

Griffiths Equipment Limited Chemwatch: 5375-25

Version No: 3.1.1.1 Safety Data Sheet according to HSNO Regulations Chemwatch Hazard Alert Code: 2

Issue Date: **30/10/2019** Print Date: **31/10/2019** S.GHS.NZL.EN

## SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

#### Product Identifier

Product name	Little Joe MINI Blister Ocean Splash
Synonyms	LJMB007N
Other means of identification	Not Available
Relevant identified uses of the	substance or mixture and uses advised against

	, and the second s	
Relevant identified uses	Air Freshener. SDS are intended for use in the workplace. For domestic-use products, refer to consumer labels. 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 <sup>[1]</sup>	Acute Toxicity (Inhalation) Category 5, Acute Toxicity (Oral) Category 5, Skin Sensitizer Category 1, Acute Aquatic Hazard Category 2, Chronic Aquatic Hazard Category 4	
Legend:	1. Classified by Chemwatch; 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	6.1E (inhalation), 6.1E (oral), 6.5B (contact), 9.1D	
abel elements		
Hazard pictogram(s)		
SIGNAL WORD	WARNING	
Hazard statement(s)		
H333	May be harmful if inhaled.	
H303	May be harmful if swallowed.	
H317	May cause an allergic skin reaction.	

H401	Toxic to aquatic life.
H413	May cause long lasting harmful effects to aquatic life.
Precautionary statement(s) Pre	evention
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) Re	sponse
P321	Specific treatment (see advice on this label).
P302+P352	IF ON SKIN: Wash with plenty of water and soap

P321	Specific treatment (see advice on this label).
P302+P352	IF ON SKIN: Wash with plenty of water and soap.
P304+P312	IF INHALED: Call a POISON CENTER/doctor/physician/first aider/if you feel unwell.
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
18479-58-8	<4	dihydromyrcenol
115-95-7	<2.5	linalyl acetate
Not Available	>80	Ingredients determined not to be hazardous

## **SECTION 4 FIRST AID MEASURES**

#### Description of first aid measures

Eye Contact	<ul> <li>If this product comes in contact with the eyes:</li> <li>Wash out immediately with fresh running water.</li> <li>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.</li> <li>Seek medical attention without delay; if pain persists or recurs seek medical attention.</li> <li>Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.</li> </ul>
Skin Contact	<ul> <li>If skin contact occurs:</li> <li>Immediately remove all contaminated clothing, including footwear.</li> <li>Flush skin and hair with running water (and soap if available).</li> <li>Seek medical attention in event of irritation.</li> </ul>
Inhalation	<ul> <li>If fumes, aerosols or combustion products are inhaled remove from contaminated area.</li> <li>Other measures are usually unnecessary.</li> </ul>
Ingestion	<ul> <li>If swallowed do NOT induce vomiting.</li> <li>If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.</li> <li>Observe the patient carefully.</li> <li>Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious.</li> <li>Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink.</li> <li>Seek medical advice.</li> </ul>

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

## **SECTION 5 FIREFIGHTING MEASURES**

### Extinguishing media

- 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
 Avoid strong acids, acid chlorides, acid anhydrides and chloroformates.

	<ul> <li>Avoid strong bases.</li> </ul>
Advice for firefighters	
Fire Fighting	<ul> <li>Alert Fire Brigade and tell them location and nature of hazard.</li> <li>Wear breathing apparatus plus protective gloves.</li> <li>Prevent, by any means available, spillage from entering drains or water courses.</li> <li>Use water delivered as a fine spray to control fire and cool adjacent area.</li> <li>DO NOT approach containers suspected to be hot.</li> <li>Cool fire exposed containers with water spray from a protected location.</li> <li>If safe to do so, remove containers from path of fire.</li> <li>Equipment should be thoroughly decontaminated after use.</li> </ul>
Fire/Explosion Hazard	<ul> <li>Combustible.</li> <li>Slight fire hazard when exposed to heat or flame.</li> <li>Heating may cause expansion or decomposition leading to violent rupture of containers.</li> <li>On combustion, may emit toxic fumes of carbon monoxide (CO).</li> <li>May emit acrid smoke.</li> <li>Mists containing combustible materials may be explosive.</li> <li>Combustion products include:</li> <li>carbon dioxide (CO2)</li> <li>nitrogen oxides (NOx)</li> <li>other pyrolysis products typical of burning organic material.</li> </ul>

