



Heart air freshener - Ocean drive

Safety Data Sheet

according to SANS 10234:2019 and SANS 11014:2010
Issue date: 6/13/2022 Revision date: 6/13/2024 Version: 1.1

SECTION 1: Identification

1.1. Product identifier

Product form : Mixture
Trade name : Heart air freshener - Ocean drive
Type of product : Air freshener
Product code : SH1098
Product group : 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

Skin corrosion/irritation, Category 2 H315
Skin sensitisation, Category 1 H317
Hazardous to the aquatic environment – Acute Hazard, Category 2 H401
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) : Warning
Hazardous ingredients : Dipropylene glycol methyl ether, dipentene, 2-tert-butylcyclohexanol acetate, Ethyl 2-methyl-1,3-dioxolane-2-acetate, Allyl heptanoate, 2,6-dimethyl-7-octen-2-ol, undecan-4-olide
Hazard statements (GHS ZA) : H315 - Causes skin irritation.
H317 - May cause an allergic skin reaction.
H411 - Toxic to aquatic life with long lasting effects.
Precautionary statements (GHS ZA) : P261 - Avoid breathing vapours.
P264 - Wash hands, forearms and face thoroughly after handling.
P272 - Contaminated work clothing should not be allowed out of the workplace.
P273 - Avoid release to the environment.
P280 - Wear eye protection, protective clothing, protective gloves.
P302+P352 - IF ON SKIN: Wash with plenty of water.

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P321 - Specific treatment (see supplemental first aid instruction on this label).
P332+P313 - If skin irritation occurs: Get medical advice.
P333+P313 - If skin irritation or rash occurs: Get medical advice.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P391 - Collect spillage.
P501 - Dispose of contents and container to an approved waste disposal plant.

2.3. Other hazards

Adverse physicochemical, human health and environmental effects

: Causes skin irritation, May cause an allergic skin reaction, Toxic to aquatic life, Toxic to aquatic life with long lasting effects.

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to the United Nations GHS
Dipropylene glycol methyl ether	CAS-No.: 34590-94-8	60.0 - 70.0	Flam. Liq. 4, H227 Acute Tox. Not classified (Oral) Acute Tox. Not classified (Dermal) STOT RE Not classified Aquatic Acute Not classified
dipentene	CAS-No.: 138-86-3	10.0 - 20.0	Flam. Liq. 3, H226 Acute Tox. Not classified (Oral) Acute Tox. Not classified (Dermal) Skin Irrit. 2, H315 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2-tert-butylcyclohexanol acetate	CAS-No.: 88-41-5	5.0 - 10.0	Flam. Liq. 4, H227 Acute Tox. 5 (Oral), H303 Acute Tox. Not classified (Dermal)
Ethyl 2-methyl-1,3-dioxolane-2-acetate	CAS-No.: 6413-10-1	5.0 - 10.0	Flam. Liq. 4, H227 STOT RE Not classified Aquatic Acute Not classified
Allyl heptanoate	CAS-No.: 142-19-8	1.0- 5.0	Flam. Liq. 4, H227 Acute Tox. 3 (Dermal), H311 Aquatic Acute 1, H400
2,6-dimethyl-7-octen-2-ol	CAS-No.: 18479-58-8	1.0 - 5.0	Flam. Liq. 4, H227
undecan-4-olide	CAS-No.: 104-67-6	1.0 - 5.0	Flam. Liq. Not classified Acute Tox. 5 (Oral), H303 Acute Tox. 5 (Dermal), H313 Aquatic Acute 2, H401

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation
First-aid measures after skin contact

: Remove person to fresh air and keep comfortable for breathing.
: 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
First-aid measures after ingestion

: Rinse eyes with water as a precaution.
: Call a poison center or a doctor if you feel unwell.

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4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects after skin contact : Irritation. May cause an allergic skin reaction.

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.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic fumes may be released.

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. Avoid contact with skin and eyes. Avoid breathing vapours.

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 containment and cleaning up

For containment : Collect spillage.
Methods for cleaning up : Mechanically recover the product.
Other information : Dispose of materials or solid residues at an authorized site.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Avoid contact with skin and eyes. Wear personal protective equipment. Avoid breathing vapours.
Hygiene measures : 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.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep cool.

