

### Safety Data Sheet

according to SANS 10234:2019 and SANS 11014:2010 Issue date: 5/31/2024 Revision date: 5/31/2026 Version: 1.1

## **SECTION 1: Identification**

#### **1.1. Product identifier**

Product form Trade name Type of product Product code Product group : Mixture : Ice sensations - Glacier

- : Vehicle interior air freshener
- : SH562
- : Trade product

#### **1.2.** Relevant identified uses of the substance or mixture and uses advised against

:

Use of the substance/mixture

#### 1.3. Supplier's details

#### Manufacturer

Shield Chemicals (Pty) Ltd 9 London Rd Apex P.O. Box 1939 1501 Benoni – Gauteng South Africa T (011) 421 7111 Contact: Jayson Clark

#### 1.4. Emergency telephone number

Emergency number

: (011) 421 7111

SECTION 2: Hazards identification	
2.1. Classification of the substance or mixture	
Classification according to the United Nations GHS	
Flammable liquids, Category 4	H227
Skin corrosion/irritation, Category 2	H315
Serious eye damage/eye irritation, Category 2A	H319
Skin sensitisation, Category 1	H317
Carcinogenicity, Category 2	H351
Hazardous to the aquatic environment – Acute Hazard Not classified	
Hazardous to the aquatic environment – Chronic Hazard, Category 2	H411
Full text of H-statements: see section 16	
2.2. Label elements	

#### Labelling according to the United Nations GHS

Hazard pictograms (GHS ZA)

Signal word (GHS-ZA) Hazardous ingredients

Hazard statements (GHS ZA)



- : linalool, 2-(6,6-dimethylbicyclo[3.1.1]hept-2-en-2-yl)ethyl acetate, linalyl acetate, betacitronellol, (+/-)-, coumarin, 4'-tert-butyl-2',6'-dimethyl-3',5'-dinitroacetophenone, (Z)-citral
- : H227 Combustible liquid
  - H315 Causes skin irritation
  - H317 May cause an allergic skin reaction
  - H319 Causes serious eye irritation
  - H351 Suspected of causing cancer
  - H411 Toxic to aquatic life with long lasting effects

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Precautionary statements (GHS ZA)	<ul> <li>P203 - Obtain, read and follow all safety instructions before use.</li> <li>P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</li> <li>P261 - Avoid breathing vapours.</li> <li>P264 - Wash hands, forearms and face thoroughly after handling.</li> <li>P272 - Contaminated work clothing should not be allowed out of the workplace.</li> <li>P273 - Avoid release to the environment.</li> <li>P280 - Wear eye protection, protective clothing, protective gloves.</li> <li>P302+P352 - IF ON SKIN: Wash with plenty of soap and water</li> <li>P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</li> <li>P318 - IF exposed or concerned, get medical advice.</li> <li>P321 - Specific treatment (see on this label).</li> <li>P332+P317 - If skin irritation occurs: Get medical help.</li> <li>P362+P364 - Take off contaminated clothing and wash it before reuse.</li> <li>P370+P378 - In case of fire: Use carbon dioxide (CO2), sand, foam to extinguish.</li> <li>P391 - Collect spillage.</li> <li>P403 - Store in a well-ventilated place.</li> <li>P405 - Store locked up.</li> <li>P501 - Dispose of contents and container to a hazardous or special waste collection point.</li> </ul>
2.3. Other hazards	
Adverse physicochemical, human health and environmental effects	<ul> <li>Suspected of causing cancer, Causes skin irritation, May cause an allergic skin reaction, Causes serious eye irritation, Toxic to aquatic life with long lasting effects.</li> </ul>

### **SECTION 3: Composition/information on ingredients**

#### 3.1. Substances

#### Not applicable

### 3.2. Mixtures

Name	Product identifier	%	Classification according to the United Nations GHS
linalool	CAS-No.: 78-70-6 EC Index-No.: 603-235-00-2	5.0 - 10.0	Flam. Liq. 4, H227 Acute Tox. Not classified (Dermal) Skin Sens. 1B, H317
2-(6,6-dimethylbicyclo[3.1.1]hept-2-en-2-yl)ethyl acetate	-	5.0 - 10.0	Eye Irrit. 2A, H319 Skin Sens. 1B, H317 Aquatic Chronic 2, H411
linalyl acetate	CAS-No.: 115-95-7	5.0 - 10.0	Flam. Liq. 4, H227 Acute Tox. Not classified (Oral) Acute Tox. Not classified (Dermal) Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1B, H317 Aquatic Acute 3, H402
2,6-dimethyl-7-octen-2-ol	CAS-No.: 18479-58-8	1.0 - 5.0	Flam. Liq. 4, H227
3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-indenyl acetate	-	1.0 - 5.0	Aquatic Chronic 3, H412
coumarin	CAS-No.: 91-64-5	1.0 - 5.0	Acute Tox. 4 (Oral), H302 Skin Sens. 1, H317 Aquatic Acute 2, H401 Aquatic Chronic 3, H412