## 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	<ul> <li>Clean up all spills immediately.</li> <li>Avoid contact with skin and eyes.</li> <li>Wear impervious gloves and safety goggles.</li> <li>Trowel up/scrape up.</li> <li>Place spilled material in clean, dry, sealed container.</li> <li>Flush spill area with water.</li> </ul>
Major Spills	<ul> <li>Clear area of personnel and move upwind.</li> <li>Alert Fire Brigade and tell them location and nature of hazard.</li> <li>Control personal contact with the substance, by using protective equipment.</li> <li>Prevent spillage from entering drains, sewers or water courses.</li> <li>Recover product wherever possible.</li> <li>Put residues in labelled containers for disposal.</li> <li>If contamination of drains or waterways occurs, advise emergency services.</li> </ul>

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

## SECTION 7 HANDLING AND STORAGE

## Precautions for safe handling

Safe handling	<ul> <li>Limit all unnecessary personal contact.</li> <li>Wear protective clothing when risk of exposure occurs.</li> <li>Use in a well-ventilated area.</li> <li>Avoid contact with incompatible materials.</li> <li>When handling, DO NOT eat, drink or smoke.</li> <li>Keep containers securely sealed when not in use.</li> <li>Avoid physical damage to containers.</li> <li>Always wash hands with scap and water after handling.</li> <li>Work clothes should be laundered separately.</li> <li>Use good occupational work practice.</li> <li>Observe manufacturer's storage and handling recommendations contained within this SDS.</li> <li>Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions are maintained.</li> </ul>
Other information	<ul> <li>Store in original containers.</li> <li>Keep containers securely sealed.</li> <li>Store in a cool, dry, well-ventilated area.</li> <li>Store away from incompatible materials and foodstuff containers.</li> <li>Protect containers against physical damage and check regularly for leaks.</li> <li>Observe manufacturer's storage and handling recommendations contained within this SDS.</li> </ul>

Suitable container	<ul> <li>Metal can or drum</li> <li>Packaging as recommended by manufacturer.</li> <li>Check all containers are clearly labelled and free from leaks.</li> </ul>	
Storage incompatibility	Avoid contamination of water, foodstuffs, feed or seed. Avoid reaction with oxidising agents	

### SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

#### **Control parameters**

#### INGREDIENT DATA

#### Not Available

#### EMERGENCY LIMITS

Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3	
Little Joe MINI Blister Ocean Splash	Not Available	Not Available	Not Available	Not Available	
Ingredient	Original IDLH		Revised IDLH		
dihydromyrcenol	Not Available		Not Available		
linalyl acetate	Not Available		Not Available		

## OCCUPATIONAL EXPOSURE BANDING

Ingradiant	Occupational Exposure Band Rating	Occupational Exposure Band Limit		
Ingredient	Occupational Exposure Band Rating	Occupational Exposure Band Limit		
dihydromyrcenol	E	≤ 0.1 ppm		
linalyl acetate	E	≤ 0.1 ppm		
Notes:	adverse health outcomes associated with exposure.	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

