as classifie or fumes, especially for prolonged periods, may produce respiratory di	ed by EC Directives using animal models). Nevertheless inhalation of dusts iscomfort and occasionally, distress.		
Ingestion	The material has NOT been classified by EC Directives or other classification systems as "harmful by ingestion". This is because of the lack of corroborating animal or human evidence.			
Skin Contact	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. 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. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.			
Eye	There is some evidence to suggest that this material can cause eye in	ritation and damage in some persons.		
Chronic	Skin contact with the material is more likely to cause a sensitisation re	action in some persons compared to the general population.		
15268 Jelly Belly 3D Crushed	ΤΟΧΙΟΙΤΥ	IRRITATION		
Pineapple	Not Available	Not Available		
	тохісіту	IRRITATION		
allyl caproate	Dermal (rabbit) LD50: 300 mg/kg ^[2]	Skin (human): 20 mg/48h - mild		
	Oral (rat) LD50: 218 mg/kg ^[2]			
	ΤΟΧΙΟΙΤΥ	IRRITATION		
allyl cyclohexanepropionate	Oral (rat) LD50: 585 mg/kg ^[2]	Not Available		
	ΤΟΧΙΟΙΤΥ	IRRITATION		
ethyl methylphenylglycidate	Oral (rat) LD50: 5470 mg/kg ^[2]	Not Available		
	тохісіту	IRRITATION		
	444 mg/kg ^[2]	Eye: no adverse effect observed (not irritating) ^[1]		
allyl heptanoate	Dermal (rabbit) LD50: 810 mg/kg ^[2]	Skin (human): 20 mg/48h - mild		
	Oral (rat) LD50: 500 mg/kg ^[2]	Skin: no adverse effect observed (not irritating) ^[1]		

Continued...

	TOXICITY	IRRITATION
	Dermal (rabbit) LD50: >5000 mg/kg ^[2]	Eye: no adverse effect observed (not irritating) ^[1]
orange, sweet, extract	Oral (rabbit) LD50: >5000 mg/kg ^[2]	Skin (rabbit): 500mg/24h moderate
		Skin: no adverse effect observed (not irritating)[1]
	ΤΟΧΙΟΙΤΥ	IRRITATION
n-amyl acetate	200 mg/kg ^[2]	Eye (human): 300 ppm
	Oral (rat) LD50: 6500 mg/kg ^[2]	
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	
ALLYL CAPROATE	NOTE: Substance has been shown to be mutagenic in at least one assay, or belongs to a family of chemicals producing damage or change to cellular DNA.	
	A member or analogue of a group of aliphatic and alicyc safe.	lic terpenoid tertiary alcohols and structurally related substances generally regarded a
ALLYL	Most alicyclic substances used as flavour ingredients an	e mono- and bicyclic terpenes which occur naturally in a wide variety of foods.
CYCLOHEXANEPROPIONATE	With the exception of pulegone, alicyclic substances show very low oral acute toxicity. In most subchronic studies performed on animals, no adverse effects were observed at any dose level.	

Somnolence, haemorrhage recorded.
Asthma-like symptoms may continue for months or even years after exposure to the material ends. This may be due to a non-allergic condition known as reactive airways dysfunction syndrome (RADS) which can occur after exposure to high levels of highly irritating compound. Main criteria for diagnosing RADS include the absence of previous airways disease in a non-atopic individual, with sudden onset of persistent asthma-like symptoms within minutes to hours of a documented exposure to the irritant. Other criteria for diagnosis of RADS include a reversible airflow pattern on lung function tests, moderate to severe bronchial hyperreactivity on methacholine challenge testing, and the lack of minimal lymphocytic inflammation, without eosinophilia. RADS (or asthma) following an irritating inhalation is an infrequent disorder with rates related to the concentration of and duration of exposure to the irritating substance. On the other hand, industrial bronchitis is a disorder that occurs as a result of exposure due to high concentrations of irritating substance (often particles) and is completely reversible after exposure ceases. The disorder is characterized by difficulty breathing, cough and mucus production.

