Safety Data Sheet

According to Regulation (EC) No 1907/2006

Good Sense 30 Day Refill Green Apple O2d

Revision: 2018-01-25 **Version:** 01.2

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier
Trade name: Good Sense 30 Day Refill Green Apple O2d

1.2 Relevant identified uses of the substance or mixture and uses advised against
Identified uses:
AISE-C18 - Air fresheners non-aerosol
Uses advised against: Uses other than those identified are not recommended

1.3 Details of the supplier of the safety data sheet
Diversey Europe Operations BV, Maarssenbroeksedijk 2, 3542DN Utrecht, The Netherlands

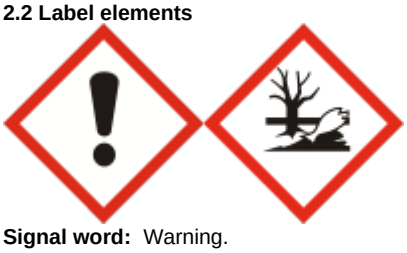
Contact details
Diversey Ltd
Weston Favell Centre, Northampton NN3 8PD, United Kingdom
Tel: 01604 405311, Fax: 01604 406809
Regulatory Email: customerservice.uk@diversey.com

1.4 Emergency telephone number
For medical or environmental emergency only:
call 0800 052 0185

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
Skin Irrit. 2 (H315)
Skin Sens. 1 (H317)
Aquatic Chronic 2 (H411)

2.2 Label elements



Signal word: Warning.

Contains 2,4-dimethylcyclohex-3-ene-1-carbaldehyde (2,4-Dimethyl-3-Cyclohexene Carboxaldehyde), 1-(2,6,6-trimethyl-3-cyclohexen-1-yl)-2-buten-1-one (Delta-Damascone).

Hazard statements:
H315 - Causes skin irritation.
H317 - May cause an allergic skin reaction.
H411 - Toxic to aquatic life with long lasting effects.

Precautionary statements:
P101 - If medical advice is needed, have product container or label at hand.
P102 - Keep out of reach of children.
P280 - Wear protective gloves.
P501 - Dispose of unused content as chemical waste.

2.3 Other hazards
No other hazards known
The product does not meet the criteria for PBT or vPvB in accordance with Regulation (EC) No 1907/2006, Annex XIII

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Ingredient(s)	EC number	CAS number	REACH number	Classification	Notes	Weight percent
2-tert-butylcyclohexyl acetate	201-828-7	88-41-5	No data available	Aquatic Chronic 2 (H411)		>= 75
2,4-dimethylcyclohex-3-ene-1-carbaldehyde	268-264-1	68039-49-6	No data available	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Skin Sens. 1B (H317) Aquatic Chronic 3 (H412)		3-10
allyl heptanoate	205-527-1	142-19-8	No data available	Acute Tox. 4 (H302) Acute Tox. 4 (H312) Skin Irrit. 2 (H315) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)		3-10
undecan-4-olide	203-225-4	104-67-6	No data available	Aquatic Chronic 2 (H411)		3-10
3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-inden-6-yl propionate	241-514-7	17511-60-3	No data available	Aquatic Chronic 2 (H411)		3-10
allyl (3-methylbutoxy)acetate	266-803-5	67634-00-8	No data available	Acute Tox. 4 (H302) Skin Irrit. 2 (H315)		1-3
ethyl 2-naphthyl ether	202-226-7	93-18-5	No data available	Skin Irrit. 2 (H315) Aquatic Chronic 2 (H411)		1-3
hexyl acetate	205-572-7	142-92-7	No data available	Flam. Liq. 3 (H226) Aquatic Chronic 2 (H411)		1-3
1-(2,6,6-trimethyl-3-cyclohexen-1-yl)-2-buten-1-one	260-709-8	57378-68-4	No data available	Skin Sens. 1 (H317)		0.1-1