None required when handling small quantities. OTHERWISE: Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection. The basic types of engineering controls are: Process controls which involve changing the way a job activity or process is done to reduce the risk. Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment. Ventilation can remove or dilute an air contaminant if designed properly. The design of a ventilation system must match the particular process and chemical or contaminant in use. Employers may need to use multiple types of controls to prevent employee overexposure. General exhaust is adequate under normal operating conditions. If risk of overexposure exists, wear SAA approved respirator. Correct fit is essential to obtain adequate protection. Provide adequate ventilation in warehouse or closed storage areas. Air contaminants generated in the workplace possess varying "escape" velocities which, in turn, determine the "capture velocities" of fresh circulating air required to effectively remove the contaminant. Air Speed: Type of Contaminant: 0.25-0.5 m/s solvent, vapours, degreasing etc., evaporating from tank (in still air) (50-100 f/min) aerosols, fumes from pouring operations, intermittent container filling, low speed conveyer transfers, welding, spray 0.5-1 m/s (100-200 drift, plating acid fumes, pickling (released at low velocity into zone of active generation) f/min.) Appropriate engineering direct spray, spray painting in shallow booths, drum filling, conveyer loading, crusher dusts, gas discharge (active 1-2.5 m/s (200-500 controls generation into zone of rapid air motion) f/min) grinding, abrasive blasting, tumbling, high speed wheel generated dusts (released at high initial velocity into zone of 2.5-10 m/s very high rapid air motion). (500-2000 f/min.) Within each range the appropriate value depends on: Lower end of the range Upper end of the range 1: Room air currents minimal or favourable to capture 1: Disturbing room air currents 2: Contaminants of low toxicity or of nuisance value only 2: Contaminants of high toxicity 3: Intermittent, low production 3: High production, heavy use 4: Large hood or large air mass in motion 4: Small hood - local control only Simple theory shows that air velocity falls rapidly with distance away from the opening of a simple extraction pipe. Velocity generally decreases with the square of distance from the extraction point (in simple cases). Therefore the air speed at the extraction point should be adjusted, accordingly, after reference to distance from the contaminating source. The air velocity at the extraction fan, for example, should be a minimum of 1-2 m/s (200-400 f/min.) for extraction of solvents generated in a tank 2 meters distant from the extraction point. Other mechanical considerations, producing performance deficits within the extraction apparatus, make it essential that theoretical air velocities are multiplied by factors of 10 or more when extraction systems are installed or used.

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	Wear general protective gloves, eg. light weight rubber gloves.
Body protection	See Other protection below
Other protection	No special equipment needed when handling small quantities. <b>OTHERWISE:</b> • Overalls. • Barrier cream. • Eyewash unit.

### **Respiratory protection**

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

Selection of the Class and Type of respirator will depend upon the level of breathing zone contaminant and the chemical nature of the contaminant. Protection Factors (defined as the ratio of contaminant outside and inside the mask) may also be important.

Required minimum protection factor	Maximum gas/vapour concentration present in air p.p.m. (by volume)	Half-face Respirator	Full-Face Respirator
up to 10	1000	A-AUS / Class1 P2	-
up to 50	1000	-	A-AUS / Class 1 P2
up to 50	5000	Airline *	-
up to 100	5000	-	A-2 P2
up to 100	10000	-	A-3 P2
100+			Airline**

\* - Continuous Flow \*\* - Continuous-flow or positive pressure demand

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)

### SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

Appearance Reflex Blue scented polymer pad with an ocean splash odour; does not mix with water.

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 Available	Molecular weight (g/mol)	Not Applicable
Flash point (°C)	Not Applicable	Taste	Not Available
Evaporation rate	Not Available	Explosive properties	Not Available
Flammability	Not Applicable	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	Immiscible	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	<ul> <li>Unstable in the presence of incompatible materials.</li> <li>Product is considered stable.</li> <li>Hazardous polymerisation will not occur.</li> </ul>		
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