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SECTION 4: First aid measures		
4.1. Description of first aid measures		
First-aid measures general	: IF exposed or concerned: Get medical advice/attention.	
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.	
First-aid measures after skin contact	: Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.	
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.	
First-aid measures after ingestion	: Call a poison center or a doctor if you feel unwell.	
4.2. Most important symptoms and effects, both acute and delayed		
Symptoms/effects after skin contact Symptoms/effects after eye contact	<ul><li>Irritation. May cause an allergic skin reaction.</li><li>Eye irritation.</li></ul>	

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures		
5.1. Extinguishing media		
Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.	
5.2. Special hazards arising from the substance or mixture		
Fire hazard Hazardous decomposition products in case of fire	<ul><li>Combustible liquid.</li><li>Toxic fumes may be released.</li></ul>	
5.3. Advice for firefighters		
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.	

SECTION 6: Accidental release measures		
6.1. Personal precautions, protective	equipment and emergency procedures	
No additional information available		
6.1.1. For non-emergency personnel		
Emergency procedures	: Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapours/spray.	
6.1.2. For emergency responders		
Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".	
6.2. Environmental precautions		
Avoid release to the environment.		
6.3. Methods and material for contain	ment and cleaning up	
For containment	: Collect spillage.	

Methods for cleaning up	: Take up liquid spill into absorbent material. Notify authorities if product enters sewers or
	public waters.
Other information	: Dispose of materials or solid residues at an authorized site.

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according to SANS 10234:2019 and SANS 11014:20	
SECTION 7: Handling and storage	
7.1. Precautions for safe handling	
Precautions for safe handling Hygiene measures	<ul> <li>Ensure good ventilation of the work station. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Wear personal protective equipment. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapours/spray.</li> <li>Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.</li> </ul>
7.2. Conditions for safe storage, inclu	ding any incompatibilities
Storage conditions	: Store in a well-ventilated place. Keep cool. Store locked up.
SECTION 8: Exposure controls/pe	ersonal protection
8.1. Control parameters	
No additional information available	
8.2. Appropriate engineering controls	
Appropriate engineering controls Environmental exposure controls	<ul><li>Ensure good ventilation of the work station.</li><li>Avoid release to the environment.</li></ul>
8.3. Individual protection measures, s	such as personal protective equipment (PPE)
Hand protection Eye protection Skin and body protection Respiratory protection Personal protective equipment symbol(s):	<ul> <li>Protective gloves</li> <li>Safety glasses</li> <li>Wear suitable protective clothing</li> <li>In case of insufficient ventilation, wear suitable respiratory equipment</li> </ul>
8.4. Exposure limit values for the other	er components
No additional information available	

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Liquid.
Colour	: No data available
Odour	: characteristic.
Odour threshold	: No data available
рН	: No data available
pH solution	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Relative evaporation rate (ether=1)	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: ≈ 83 °C closed cup
Auto-ignition temperature	: No data available

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Decomposition temperature	: No data available
Flammability	: Combustible liquid
Vapour pressure	: ≈ 0.16 hPa
Vapour pressure at 50°C	: No data available
Relative vapour density at 20°C	: No data available
Relative density	: No data available
Relative density of saturated gas/air mixture	: No data available
Density	: 0.963 – 0.973 g/cm <sup>3</sup>
Relative gas density	: No data available
Solubility	: Insoluble in water.
Partition coefficient n-octanol/water (Log Pow)	: No data available
Partition coefficient n-octanol/water (Log Kow)	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available
Lower explosion limit	: No data available
Upper explosion limit	: No data available

#### 9.2. Other information

No additional information available

### **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

#### **10.2. Chemical stability**

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

**10.4. Conditions to avoid** 

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

**10.5. Incompatible materials** 

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## **SECTION 11: Toxicological information**

### 11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified
linalool (78-70-6)	
LD50 oral rat	2790 mg/kg bodyweight (Equivalent or similar to OECD 401, Rat, Male / female, Vevidence, Oral, 014 day(s))
LD50 oral	≈ 2790 mg/kg