* Polymer.
Workplace exposure limit(s), if available, are listed in subsection 8.1.
[1] Exempted: ionic mixture. See Regulation (EC) No 1907/2006, Annex V, paragraph 3 and 4. This salt is potentially present, based on calculation, and included for classification and labelling purposes only. Each starting material of the ionic mixture is registered, as required.
[2] Exempted: included in Annex IV of Regulation (EC) No 1907/2006.
[3] Exempted: Annex V of Regulation (EC) No 1907/2006.
[4] Exempted: polymer. See Article 2(9) of Regulation (EC) No 1907/2006.
For the full text of the H and EUH phrases mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General Information: Symptoms of intoxication may even occur after several hours. It is recommended to continue medical observation for at least 48 hours after the incident.

Inhalation: Get medical attention or advice if you feel unwell.

Skin contact: Wash skin with plenty of lukewarm, gently flowing water. Take off immediately all contaminated clothing and wash it before re-use. If skin irritation occurs: Get medical advice or attention.

Eye contact: Immediately rinse eyes cautiously with lukewarm water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice or attention.

Ingestion: Rinse mouth. Immediately drink 1 glass of water. Get medical attention or advice if you feel unwell.

Self-protection of first aider: Consider personal protective equipment as indicated in subsection 8.2.

4.2 Most important symptoms and effects, both acute and delayed

Inhalation: No known effects or symptoms in normal use.

Skin contact: Causes irritation. May cause an allergic skin reaction.

Eye contact: No known effects or symptoms in normal use.

Ingestion: No known effects or symptoms in normal use.

4.3 Indication of any immediate medical attention and special treatment needed

No information available on clinical testing and medical monitoring. Specific toxicological information on substances, if available, can be found in section 11.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Carbon dioxide. Dry powder. Water spray jet. Fight larger fires with water spray jet or alcohol-resistant foam.

5.2 Special hazards arising from the substance or mixture

No special hazards known.

5.3 Advice for firefighters

As in any fire, wear self contained breathing apparatus and suitable protective clothing including gloves and eye/face protection.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear suitable gloves.

6.2 Environmental precautions
Do not allow to enter drainage system, surface or ground water. Do not allow to enter the ground/soil. Inform responsible authorities in case undiluted product reaches drainage system, surface or ground water or the ground/soil.

6.3 Methods and material for containment and cleaning up
Collect mechanically.

6.4 Reference to other sections
For personal protective equipment see subsection 8.2. For disposal considerations see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling
Measures to prevent fire and explosions:
No special precautions required.

Measures required to protect the environment:
For environmental exposure controls see subsection 8.2.

Advices on general occupational hygiene:
Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Keep out of reach of children. Do not mix with other products unless adviced by Diversey. Wash hands before breaks and at the end of workday. Wash face, hands and any exposed skin thoroughly after handling. Take off immediately all contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Use personal protective equipment as required. Use only with adequate ventilation.

7.2 Conditions for safe storage, including any incompatibilities
Store in accordance with local and national regulations. Keep out of reach of children. Keep only in original container. Store in a closed container.
For conditions to avoid see subsection 10.4. For incompatible materials see subsection 10.5.

7.3 Specific end use(s)
No specific advice for end use available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters
Workplace exposure limits

Air limit values, if available:

Biological limit values, if available:

Recommended monitoring procedures, if available:

Additional exposure limits under the conditions of use, if available:

DNEL/DMEL and PNEC values
Human exposure
DNEL oral exposure - Consumer (mg/kg bw)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
2-tert-butylcyclohexyl acetate	No data available	No data available	No data available	No data available
2,4-dimethylcyclohex-3-ene-1-carbaldehyde	No data available	No data available	No data available	No data available
allyl heptanoate	No data available	No data available	No data available	No data available
undecan-4-olide	No data available	No data available	No data available	No data available
3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-inden-6-yl propionate	No data available	No data available	No data available	No data available
allyl (3-methylbutoxy)acetate	No data available	No data available	No data available	No data available
ethyl 2-naphthyl ether	No data available	No data available	No data available	No data available
hexyl acetate	No data available	No data available	No data available	No data available
1-(2,6,6-trimethyl-3-cyclohexen-1-yl)-2-buten-1-one	No data available	No data available	No data available	No data available