	Not permally a bagard due to per valatile pature of produ	at .	
Inhaled	Not normally a hazard due to non-volatile nature of product The material is not thought to produce adverse health effects or irritation of the respiratory tract (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting.		
Ingestion	Considered an unlikely route of entry in commercial/indus vomiting	strial environments Ingestion may result in nausea, abdominal irritation, pain and	
Skin Contact	The material may cause skin irritation after prolonged or r vesicles, scaling and thickening of the skin.	repeated exposure and may produce on contact skin redness, swelling, the production of	
Eye	The material may be irritating to the eye, with prolonged contact causing inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.		
Chronic	Skin contact with the material is more likely to cause a sensitisation reaction in some persons compared to the general population. Sensitisation may result in allergic dermatitis responses including rash, itching, hives or swelling of extremities.		
Little Joe MINI Blister Ocean	ΤΟΧΙΟΙΤΥ	IRRITATION	
Splash	Not Available	Not Available	
	ΤΟΧΙΟΙΤΥ	IRRITATION	
	Dermal (rabbit) LD50: >5000 mg/kg <sup>[2]</sup>	Eye: adverse effect observed (irritating) <sup>[1]</sup>	
dihydromyrcenol	Oral (rat) LD50: 3600 mg/kg <sup>[2]</sup>	Skin (rabbit): 500 mg/24h - mild	
		Skin: adverse effect observed (irritating) <sup>[1]</sup>	
	ΤΟΧΙΟΙΤΥ	IRRITATION	
linalyl acetate	Dermal (rabbit) LD50: >5000 mg/kg <sup>[2]</sup>	Skin (guinea pig): 100mg/24h-mod	
	Oral (rat) LD50: 13934 mg/kg <sup>[2]</sup>	Skin (rabbit): 100 mg/24h-SEVERE	
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		
	The material may cause skin irritation after prolonged or r vesicles, scaling and thickening of the skin.	repeated exposure and may produce on contact skin redness, swelling, the production	
	Current opinion holds that there are no safety concerns regarding the branched chain unsaturated non-cyclic alcohols, as fragrance ingredients,		
	at current declared levels of use and exposure; however, use of these materials at higher maximum levels of skin or whole-body exposure requires re-evaluation.		
	At current declared levels of use, there was no evidence or only minimal evidence of skin irritation in humans. Sensitising hydroperoxides may be		
DIHYDROMYRCENOL	formed by contact with air. It should be ensured that oxidation reactions are prevented in the end product. The use of these materials under the declared levels of use and exposure will not induce sensitization. These compounds generally have low acute toxicity. The branched chain		

declared levels of use and exposure will not induce sensitization. These compounds generally have low acute toxicity. The branched chain, unsaturated alcohols tested had low whole-body toxicity after repeated application. In animals, repeated exposure at high doses caused liver changes and kidney damage. There was little or no evidence of adverse effects on fertility or development. Data on cancer-causing potential is not available, but they are not of primary concern. Alkyl alcohols of chain length C6-13 are absorbed from skin, when inhaled or swallowed but show evidence of little harm. They are broken down and rapidly excreted by the body. 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. 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. Cross-reactivity is also expected between ester derivatives and their parent alcohols, as the esters will be broken down by esterases in the skin. Esters of important contact allergens that can be activated by hydrolysis in the skin are isoeugenol acetate, eugenyl acetate and geranyl acetate all of which are known to be used as fragrance ingredients.

LINALYL ACETATE

Inhalational exposure of mice and man to linalool caused slight sedative effects but a dose dependent response characteristic could not be determined. It may irritate the digestive tract, skin, nose and the eyes but is not considered to be a sensitiser. It is equally shown to cause kidneys and liver damage but no genetic or reproductive defect was observed.

Opinion holds that there are no safety concerns for linalool and the linally esters, as fragrance ingredients, under the present declared levels of use and exposure for the following reasons:

Linalool and the linalyl esters have a low order of acute toxicity.

No significant toxicity was observed in subchronic tests; it is concluded that these materials have dermal and oral NOAELS of 50 mg/kg/day or greater.

Based on a critical review of all available mutagenicity and genotoxicity studies, it has been determined that these materials are negative in short-term tests and therefore would have no significant potential to produce genotoxic effects.

The metabolic fate of linalool and the linalyl esters is either known or assumed from analogies with structurally related substances that indicate no production of toxic or persistent metabolites and the structural analogies indicate no concern.

Human dermatological studies show that these materials are not irritating, phototoxic or sensitizing.