 Somnolence, gastrointestinal changes, changes in serum composition, enzyme inhibition recorded. Ethyl methylphenylglycidate (EMPG) irritated the skin of some individuals. Skin sensitisation was not induced in volunteers given repeated applications of a dilute solution. EMPG was of low acute oral toxicity in rodents. Long-term feeding studies generated no clear evidence of carcinogenicity, although treated male rats had increased incidences of cellular changes in the liver, pancreas, adrenal glands and lymph nodes. In shorter feeding studies in rats, various organ weight changes, slight paralysis of the hind limbs, together with associate nerve degeneration, and marked wasting of the testes were seen. Chromosome damage occurred in mammalian cells in culture but not in the bone marrow cells of mice given a single intraperitoneal injection. There was no evidence of mutagenicity in bacterial assays (including Ames tests) although a weak mutagenic effect was seen in the fruit fly.

 ALLYL HEPTANOATE
 Oral (mouse): 630 mg/kg Skin (rabbit): 500 mg/24h - mod Somnolence, liver changes recorded.

The essential oils, oleoresins (solvent-free), and natural extractives (including distillates) derived from citrus fruits are generally recognized as safe (GRAS) for their intended use in foods for human consumption.

Botanicals such as citrus are comprised of hundreds of ingredients, some of which have the potential to cause toxic effects; for example, bergapten (5-methoxypsoralen; 5-MOP) is a naturally occurring furocoumarin (psoralen) in bergamot oil that causes light-mediated toxicity.

Acute toxicity: Animal testing shows that the acute toxicity of these substances is generally low via skin contact.

Skin irritation: In animal testing, undiluted citrus essential oils caused varying degrees of irritation. In humans, no irritation was observed after applying a variety of these oils to skin.

Eye irritation: There appeared to be no significant eye irritation in testing with these substances. Sensitisation: Testing in humans have shown that these substances generally do not cause sensitisation. However, among professional food

 ORANGE, SWEET, EXTRACT
 handlers, some proportion (under 10%) had positive reactions to orange and lemon peel.

 Light-mediated toxicity and sensitization: Testing for this group of substances has yielded mixed results. Light-mediated toxicity and sensitization have been seen in several people exposed to bergamot oil or limes/lime juice.

Cancer-causing potential: Animal testing showed that essential oils of citrus fruits promoted tumours. However, most were benign. No significant acute toxicological data identified in literature search.

d-Limonene is readily absorbed by inhalation and swallowing. Absorption through the skin is reported to the lower than by inhalation. It is rapidly distributed to different tissues in the body, readily metabolized and eliminated, primary through the urine.

Limonene shows low acute toxicity by all three routes in animals. Limonene is a skin irritant in both experimental animals and humans. Limited data is available on the potential to cause eye and airway irritation. Autooxidised products of d-limonene have the potential to sensitise the skin. Limited data is available on the potential to cause respiratory sensitization in humans. Limonene will automatically oxidize in the presence of light in air, forming a variety of oxygenated monocyclic terpenes. When contact with these oxidation products occurs, the risk of skin sensitization is high.

Limonene does not cause genetic toxicity of birth defects, and it is not toxic to the reproductive system.

ALLYL CAPROATE & ALLYL HEPTANOATE & N-AMYL ACETATE

ETHYL METHYLPHENYLGLYCIDATE & ORANGE, SWEET, EXTRACT

The following information refers to contact allergens as a group and may not be specific to this product. Contact allergies quickly manifest themselves as contact eczema, more rarely as urticaria or Quincke's oedema. The pathogenesis of contact eczema involves a cell-mediated (T lymphocytes) immune reaction of the delayed type. Other allergic skin reactions, e.g. contact urticaria, involve antibody-mediated immune reactions. The significance of the contact allergen is not simply determined by its sensitisation potential: the distribution of the substance and the opportunities for contact with it are equally important. A weakly sensitising substance which is widely distributed can be a more important allergen than one with stronger sensitising potential with which few individuals come into contact. From a clinical point of view, substances are noteworthy if they produce an allergic test reaction in more than 1% of the persons tested.