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.
Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures, such as personal protective equipment (PPE)

Hand protection : Protective gloves
Eye protection : Safety glasses
Skin and body protection : Wear suitable protective clothing
Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment

Personal protective equipment symbol(s):



8.4. Exposure limit values for the other components

No additional information available

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Solid
Appearance : Solid.
Colour : Blue.
Odour : characteristic.
Odour threshold : No data available
pH : 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 : No data available
Freezing point : Not applicable
Boiling point : No data available
Flash point : $\approx 74\text{ }^{\circ}\text{C}$
Auto-ignition temperature : Not applicable
Decomposition temperature : No data available
Flammability (solid, gas) : Non flammable.
Vapour pressure : No data available
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 : No data available
Relative gas density : No data available
Solubility : No data available
Partition coefficient n-octanol/water (Log Pow) : No data available
Partition coefficient n-octanol/water (Log Kow) : No data available
Viscosity, kinematic : Not applicable
Viscosity, dynamic : No data available
Explosive properties : No data available
Oxidising properties : No data available
Explosive limits : Not applicable

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Lower explosive limit (LEL) : No data available
Upper explosive limit (UEL) : 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

None under recommended storage and handling conditions (see section 7).

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

Dipropylene glycol methyl ether (34590-94-8)	
LD50 oral rat	> 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LD50 dermal rat	> 19020 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LD50 dermal rabbit	9510 mg/kg bodyweight Animal: rabbit, Animal sex: male, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
dipentene (138-86-3)	
LD50 oral rat	5300 mg/kg (Rat, Literature study, Oral)
LD50 dermal rabbit	> 5000 mg/kg (Rabbit, Literature study, Dermal)
2-tert-butylcyclohexanol acetate (88-41-5)	
LD50 oral rat	4600 mg/kg (Equivalent or similar to OECD 401, Rat, Experimental value, Oral, 14 day(s))
LD50 dermal rabbit	> 5000 mg/kg (Equivalent or similar to OECD 402, Rabbit, Experimental value, Dermal)
Allyl heptanoate (142-19-8)	
LD50 dermal rabbit	810 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), 95% CL: 440 - 1180

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undecan-4-olide (104-67-6)	
LD50 oral rat	> 2000 mg/kg bodyweight (Equivalent or similar to OECD 420, Rat, Male / female, Read-across, Oral)
LD50 dermal rat	> 2000 mg/kg bodyweight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal)

Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified

Dipropylene glycol methyl ether (34590-94-8)	
NOAEL (oral, rat, 90 days)	1000 mg/kg bodyweight Animal: rat, Guideline: other:KANPOGYO No.700, YAKUHATSU No. 1039.61, and KIKYKU No. 1014.
NOAEL (dermal, rat/rabbit, 90 days)	2850 mg/kg bodyweight Animal: rabbit, Animal sex: male, Guideline: OECD Guideline 411 (Subchronic Dermal Toxicity: 90-Day Study)

Ethyl 2-methyl-1,3,dioxolane-2-acetate (6413-10-1)	
NOAEL (oral, rat, 90 days)	1000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)

Aspiration hazard : Not classified

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Viscosity, kinematic	Not applicable

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: Toxic to aquatic life. Toxic to aquatic life with long lasting effects.
Hazardous to the aquatic environment, short-term (acute)	: Toxic to aquatic life.
Hazardous to the aquatic environment, long-term (chronic)	: Toxic to aquatic life with long lasting effects.

Dipropylene glycol methyl ether (34590-94-8)	
LC50 - Fish [1]	> 1000 mg/l Test organisms (species): Poecilia reticulata
EC50 - Other aquatic organisms [1]	1930 mg/l Test organisms (species): other aquatic crustacea:Acartia tonsa
EC50 72h - Algae [1]	> 969 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
LOEC (chronic)	0.5 mg/l Test organisms (species): Daphnia magna Duration: '22 d'
NOEC (chronic)	≥ 0.5 mg/l Test organisms (species): Daphnia magna Duration: '22 d'

dipentene (138-86-3)	
LC50 - Fish [1]	0.545 mg/l (ECOSAR, 96 h, QSAR)
BCF - Other aquatic organisms [1]	917 – 931 (BCFBAF v3.00, QSAR)
Partition coefficient n-octanol/water (Log Pow)	4.57 (Experimental value)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	3.049 – 3.801 (log Koc, SRC PCKOCWIN v2.0, QSAR)