These materials are used at low levels of exposure relative to doses that elicit adverse effects. The estimate for maximum systemic exposure by humans using cosmetic products is 0.3 mg/kg/ day for linalool and linalyl acetate and 0.1 mg/ kg/day or lower for the other linalyl esters. Using the NOAELs (50 mg/kg/day or greater) and the maximum exposure estimates and assuming 100% absorption, a margin of safety for the exposure of humans to linalool and the linalyl esters may conservatively be calculated as 167 times the maximum daily exposure for linalool and linalyl acetate (50 mg/kg/day 0.3 mg/kg/day for linalool or linalyl acetate=167) and

	<ul> <li>500 times the maximum daily exposure for the other individual linally lesters (50 mg/kg/day / 0.1 mg/kg/day for the other individual linally lesters=500).</li> <li>In general, linalool esters are hydrolyzed to their corresponding alcohol (linalool) and carboxylic acid. Hydrolysis is catalyzed by carboxylesterases or esterases. Tertiary alcohols such as linalool are metabolized primarily through conjugation with glucuronic acid and are excreted in the urine and to a lesser extent faeces. Alkyl or alkenyl substituents may undergo oxidation to form polar metabolites that may also be excreted free or in the conjugated form. Oxidation is mediated by cytochrome P-450 dependant mono-oxygenases. The carboxylic acids formed by hydrolysis of the linalyl esters included in this summary are all known to be easily and rapidly metabolized. The linear saturated carboxylic acids are metabolized normally as fatty acids that undergo beta-oxidation. The branched-chain carboxylic acids from linalyl isovalerate and isobutyrate are similarly oxidized,but the end product is acetone. The carboxylic acids from linalyl benzoate and phenylacetate are conjugated and excreted. The cinnamic acid from linallyl cinnamate is conjugated and excreted,or metabolized to benzoic acid.</li> <li>No sensitization was observed with linalool in guinea pig sensitization studies at concentrations up to 20%. With linalyl acetate at a concentration of 10%, weak to moderate sensitization studies. No sensitization reactions were observed with linalyl propionate (data were not available for the other linalyl esters)</li> <li>when tested at 8% in open epicutaneous tests in guinea pigs</li> <li>The Research Institute for Fragrance Materials (RIFM) Expert Panel</li> <li>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. Repeated exposures may produce severe ulceration.</li> <li>A member or analogue of a group</li></ul>			
DIHYDROMYRCENOL & LINALYL ACETATE	Animal testing suggests that the acute toxicity of tertiary alcohols and related esters is extremely low. Genetic toxicity: Tests on bacterial and animal cells showed no evidence of genetic toxicity or potential to cause mutations. For terpenoid tertiary alcohols and their related esters: These substances are metabolised in the liver and exceted primarily in the urine and facess. A portion is also excreted unchanged. They have low short term toxicly when ingested or applied on the skin. However, repeated and forg term use may cause dose dependent harm to both the focus and mother. Adverse reactions to fragrances in perfumes and fragranced cosmetic products include allergic contact dematilis, initiant contact dematilis, sensitivity to light, immediate contact reactions, and pignented contact dematils. Altroome and connubial contact dematilis contact learning in the perfume on the skin. However, repeated and compute dematils can be severe and widespread, with significant impairment of quality of life and potential consequences for timess for work. If the perfume contains a sensitizing component, Inderiance to perfumes by inhalation may occur. Symptoms may include general unvellness, coughing, phlegm, wheesing, chest lightness, headache, shortness of breath with exertion, acute respiratory illesses, haylever, ashma and other respiratory diseases. Perfumes can induce excess reactivity of the ainway without producing allergy or alivay obstruction. Ferating through a carbon filter mask had no protective effect. Cocupational astima caused by perfume substances, such as isoanyl acetate, limonene, cinnamaldehyde and benzaldehyde, tend to give persister symptoms, even though the exposure is below occupational exposure limits. Prevention of contact sensitization to fragrances is an important dojective of public heading regiment. Hards: Contact sensitization may be the primary cause of hand eczema or a complication of linitant or atopic hand eczema may not be clear. Hards: Contact sensitization may be th			
	and prohaptens.			
Acute Toxicity	<b>*</b>	Carcinogenicity	×	
Skin Irritation/Corrosion	X	Reproductivity	X	
Serious Eye Damage/Irritation	×	STOT - Single Exposure	×	
Respiratory or Skin sensitisation	✓ ✓	STOT - Repeated Exposure	X	

Mutagenicity

×

Legend:

