



# Heart air freshener - Vanilla pineapple

## 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 - Vanilla pineapple  
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

Flammable solids, Category 1 H228  
Hazardous to the aquatic environment – Acute Hazard, Category 3 H402  
Hazardous to the aquatic environment – Chronic Hazard, Category 3 H412  
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) : Danger

Hazardous ingredients : Dipropylene glycol methyl ether, 4-tert-butylcyclohexyl acetate, 2-tert-butylcyclohexanol acetate, benzyl acetate

Hazard statements (GHS ZA) : H228 - Flammable solid.  
H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements (GHS ZA) : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P240 - Ground and bond container and receiving equipment.  
P241 - Use explosion-proof equipment.  
P273 - Avoid release to the environment.  
P280 - Wear eye protection, protective clothing, protective gloves.  
P370+P378 - In case of fire: Use carbon dioxide (CO<sub>2</sub>), extinguishing powder, foam to extinguish.  
P501 - Dispose of contents and container to an approved waste disposal plant.

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### 2.3. Other hazards

Adverse physicochemical, human health and environmental effects : Flammable solid, Harmful to aquatic life, Harmful 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
4-tert-butylcyclohexyl acetate	CAS-No.: 32210-23-4	10.0 - 20.0	Flam. Liq. Not classified Acute Tox. 5 (Oral), H303 Aquatic Acute 2, H401
2-tert-butylcyclohexanol acetate	CAS-No.: 88-41-5	10.0 - 20.0	Flam. Liq. 4, H227 Acute Tox. 5 (Oral), H303 Acute Tox. Not classified (Dermal)
benzyl acetate	CAS-No.: 140-11-4	5.0 - 10.0	Flam. Liq. Not classified Acute Tox. 5 (Oral), H303 Acute Tox. Not classified (Dermal) Aquatic Acute 2, H401

## 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.  
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

No additional information available

### 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

Fire hazard : Flammable solid.  
Hazardous decomposition products in case of fire : Toxic fumes may be released.

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### 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.

#### 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. Notify authorities if product enters sewers or public waters.  
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. Wear personal protective equipment. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment.  
Hygiene measures : 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

Technical measures : Ground/bond container and receiving equipment.  
Storage conditions : Keep cool. Protect from sunlight. Keep away from ignition sources. Store in a well-ventilated place.

## 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

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### 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	: Yellow.
Odour	: Vanilla pineapple.
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	: ≈ 82 °C
Auto-ignition temperature	: Not applicable
Decomposition temperature	: No data available
Flammability (solid, gas)	: Flammable solid.
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 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

Flammable solid.

### 10.2. Chemical stability

Stable under normal conditions.

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### 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

<b>Dipropylene glycol methyl ether (34590-94-8)</b>	
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)

<b>4-tert-butylcyclohexyl acetate (32210-23-4)</b>	
LD50 oral rat	3370 mg/kg bodyweight (Equivalent or similar to OECD 401, Rat, Male / female, Experimental value, Oral, 14 day(s))

<b>2-tert-butylcyclohexanol acetate (88-41-5)</b>	
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)

<b>benzyl acetate (140-11-4)</b>	
LD50 oral rat	> 2000 mg/kg bodyweight (Equivalent or similar to OECD 401, Rat, Male / female, Experimental value, Oral, 15 day(s))
LD50 dermal rabbit	> 5000 mg/kg bodyweight (Rabbit, Experimental value, Dermal, 14 day(s))

Skin corrosion/irritation : Not classified  
Serious eye damage/irritation : Not classified  
Respiratory or skin sensitisation : Not classified  
Germ cell mutagenicity : Not classified  
Carcinogenicity : Not classified  
Reproductive toxicity : Not classified  
STOT-single exposure : Not classified  
STOT-repeated exposure : Not classified

<b>Dipropylene glycol methyl ether (34590-94-8)</b>	
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)

Aspiration hazard : Not classified

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<b>Heart air freshener - Vanilla pineapple</b>	
Viscosity, kinematic	Not applicable

## SECTION 12: Ecological information

### 12.1. Toxicity

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

<b>Dipropylene glycol methyl ether (34590-94-8)</b>	
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'

<b>4-tert-butylcyclohexyl acetate (32210-23-4)</b>	
LC50 - Fish [1]	8.6 mg/l (EU Method C.1, 96 h, Cyprinus carpio, Semi-static system, Fresh water, Experimental value, Nominal concentration)
EC50 - Crustacea [1]	5.3 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Locomotor effect)
ErC50 algae	22 mg/l (EU Method C.3, 72 h, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, GLP)
BCF - Fish [1]	234 – 334.6 l/kg (BCFBAF v3.01, QSAR, Fresh weight)
Partition coefficient n-octanol/water (Log Pow)	4.8 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 25 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	3.51 – 3.66 (log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC), Experimental value, GLP)

<b>2-tert-butylcyclohexanol acetate (88-41-5)</b>	
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)