Weight of

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linalool (78-70-6)	
LD50 dermal rabbit	5610 mg/kg bodyweight (Equivalent or similar to OECD 402, 24 h, Rabbit, Experimental value, Dermal, 7 day(s))
linalyl acetate (115-95-7)	
LD50 oral rat	> 9000 mg/kg bodyweight (BASF test, Rat, Male / female, Experimental value, Oral, 7 day(s))
LD50 dermal rabbit	> 5000 mg/kg bodyweight (Rabbit, Experimental value, Dermal, 14 day(s))
coumarin (91-64-5)	·
LD50 oral rat	680 mg/kg bodyweight (Equivalent or similar to OECD 401, Rat, Male / female, Experimental value, Oral, 14 day(s))
Skin corrosion/irritation :	Causes skin irritation.
Serious eye damage/irritation :	Causes serious eye irritation.
Respiratory or skin sensitisation :	May cause an allergic skin reaction.
Germ cell mutagenicity :	Not classified
Carcinogenicity :	Suspected of causing cancer.
Reproductive toxicity :	Not classified
STOT-single exposure :	Not classified
STOT-repeated exposure :	Not classified
Aspiration hazard :	Not classified
linalool (78-70-6)	
Animal studies and expert judgment for classification	False
2-(6,6-dimethylbicyclo[3.1.1]hept-2-en-2-yl)et	hyl acetate
Animal studies and expert judgment for classification	False
linalyl acetate (115-95-7)	-
Animal studies and expert judgment for classification	False
2,6-dimethyl-7-octen-2-ol (18479-58-8)	
Animal studies and expert judgment for classification	False
3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-inde	nyl acetate
Animal studies and expert judgment for classification False	
coumarin (91-64-5)	
Animal studies and expert judgment for classification	False

# **SECTION 12: Ecological information**

## 12.1. Toxicity

(acute)	<ul> <li>Toxic to aquatic life with long lasting effects.</li> <li>Not classified.</li> <li>Toxic to aquatic life with long lasting effects.</li> </ul>
linalool (78-70-6)	
LC50 - Fish [1]	27.8 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oncorhynchus mykiss, Static system, Fresh water, Experimental value, GLP)
EC50 - Crustacea [1]	59 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static

system, Fresh water, Experimental value, GLP)

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inalool (78-70-6)	
FrC50 algae	156.7 mg/l (DIN 38412-9, 96 h, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, Nominal concentration)
Partition coefficient n-octanol/water (Log Pow)	2.8 (Experimental value, Equivalent or similar to OECD 107, 25 °C)
Drganic Carbon Normalized Adsorption Coefficient Log Koc)	1.9 – 2.2 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
inalyl acetate (115-95-7)	
.C50 - Fish [1]	11 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Cyprinus carpio, Flow-through system, Fresh water, Experimental value, GLP)
EC50 - Crustacea [1]	59 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Locomotor effect)
FrC50 algae	157 mg/l (DIN 38412-9, 96 h, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, Nominal concentration)
3CF - Fish [1]	174 l/kg (BCFBAF v3.00, Pisces, Calculated value, Fresh weight)
Partition coefficient n-octanol/water (Log Pow)	3.9 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 25 °C)
Drganic Carbon Normalized Adsorption Coefficient Log Koc)	2.7 (log Koc, PCKOCWIN v1.66, Calculated value)
2,6-dimethyl-7-octen-2-ol (18479-58-8)	
Partition coefficient n-octanol/water (Log Pow)	3.47 (Estimated value)
oumarin (91-64-5)	
.C50 - Fish [1]	2.94 mg/l (96 h, Pimephales promelas, QSAR, Lethal)
EC50 - Crustacea [1]	24.3 – 36.9 mg/l (48 h, Daphnia magna, Static system, Fresh water, Experimental value, Locomotor effect)
Partition coefficient n-octanol/water (Log Pow)	1.51 (Estimated value, 25 °C)
Drganic Carbon Normalized Adsorption Coefficient Log Koc)	1.63 (log Koc, QSAR)
2.2. Persistence and degradability	
ce sensations - Glacier	
Persistence and degradability	No additional information available
inalool (78-70-6)	
Persistence and degradability	Readily biodegradable in water.
inalyl acetate (115-95-7)	
Persistence and degradability	Readily biodegradable in water.
2,6-dimethyl-7-octen-2-ol (18479-58-8)	
Persistence and degradability	Biodegradability in water: no data available.
oumarin (91-64-5)	
Persistence and degradability	Readily biodegradable in water.
2.3. Bioaccumulative potential	
ce sensations - Glacier	

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linalool (78-70-6)	
Partition coefficient n-octanol/water (Log Pow)	2.8 (Experimental value, Equivalent or similar to OECD 107, 25 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.9 – 2.2 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
linalyl acetate (115-95-7)	·
BCF - Fish [1]	174 l/kg (BCFBAF v3.00, Pisces, Calculated value, Fresh weight)
Partition coefficient n-octanol/water (Log Pow)	3.9 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 25 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	2.7 (log Koc, PCKOCWIN v1.66, Calculated value)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
2,6-dimethyl-7-octen-2-ol (18479-58-8)	
Partition coefficient n-octanol/water (Log Pow)	3.47 (Estimated value)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
coumarin (91-64-5)	·
Partition coefficient n-octanol/water (Log Pow)	1.51 (Estimated value, 25 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.63 (log Koc, QSAR)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