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

Tovicity

Legena:

15268 Jelly Belly 3D Crushed Pineapple

🗙 – Data either not available or does not till the criteria for classification

✔ – Data available to make classification

SECTION 12 Ecological information

	Endpoint	Test Duration (hr)	Species	Value	Source
5268 Jelly Belly 3D Crushed Pineapple	Not Available	Not Available	Not Available	Not Available	Not Availabl
	Endpoint	Test Duration (hr)	Species	Value	Sourc
	LC50	96	Fish	0.117mg/L	2
	EC50	48	Crustacea	2mg/L	2
allyl caproate	EC50	72	Algae or other aquatic plants	0.778mg/L	2
	EC10	72	Algae or other aquatic plants	0.255mg/L	2
	NOEC	72	Algae or other aquatic plants	0.158mg/L	2
	Endpoint	Test Duration (hr)	Species	Value	Sourc
	LC50	96	Fish	0.13mg/L	2
allyl cyclohexanepropionate	EC50	48	Crustacea	3.8mg/L	2
	EC50	72	Algae or other aquatic plants	2.1mg/L	2
	NOEC	96	Algae or other aquatic plants	<0.28mg/L	2
	Endpoint	Test Duration (hr)	Species	Value	Sourc
	LC50	96	Fish	4.2mg/L	2
	EC50	48	Crustacea	52mg/L	2
ethyl methylphenylglycidate	EC50	72	Algae or other aquatic plants	36mg/L	2
	EC10	48	Crustacea	39mg/L	2
	NOEC	96	Fish	3.2mg/L	2
	Endpoint	Test Duration (hr)	Species	Value	Sourc
	LC50	96	Fish	0.117mg/L	2
allyl heptanoate	EC50	48	Crustacea	0.89mg/L	2
	EC50	72	Algae or other aquatic plants	0.778mg/L	2
	NOEC	72	Algae or other aquatic plants	0.158mg/L	2
	Endpoint	Test Duration (hr)	Species	Value	Sourc
	LC50	96	Fish	0.32mg/L	2
orange, sweet, extract	EC50	48	Crustacea	0.45mg/L	2
	EC50	72	Algae or other aquatic plants	0.36mg/L	2
	NOEL	48	Crustacea	0.48mg/L	2
	Endpoint	Test Duration (hr)	Species	Value	Source
n-amyl acetate	Not Available	Not Available	Not Available	Not Available	Not Availab

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Do NOT allow product to come in contact with surface waters or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash-waters.

Data 6. NITE (Japan) - Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data

Wastes resulting from use of the product must be disposed of on site or at approved waste sites.

DO NOT discharge into sewer or waterways.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
allyl caproate	LOW	LOW
allyl cyclohexanepropionate	LOW	LOW
ethyl methylphenylglycidate	HIGH	HIGH
allyl heptanoate	LOW	LOW
orange, sweet, extract	HIGH	HIGH
n-amyl acetate	LOW	LOW

Bioaccumulative potential

Ingredient

Ingredient	Bioaccumulation
allyl caproate	LOW (LogKOW = 3.1833)
allyl cyclohexanepropionate	MEDIUM (LogKOW = 4.4707)
ethyl methylphenylglycidate	LOW (LogKOW = 3.0006)
allyl heptanoate	LOW (LogKOW = 3.6744)
orange, sweet, extract	HIGH (LogKOW = 5.6842)
n-amyl acetate	LOW (LogKOW = 2.3)

Mobility in soil

Ingredient	Mobility
allyl caproate	LOW (KOC = 137.1)
allyl cyclohexanepropionate	LOW (KOC = 878.9)
ethyl methylphenylglycidate	LOW (KOC = 73.94)
allyl heptanoate	LOW (KOC = 252.8)
orange, sweet, extract	LOW (KOC = 2899)
n-amyl acetate	LOW (KOC = 38.47)

SECTION 13 Disposal considerations

Waste treatment methods Product / Packaging disposal Recycle wherever possible. Consult manufacturer for recycling options or consult local or regional waste management authority for disposal if no suitable treatment or disposal facility can be identified. Dispose of by: burial in a land-fill specifically licensed to accept chemical and / or pharmaceutical wastes or Incineration in a licensed apparatus (after admixture with suitable combustible material) Decontaminate empty containers. Observe all label safeguards until containers are cleaned and destroyed.

Ensure that the hazardous substance is disposed in accordance with the Hazardous Substances (Disposal) Notice 2017

Disposal Requirements

Packages that have been in direct contact with the hazardous substance must be only disposed if the hazardous substance was appropriately removed and cleaned out from the package. The package must be disposed according to the manufacturer's directions taking into account the material it is made of. Packages which hazardous content have been appropriately treated and removed may be recycled.

The hazardous substance must only be disposed if it has been treated by a method that changed the characteristics or composition of the substance and it is no longer hazardous. Only dispose to the environment if a tolerable exposure limit has been set for the substance.