<b>benzyl acetate (140-11-4)</b>	
LC50 - Fish [1]	4 mg/l (ASTM E729-80, 96 h, Oryzias latipes, Flow-through system, Fresh water, Experimental value)
EC50 - Crustacea [1]	17 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Semi-static system, Fresh water, Experimental value, GLP)
BCF - Fish [1]	8 (Pisces, Flow-through system, Calculated value)
Partition coefficient n-octanol/water (Log Pow)	1.96 (Experimental value, 25 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	2.4 (log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC), Experimental value, GLP)

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### 12.2. Persistence and degradability

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Persistence and degradability	No additional information available
4-tert-butylcyclohexyl acetate (32210-23-4)	
Persistence and degradability	Readily biodegradable in water.
2-tert-butylcyclohexanol acetate (88-41-5)	
Persistence and degradability	Not readily biodegradable in water.
benzyl acetate (140-11-4)	
Persistence and degradability	Readily biodegradable in water.

### 12.3. Bioaccumulative potential

Heart air freshener - Vanilla pineapple	
Bioaccumulative potential	No additional information available
4-tert-butylcyclohexyl acetate (32210-23-4)	
BCF - Fish [1]	234 – 334.6 l/kg (BCFBAF v3.01, QSAR, Fresh weight)
Partition coefficient n-octanol/water (Log Pow)	4.8 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 25 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	3.51 – 3.66 (log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC), Experimental value, GLP)
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 ( $\text{BCF} < 500$ ).
benzyl acetate (140-11-4)	
BCF - Fish [1]	8 (Pisces, Flow-through system, Calculated value)
Partition coefficient n-octanol/water (Log Pow)	1.96 (Experimental value, 25 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	2.4 (log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC), Experimental value, GLP)
Bioaccumulative potential	Low potential for bioaccumulation ( $\text{Log Kow} < 4$ ).

### 12.4. Mobility in soil

Heart air freshener - Vanilla pineapple	
Mobility in soil	No additional information available
4-tert-butylcyclohexyl acetate (32210-23-4)	
Partition coefficient n-octanol/water (Log Pow)	4.8 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 25 °C)

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4-tert-butylcyclohexyl acetate (32210-23-4)	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	3.51 – 3.66 (log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC), Experimental value, GLP)
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.

benzyl acetate (140-11-4)	
Partition coefficient n-octanol/water (Log Pow)	1.96 (Experimental value, 25 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	2.4 (log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC), Experimental value, GLP)
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
<b>14.1. UN number</b>		
1325	1325	1325
<b>14.2. Proper Shipping Name</b>		
FLAMMABLE SOLID, ORGANIC, N.O.S.	FLAMMABLE SOLID, ORGANIC, N.O.S.	Flammable solid, organic, n.o.s.
<b>14.3. Transport hazard class(es)</b>		
4.1	4.1	4.1
		
<b>14.4. Packing group</b>		
II	II	II
<b>14.5. Environmental hazards</b>		
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No



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SANS	IMDG	IATA
No supplementary information available		

### 14.6. Special precautions for user

#### SANS

Special provisions (SANS)	: 274
Limited quantities (SANS)	: 1 kg
Limited quantities (SANS)	: 1 kg
Packagings, large packagings and IBCs Packing instructions (SANS)	: P002, IBC08
Packagings, large packagings and IBCs Special packing instructions (SANS)	: B2, B4
Portable tank and bulk containers instructions (SANS)	: T3
Portable tank and bulk container special provisions (SANS)	: TP33

#### IMDG

Special provisions (IMDG)	: 274, 915
Limited quantities (IMDG)	: 1 kg
Excepted quantities (IMDG)	: E2
Packing instructions (IMDG)	: P002
IBC packing instructions (IMDG)	: IBC08
IBC special provisions (IMDG)	: B21, B4
Tank instructions (IMDG)	: T3
Tank special provisions (IMDG)	: TP33
EmS-No. (Fire)	: F-A - FIRE SCHEDULE Alfa - GENERAL FIRE SCHEDULE
EmS-No. (Spillage)	: S-G - SPILLAGE SCHEDULE Golf - FLAMMABLE SOLIDS AND SELF-REACTIVE SUBSTANCES
Stowage category (IMDG)	: B

#### IATA

PCA Excepted quantities (IATA)	: E2
PCA Limited quantities (IATA)	: Y441
PCA limited quantity max net quantity (IATA)	: 5kg
PCA packing instructions (IATA)	: 445
PCA max net quantity (IATA)	: 15kg
CAO packing instructions (IATA)	: 448
CAO max net quantity (IATA)	: 50kg
Special provisions (IATA)	: A3, A803
ERG code (IATA)	: 3L

### 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

Issue date	: 13/06/2022
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### Full text of H-statements

H227	Combustible liquid
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Full text of H-statements	
H228	Flammable solid.
H303	May be harmful if swallowed
H401	Toxic to aquatic life
H402	Harmful to aquatic life
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.