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2-tert-butylcyclohexanol acetate (88-41-5)	
BCF - Fish [1]	384.6 l/kg (BCFBAF v3.01, Calculated value, Fresh weight)
Partition coefficient n-octanol/water (Log Pow)	4.42 (Estimated value, KOWWIN)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	2.644 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
Ethyl 2-methyl-1,3,dioxolane-2-acetate (6413-10-1)	
LC50 - Fish [1]	> 100 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)
EC50 72h - Algae [1]	> 100 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
Allyl heptanoate (142-19-8)	
LC50 - Fish [1]	0.117 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)
LC50 - Fish [2]	0.13 mg/l Test organisms (species): Pimephales promelas
EC50 - Crustacea [1]	0.89 mg/l Test organisms (species): Daphnia magna
2,6-dimethyl-7-octen-2-ol (18479-58-8)	
Partition coefficient n-octanol/water (Log Pow)	3.47 (Estimated value)
undecan-4-olide (104-67-6)	
LC50 - Fish [1]	21.5 mg/l (DIN 38412-15, 96 h, Leuciscus idus, Static system, Fresh water, Read-across, Nominal concentration)
EC50 - Crustacea [1]	5.853 mg/l (EU Method C.2, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP)
ErC50 algae	5.94 mg/l (OECD 201: Alga, Growth Inhibition Test, 48 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP)
BCF - Other aquatic organisms [1]	47.79 – 420.9 (BCFBAF v3.01, QSAR)
Partition coefficient n-octanol/water (Log Pow)	3.6 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 25 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	2.6 – 2.85 (log Koc, SRC PCKOCWIN v2.0, QSAR)

12.2. Persistence and degradability

Heart air freshener - Ocean drive	
Persistence and degradability	No additional information available
dipentene (138-86-3)	
Persistence and degradability	Biodegradable in the soil. Biodegradable in water. Not easily biodegradable in water in anaerobic conditions.
ThOD	3.29 g O ₂ /g substance
2-tert-butylcyclohexanol acetate (88-41-5)	
Persistence and degradability	Not readily biodegradable in water.
2,6-dimethyl-7-octen-2-ol (18479-58-8)	
Persistence and degradability	Biodegradability in water: no data available.
undecan-4-olide (104-67-6)	
Persistence and degradability	Readily biodegradable in water.

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12.3. Bioaccumulative potential

Heart air freshener - Ocean drive	
Bioaccumulative potential	No additional information available
dipentene (138-86-3)	
BCF - Other aquatic organisms [1]	917 – 931 (BCFBAF v3.00, QSAR)
Partition coefficient n-octanol/water (Log Pow)	4.57 (Experimental value)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	3.049 – 3.801 (log Koc, SRC PCKOCWIN v2.0, QSAR)
Bioaccumulative potential	Potential for bioaccumulation ($4 \geq \text{Log Kow} \leq 5$).
2-tert-butylcyclohexanol acetate (88-41-5)	
BCF - Fish [1]	384.6 l/kg (BCFBAF v3.01, Calculated value, Fresh weight)
Partition coefficient n-octanol/water (Log Pow)	4.42 (Estimated value, KOWWIN)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	2.644 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
Bioaccumulative potential	Low potential for bioaccumulation ($\text{BCF} < 500$).
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 ($\text{Log Kow} < 4$).
undecan-4-olide (104-67-6)	
BCF - Other aquatic organisms [1]	47.79 – 420.9 (BCFBAF v3.01, QSAR)
Partition coefficient n-octanol/water (Log Pow)	3.6 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 25 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	2.6 – 2.85 (log Koc, SRC PCKOCWIN v2.0, QSAR)
Bioaccumulative potential	Low potential for bioaccumulation ($\text{Log Kow} < 4$).

12.4. Mobility in soil

Heart air freshener - Ocean drive	
Mobility in soil	No additional information available
dipentene (138-86-3)	
Surface tension	0.026 N/m (20 °C)
Partition coefficient n-octanol/water (Log Pow)	4.57 (Experimental value)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	3.049 – 3.801 (log Koc, SRC PCKOCWIN v2.0, QSAR)
Ecology - soil	Low potential for mobility in soil.
2-tert-butylcyclohexanol acetate (88-41-5)	
Partition coefficient n-octanol/water (Log Pow)	4.42 (Estimated value, KOWWIN)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	2.644 (log Koc, SRC PCKOCWIN v2.0, 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)

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2,6-dimethyl-7-octen-2-ol (18479-58-8)	
Ecology - soil	No (test)data on mobility of the substance available.
undecan-4-olide (104-67-6)	
Partition coefficient n-octanol/water (Log Pow)	3.6 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 25 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	2.6 – 2.85 (log Koc, SRC PCKOCWIN v2.0, QSAR)
Ecology - soil	Low potential for mobility in soil.

12.5. Other adverse effects

Ozone : Not classified
Other adverse effects : No additional information available




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	IATA
14.1. UN number		
Not regulated for transport		
14.2. Proper Shipping Name		
Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)		
Not applicable	Not applicable	Not applicable
		
14.4. Packing group		
Not applicable	Not applicable	Not applicable
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
No data available

IMDG
No data available

IATA
No data available

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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

SECTION 16: Other information

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Full text of H-statements

H226	Flammable liquid and vapour.
H227	Combustible liquid
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.
H400	Very toxic to aquatic life.
H401	Toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic 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.