Only deposit the hazardous substance into or onto a landfill or sewage facility or incinerator, where the hazardous substance can be handled and treated appropriately.

SECTION 14 Transport information

Labels Required

Marine Pollutant	NO
HAZCHEM	Not Applicable

Land transport (UN): 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

Transport in bulk according to Annex II of MARPOL and the IBC code

Not Applicable

SECTION 15 Regulatory information

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

This substance is to be managed using the conditions specified in an applicable Group Standard

HSR Number	Group Standard	
HSR002578	Food Additives and Fragrance Materials (Subsidiary Hazard) Group Standard 2017	
allyl caproate is found on the fol	lowing regulatory lists	
New Zealand Approved Hazardous Substances with controls		New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification
New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals		of Chemicals - Classification Data
		New Zealand Inventory of Chemicals (NZIoC)
allyl cyclohexanepropionate is found on the following regulatory lists		
New Zealand Inventory of Chemicals (NZIoC)		
ethyl methylphenylglycidate is for	ound on the following regulatory lists	
New Zealand Inventory of Chemicals (NZIoC)		

allyl heptanoate is found on the following regulatory lists

New Zealand Inventory of Chemicals (NZIoC)	
orange, sweet, extract is found on the following regulatory lists	
New Zealand Approved Hazardous Substances with controls	New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification
New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification	of Chemicals - Classification Data
of Chemicals	New Zealand Inventory of Chemicals (NZIoC)
n-amyl acetate is found on the following regulatory lists	
New Zealand Approved Hazardous Substances with controls	New Zealand Inventory of Chemicals (NZIoC)
New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification	New Zealand Workplace Exposure Standards (WES)
of Chemicals	
New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification	
of Chemicals - Classification Data	
Hazardous Substance Location	

Subject to the Health and Safety at Work (Hazardous Substances) Regulations 2017.

Hazard Class	Quantity (Closed Containers)	Quantity (Open Containers)
Not Applicable	Not Applicable	Not Applicable

Certified Handler

Subject to Part 4 of the Health and Safety at Work (Hazardous Substances) Regulations 2017.

Class of substance Quant	antities
Not Applicable Not Ap	Applicable

Refer Group Standards for further information

Tracking Requirements

Not Applicable

National Inventory Status

National Inventory	Status
Australia - AIIC	Yes
Australia Non-Industrial Use	No (allyl caproate; allyl cyclohexanepropionate; ethyl methylphenylglycidate; allyl heptanoate; orange, sweet, extract; n-amyl acetate)
Canada - DSL	Yes
Canada - NDSL	No (allyl caproate; allyl cyclohexanepropionate; ethyl methylphenylglycidate; allyl heptanoate; orange, sweet, extract; n-amyl acetate)
China - IECSC	Yes
Europe - EINEC / ELINCS / NLP	Yes
Japan - ENCS	No (orange, sweet, extract)
Korea - KECI	Yes
New Zealand - NZIoC	Yes
Philippines - PICCS	Yes
USA - TSCA	Yes
Taiwan - TCSI	Yes
Mexico - INSQ	No (allyl caproate; ethyl methylphenylglycidate)
Vietnam - NCI	Yes
Russia - ARIPS	Yes
Legend:	Yes = All CAS declared ingredients are on the inventory No = One or more of the CAS listed ingredients are not on the inventory and are not exempt from listing(see specific ingredients in brackets)

SECTION 16 Other information

Revision Date	16/09/2020
Initial Date	16/09/2020

SDS Version Summary

Version	Issue Date	Sections Updated
2.1.1.1	16/09/2020	Acute Health (eye), Classification, Ingredients

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. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

Definitions and abbreviations

PC-TWA: Permissible Concentration-Time Weighted Average PC-STEL: Permissible Concentration-Short Term Exposure Limit IARC: International Agency for Research on Cancer

ACGIH: American Conference of Governmental Industrial Hygienists STEL: Short Term Exposure Limit TEEL: Temporary Emergency Exposure Limit。 IDLH: Immediately Dangerous to Life or Health Concentrations OSF: Odour Safety Factor NOAEL :No Observed Adverse Effect Level LOAEL: Lowest Observed Adverse Effect Level TLV: Threshold Limit Value LOD: Limit Of Detection OTV: Odour Threshold Value BCF: BioConcentration Factors BEI: Biological Exposure Index

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