Heart air freshener - Delightful

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	:	Mixture
Trade name	:	Heart air freshener - Delightful
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	:	
Recommended uses and restrictions	:	Air care products

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 3	H316
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	:	alpha-hexylcinnamaldehyde, linalool, linalyl acetate
Hazard statements (GHS ZA)	:	H316 - Causes mild 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. 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 soap and water P321 - Specific treatment (see … on this label). P332+P317 - If skin irritation occurs: Get medical help.

P333+P317 - If skin irritation or rash occurs: Get medical help.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P391 - Collect spillage.
P501 - Dispose of contents and container to a hazardous or special waste collection point.

2.3. Other hazards

Adverse physicochemical, human health and environmental effects : Causes mild 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
alpha-hexylcinnamaldehyde	CAS-No.: 101-86-0	10.0 - 20.0	Flam. Liq. Not classified Acute Tox. 5 (Oral), H303 Acute Tox. 5 (Dermal), H313 Acute Tox. 3 (Inhalation:vapour), H331 Skin Sens. 1B, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
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
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
1,4-dioxacycloheptadecane-5,17-dione	CAS-No.: 105-95-3	5.0 - 10.0	Flam. Liq. Not classified Acute Tox. Not classified (Oral) Acute Tox. Not classified (Dermal) STOT RE Not classified Aquatic Acute 1, H400

SECTION 4: First aid measures

4.1. Description of first aid measures

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 eyes with water as a precaution.
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 : 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 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 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 dust/fume/gas/mist/vapours/spray.

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.

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	:	pink.
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	:	≈ 90 °C
Auto-ignition temperature	:	Not applicable
Decomposition temperature	:	No data available
Flammability	:	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

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

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)

alpha-hexylcinnamaldehyde (101-86-0)	
LD50 oral rat	3100 mg/kg (Equivalent or similar to OECD 401, Rat, Male, Experimental value of similar product, Isomer, Oral, 14 day(s))
LD50 dermal rabbit	> 3000 mg/kg (Equivalent or similar to OECD 402, 24 h, Rabbit, Female, Experimental value of similar product, Isomer, Dermal, 7 day(s))
LC50 Inhalation - Rat	> 5 mg/l (Equivalent or similar to OECD 403, 4 h, Rat, Male / female, Experimental value of similar product, Isomer, Inhalation (aerosol), 14 day(s))

linalool (78-70-6)	
LD50 oral rat	2790 mg/kg bodyweight (Equivalent or similar to OECD 401, Rat, Male / female, Weight of evidence, Oral, 014 day(s))
LD50 oral	≈ 2790 mg/kg

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))

1,4-dioxacycloheptadecane-5,17-dione (105-95-3)	
LD50 oral rat	> 5000 mg/kg bodyweight Animal: rat
LD50 dermal rabbit	> 5000 mg/kg bodyweight Animal: rabbit

Skin corrosion/irritation : Causes mild 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)

1,4-dioxacycloheptadecane-5,17-dione (105-95-3)	
NOAEL (oral, rat, 90 days)	1000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity in Rodents)

Aspiration hazard : Not classified

Heart air freshener - Delightful	
Viscosity, kinematic	Not applicable

Dipropylene glycol methyl ether (34590-94-8)	
Animal studies and expert judgment for classification	False

alpha-hexylcinnamaldehyde (101-86-0)	
Animal studies and expert judgment for classification	False

linalool (78-70-6)	
Animal studies and expert judgment for classification	False

linalyl acetate (115-95-7)	
Animal studies and expert judgment for classification	False

1,4-dioxacycloheptadecane-5,17-dione (105-95-3)	
Animal studies and expert judgment for classification	False

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'

alpha-hexylcinnamaldehyde (101-86-0)	
LC50 - Fish [1]	1.7 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Pimephales promelas, Flow-through system, Fresh water, Experimental value of similar product, Other isomer)
EC50 - Crustacea [1]	0.36 – 0.59 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Flow-through system, Fresh water, Experimental value of similar product, Other isomer)
ErC50 algae	> 0.065 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Desmodesmus subspicatus, Static system, Fresh water, Experimental value of similar product, Other isomer)
Partition coefficient n-octanol/water (Log Pow)	5.3 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 24 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	4.2 (log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC), Experimental value, Other isomer)

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)
ErC50 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)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.9 – 2.2 (log Koc, SRC PCKOCWIN v2.0, Calculated value)

linalyl acetate (115-95-7)	
LC50 - 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)
ErC50 algae	157 mg/l (DIN 38412-9, 96 h, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, Nominal concentration)
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)

1,4-dioxacycloheptadecane-5,17-dione (105-95-3)	
LC50 - Fish [1]	1.23 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)
LC50 - Fish [2]	2.13 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)
EC50 72h - Algae [1]	6.94 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
EC50 72h - Algae [2]	14.579 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)

12.2. Persistence and degradability

Heart air freshener - Delightful	
Persistence and degradability	No additional information available

alpha-hexylcinnamaldehyde (101-86-0)	
Persistence and degradability	Readily biodegradable in water.

linalool (78-70-6)	
Persistence and degradability	Readily biodegradable in water.

linalyl acetate (115-95-7)	
Persistence and degradability	Readily biodegradable in water.

12.3. Bioaccumulative potential

Heart air freshener - Delightful	
Bioaccumulative potential	No additional information available

alpha-hexylcinnamaldehyde (101-86-0)	
Partition coefficient n-octanol/water (Log Pow)	5.3 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 24 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	4.2 (log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC), Experimental value, Other isomer)
Bioaccumulative potential	High potential for bioaccumulation (Log Kow > 5).

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).

12.4. Mobility in soil

Heart air freshener - Delightful	
Mobility in soil	No additional information available

alpha-hexylcinnamaldehyde (101-86-0)	
Partition coefficient n-octanol/water (Log Pow)	5.3 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 24 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	4.2 (log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC), Experimental value, Other isomer)
Ecology - soil	Low potential for mobility in soil.

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.

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

SANS	IMDG	IATA
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

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	
H227	Combustible liquid
H303	May be harmful if swallowed
H313	May be harmful in contact with skin
H315	Causes skin irritation
H316	Causes mild skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H331	Toxic if inhaled
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
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.