## Ice sensations - Glacier

Ice sensations - Glacier	
Mobility in soil	No additional information available
linalool (78-70-6)	
Partition coefficient n-octanol/water (Log Pow)	2.8 (Experimental value, Equivalent or similar to OECD 107, 25 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.9 – 2.2 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
Ecology - soil	Low potential for adsorption in soil.
linalyl acetate (115-95-7)	
Surface tension	No data available in the literature
Partition coefficient n-octanol/water (Log Pow)	3.9 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 25 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	2.7 (log Koc, PCKOCWIN v1.66, Calculated value)
Ecology - soil	Low potential for adsorption in soil.
2,6-dimethyl-7-octen-2-ol (18479-58-8)	
Partition coefficient n-octanol/water (Log Pow)	3.47 (Estimated value)
Ecology - soil	No (test)data on mobility of the substance available.
coumarin (91-64-5)	
Surface tension	No data available in the literature
Partition coefficient n-octanol/water (Log Pow)	1.51 (Estimated value, 25 °C)

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coumarin (91-64-5)	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.63 (log Koc, QSAR)
Ecology - soil	Highly mobile in soil.
12.5. Other adverse effects	
	<ul> <li>Not classified</li> <li>No additional information available</li> </ul>

## **SECTION 13: Disposal considerations**

13.1. Disposal methods

Waste treatment methods

: Dispose of contents/container in accordance with licensed collector's sorting instructions.

### **SECTION 14: Transport information**

In accordance with SANS / IMDG / IATA		
SANS	IMDG	ΙΑΤΑ
14.1. UN number		-
3082	3082	3082
14.2. Proper Shipping Name	•	
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	Environmentally hazardous substance, liquid n.o.s.
14.3. Transport hazard class(es)	•	
9	9	9
14.4. Packing group	•	
Ш	III	Ш
14.5. Environmental hazards	•	
Dangerous for the environment : Yes	Dangerous for the environment : Yes Marine pollutant : Yes	Dangerous for the environment : Yes
No supplementary information available	•	

### 14.6. Special precautions for user

SANS

SANS	
Special provisions (SANS)	: 179, 274, 331, 335
Limited quantities (SANS)	: 5 L
Limited quantities (SANS)	: 5L
Packagings, large packagings and IBCs Packing instructions (SANS)	: P001, IBC03, LP01
Packagings, large packagings and IBCs Special packing instructions (SANS)	: PP1
Portable tank and bulk containers instructions (SANS)	: T4
Portable tank and bulk container special provisions (SANS)	: TP1, TP29

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IMDG	
Special provisions (IMDG)	: 274, 335, 969
Limited quantities (IMDG)	: 5L
Excepted quantities (IMDG)	: E1
Packing instructions (IMDG)	: LP01, P001
Special packing provisions (IMDG)	: PP1
IBC packing instructions (IMDG)	: IBC03
Tank instructions (IMDG)	: T4
Tank special provisions (IMDG)	: TP2, TP29
EmS-No. (Fire)	: F-A - FIRE SCHEDULE Alfa - GENERAL FIRE SCHEDULE
EmS-No. (Spillage)	: S-F - SPILLAGE SCHEDULE Foxtrot - WATER-SOLUBLE MARINE POLLUTANTS
Stowage category (IMDG)	: A
ΙΑΤΑ	
PCA Excepted quantities (IATA)	: E1
PCA Limited quantities (IATA)	: Y964
PCA limited quantity max net quantity (IATA)	: 30kgG
PCA packing instructions (IATA)	: 964
PCA max net quantity (IATA)	: 450L
CAO packing instructions (IATA)	: 964
CAO max net quantity (IATA)	: 450L
Special provisions (IATA)	: A97, A158, A197
ERG code (IATA)	: 9L

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

### Not applicable

### **SECTION 15: Regulatory information**

15.1. Safety, health, and environmental national regulations specific for the product

No additional information available

<b>SECTION 16: Other infor</b>	nation	
Issue date	: 31/05/2024	
Revision date	: 31/05/2026	

Full text of	H-statements
H227	Combustible liquid
H301	Toxic if swallowed
H302	Harmful if swallowed
H303	May be harmful if swallowed
H311	Toxic in contact with skin
H313	May be harmful in contact with skin
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H351	Suspected of causing cancer
H400	Very toxic to aquatic life
H401	Toxic to aquatic life
H402	Harmful to aquatic life
H410	Very toxic to aquatic life with long lasting effects

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Full text of H-statements	
H411	Toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects

Safety Data Sheet (SDS), South Africa

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.