X − Data either not available or does not fill the criteria for classification
✓ − Data available to make classification

×

Aspiration Hazard

## SECTION 12 ECOLOGICAL INFORMATION

Little Joe MINI Blister Ocean Splash	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
	Not Available	Not Available	Not Available	Not Available	Not Available
	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
	LC50	96	Fish	27.8mg/L	2
dihydromyrcenol	EC50	48	Crustacea	38mg/L	2
	EC50	72	Algae or other aquatic plants	65mg/L	2
	NOEC	96	Fish	<3.5mg/L	2
	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURC
	LC50	96	Fish	1.564mg/L	3
	EC50	48	Crustacea	15mg/L	2
linalyl acetate	EC50	96	Algae or other aquatic plants	0.136mg/L	3
	EC0	48	Crustacea	10mg/L	2
	NOEC	72	Algae or other aquatic plants	9.6mg/L	2

Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 3. EPIWIN Suite V3.12 (QSAR) - Aquatic Toxicity Data (Estimated) 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

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. **DO NOT** discharge into sewer or waterways.

### Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
dihydromyrcenol	HIGH	HIGH
linalyl acetate	HIGH	HIGH

### **Bioaccumulative potential**

Ingredient	Bioaccumulation	
dihydromyrcenol	LOW (LogKOW = 3.4666)	
linalyl acetate	MEDIUM (LogKOW = 3.93)	

### Mobility in soil

Ingredient	Mobility	
dihydromyrcenol	LOW (KOC = 54.78)	
linalyl acetate	LOW (KOC = 517.9)	

## SECTION 13 DISPOSAL CONSIDERATIONS

#### Waste treatment methods

Product / Packaging disposal <ul> <li>Recycle wherever possible or consult manufacturer for recycling options.</li> <li>Consult State Land Waste Authority for disposal.</li> <li>Bury or incinerate residue at an approved site.</li> <li>Recycle containers if possible, or dispose of in an authorised landfill.</li> </ul>
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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	

### DIHYDROMYRCENOL IS FOUND ON THE FOLLOWING REGULATORY LISTS

New Zealand Inventory of Chemicals (NZIoC)

#### LINALYL ACETATE IS FOUND ON THE FOLLOWING REGULATORY LISTS

GESAMP/EHS Composite List - GESAMP Hazard Profiles

IMO IBC Code Chapter 17: Summary of minimum requirements

International Air Transport Association (IATA) Dangerous Goods Regulations

International Maritime Dangerous Goods Requirements (IMDG Code)

New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals - Classification Data New Zealand Inventory of Chemicals (NZIoC) New Zealand Land Transport Rule: Dangerous Goods 2005 - Schedule 1 Quantity limits New Zealand Land Transport Rule: Dangerous Goods 2005 - Schedule 3 Segregation requirements for dangerous goods United Nations Recommendations on the Transport of Dangerous Goods Model Regulations

#### **Hazardous Substance Location**

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

Hazard Class	Quantity beyond which controls apply for closed containers	Quantity beyond which controls apply when use occurring in 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	Quantities	
Not Applicable	Not Applicable	

Refer Group Standards for further information

#### **Tracking Requirements**

Not Applicable

#### **National Inventory Status**

National Inventory	Status	
Australia - AICS	Yes	
Canada - DSL	Yes	
Canada - NDSL	No (dihydromyrcenol; linalyl acetate)	
China - IECSC	Yes	
Europe - EINEC / ELINCS / NLP	/es	
Japan - ENCS	Yes	
Korea - KECI	Yes	
New Zealand - NZIoC	Yes	
Philippines - PICCS	Yes	
USA - TSCA	Yes	
Taiwan - TCSI	Yes	
Mexico - INSQ	Yes	
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	30/10/2019
Initial Date	29/10/2019

#### SDS Version Summary

Version	Issue Date	Sections Updated
3.1.1.1	30/10/2019	Chronic Health, Classification, Environmental, 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 Limit₀ IDLH: Immediately Dangerous to Life or Health Concentrations OSF: Odour Safety Factor NOAEL: No Observed Adverse Effect Level LOAEL: Lowest 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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