

#### 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 - 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 :

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

Flammable solids, Category 1 H228
Skin sensitisation, Category 1 H317
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 : 4-tert-butylcyclohexyl acetate
Hazard statements (GHS ZA) : H228 - Flammable solid

H317 - May cause an allergic skin reaction

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.

P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.

P272 - Contaminated work clothing should not be allowed out of the workplace.

P273 - Avoid release to the environment.

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 ${\hbox{\sf P280 - Wear eye protection, protective clothing, protective gloves.}}\\$ 

P302+P352 - IF ON SKIN: Wash with plenty of soap and water

P321 - Specific treatment (see ... on this label).

P333+P317 - If skin irritation or rash occurs: Get medical help.

P362+P364 - Take off contaminated clothing and wash it before reuse.

P370+P378 - In case of fire: Use carbon dioxide (CO2), sand, foam to extinguish.

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

: Flammable solid, May cause an allergic skin reaction, 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 Acute Tox. 5 (Dermal), H313 Skin Sens. 1B, H317 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. Not classified (Dermal) Aquatic Chronic 3, H412

#### **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 : May cause an allergic skin reaction.

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

Treat symptomatically.

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#### **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.

#### 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 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. Keep away from heat, hot surfaces, sparks,

open flames and other ignition sources. No smoking. Ground/bond container and receiving

equipment. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapours/spray. Wear personal protective equipment.

Hygiene measures : Contaminated work clothing should not be allowed out of the workplace. Wash

contaminated clothing before reuse. 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

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#### 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 : Yellow.

Odour Vanilla pineapple. Odour threshold : No data available : No data available рΗ 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 : Flammable solid. : No data available Vapour pressure : No data available Vapour pressure at 50°C : No data available Relative vapour density at 20°C : No data available Relative density Relative density of saturated gas/air mixture : No data available Density No data available Relative gas density No data available No data available Solubility 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

#### 9.2. Other information

Lower explosion limit

Upper explosion limit

No additional information available

No data available

No data available

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

#### 10.1. Reactivity

Flammable solid.

#### 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

Dipropylene glycol methyl ethe	r (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)
4-tert-butylcyclohexyl acetate (3	32210-23-4)
LD50 oral rat	3370 mg/kg bodyweight (Equivalent or similar to OECD 401, Rat, Male / female, Experimental value, Oral, 14 day(s))
LD50 dermal rabbit	> 4680 mg/kg bodyweight (Equivalent or similar to OECD 402, 24 h, Rabbit, Male / female, Experimental value, Dermal, 14 day(s))
2-tert-butylcyclohexanol acetate	e (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)
benzyl acetate (140-11-4)	·
LD50 oral rat	> 2000 mg/kg bodyweight (Equivalent or similar to OECD 401, Rat, Male / female, Experimental value, Oral, 15 day(s))
LD50 oral	> 2490 mg/kg
LD50 dermal rabbit	> 5000 mg/kg bodyweight (Rabbit, Experimental value, Dermal, 14 day(s))
Skin corrosion/irritation	· Not classified

Skin corrosion/irritation : Not classified Serious eye damage/irritation : Not classified

Respiratory or skin sensitisation : May cause an allergic skin reaction.

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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)

Aspiration hazard	Not classified
ASDITATION NAZATU	NOL CIASSIIIEU

Heart air freshener - Vanilla pineapple		
Viscosity, kinematic	Not applicable	
Dipropylene glycol methyl ether (34590-94-8)		
Animal studies and expert judgment for classification	False	
4-tert-butylcyclohexyl acetate (32210-23-4)		
Animal studies and expert judgment for classification	False	
2-tert-butylcyclohexanol acetate (88-41-5)		
Animal studies and expert judgment for classification	False	
benzyl acetate (140-11-4)		
Animal studies and expert judgment for classification	False	

#### **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 : Harmful to aquatic life.

(acuto)

Hazardous to the aquatic environment, long–term : Harmful to aquatic life with long lasting effects.

(chronic)

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' 4-tert-butylcyclohexyl acetate (32210-23-4) 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, GLP) 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)

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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)
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)
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)
benzyl acetate (140-11-4)	
LC50 - Fish [1]	4 mg/l (ASTM E729-80, 96 h, Oryzias latipes, Flow-through system, Fresh water, Experimental value, Nominal concentration)
EC50 - Crustacea [1]	17 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Semistatic system, Fresh water, Experimental value, GLP)
ErC50 algae	110 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, GLP)
BCF - Fish [1]	8 (Pisces, Flow-through system, Calculated value)
Partition coefficient n-octanol/water (Log Pow)	2 (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)

### 12.2. Persistence and degradability

Heart air freshener - Vanilla pineapple		
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	Low potential for bioaccumulation (BCF < 500).	

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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)	
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).	
benzyl acetate (140-11-4)		
BCF - Fish [1]	8 (Pisces, Flow-through system, Calculated value)	
Partition coefficient n-octanol/water (Log Pow)	2 (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 (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)	
Surface tension	62.9 mN/m (20 °C, OECD 115: Surface Tension of Aqueous Solutions)
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)
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)	
Surface tension	No data available in the literature
Partition coefficient n-octanol/water (Log Pow)	2 (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

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according to SANS 10234:2019 and SANS 11014:2010

#### **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		
1325	1325	1325
14.2. Proper Shipping Name		
FLAMMABLE SOLID, ORGANIC, N.O.S.	FLAMMABLE SOLID, ORGANIC, N.O.S.	Flammable solid, organic, n.o.s.
14.3. Transport hazard class(es)		
4.1	4.1	4.1
14.4. Packing group	'	
II	II	II
14.5. Environmental hazards		
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No
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 : P002, IBC08 Packagings, large packagings and IBCs Packing

instructions (SANS)

Packagings, large packagings and IBCs Special

packing instructions (SANS)

: B2, B4

Portable tank and bulk containers instructions : T3

(SANS)

Portable tank and bulk container special provisions : TP33

(SANS)

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) Т3 Tank special provisions (IMDG) TP33

: F-A - FIRE SCHEDULE Alfa - GENERAL FIRE SCHEDULE EmS-No. (Fire)

: S-G - SPILLAGE SCHEDULE Golf - FLAMMABLE SOLIDS AND SELF-REACTIVE EmS-No. (Spillage)

**SUBSTANCES** 

Stowage category (IMDG) : B

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#### **IATA**

PCA Excepted quantities (IATA) : E2 PCA Limited quantities (IATA) : Y441 : 5kg PCA limited quantity max net quantity (IATA) 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**

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Full text of H-statements	
H227	Combustible liquid
H228	Flammable solid
H303	May be harmful if swallowed
H313	May be harmful in contact with skin
H317	May cause an allergic skin reaction
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.

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