DNEL dermal exposure - Worker

Ingredient(s)	Short term - Local effects	Short term - Systemic effects (mg/kg bw)	Long term - Local effects	Long term - Systemic effects (mg/kg bw)
2-tert-butylcyclohexyl acetate	No data available	No data available	No data available	No data available
2,4-dimethylcyclohex-3-ene-1-carbaldehyde	No data available	No data available	No data available	No data available
allyl heptanoate	No data available	No data available	No data available	No data available
undecan-4-olide	No data available	No data available	No data available	No data available
3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-inden-6-yl propionate	No data available	No data available	No data available	No data available
allyl (3-methylbutoxy)acetate	No data available	No data available	No data available	No data available
ethyl 2-naphthyl ether	No data available	No data available	No data available	No data available
hexyl acetate	No data available	No data available	No data available	No data available

1-(2,6,6-trimethyl-3-cyclohexen-1-yl)-2-buten-1-one	No data available	No data available	No data available	No data available

DNEL dermal exposure - Consumer

Ingredient(s)	Short term - Local effects	Short term - Systemic effects (mg/kg bw)	Long term - Local effects	Long term - Systemic effects (mg/kg bw)
2-tert-butylcyclohexyl acetate	No data available	No data available	No data available	No data available
2,4-dimethylcyclohex-3-ene-1-carbaldehyde	No data available	No data available	No data available	No data available
allyl heptanoate	No data available	No data available	No data available	No data available
undecan-4-olide	No data available	No data available	No data available	No data available
3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-inden-6-yl propionate	No data available	No data available	No data available	No data available
allyl (3-methylbutoxy)acetate	No data available	No data available	No data available	No data available
ethyl 2-naphthyl ether	No data available	No data available	No data available	No data available
hexyl acetate	No data available	No data available	No data available	No data available
1-(2,6,6-trimethyl-3-cyclohexen-1-yl)-2-buten-1-one	No data available	No data available	No data available	No data available

DNEL inhalatory exposure - Worker (mg/m³)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
2-tert-butylcyclohexyl acetate	No data available	No data available	No data available	No data available
2,4-dimethylcyclohex-3-ene-1-carbaldehyde	No data available	No data available	No data available	No data available
allyl heptanoate	No data available	No data available	No data available	No data available
undecan-4-olide	No data available	No data available	No data available	No data available
3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-inden-6-yl propionate	No data available	No data available	No data available	No data available
allyl (3-methylbutoxy)acetate	No data available	No data available	No data available	No data available
ethyl 2-naphthyl ether	No data available	No data available	No data available	No data available
hexyl acetate	No data available	No data available	No data available	No data available
1-(2,6,6-trimethyl-3-cyclohexen-1-yl)-2-buten-1-one	No data available	No data available	No data available	No data available

DNEL inhalatory exposure - Consumer (mg/m³)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
2-tert-butylcyclohexyl acetate	No data available	No data available	No data available	No data available
2,4-dimethylcyclohex-3-ene-1-carbaldehyde	No data available	No data available	No data available	No data available
allyl heptanoate	No data available	No data available	No data available	No data available
undecan-4-olide	No data available	No data available	No data available	No data available
3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-inden-6-yl propionate	No data available	No data available	No data available	No data available
allyl (3-methylbutoxy)acetate	No data available	No data available	No data available	No data available
ethyl 2-naphthyl ether	No data available	No data available	No data available	No data available
hexyl acetate	No data available	No data available	No data available	No data available
1-(2,6,6-trimethyl-3-cyclohexen-1-yl)-2-buten-1-one	No data available	No data available	No data available	No data available

Environmental exposure

Environmental exposure - PNEC

Ingredient(s)	Surface water, fresh (mg/l)	Surface water, marine (mg/l)	Intermittent (mg/l)	Sewage treatment plant (mg/l)
2-tert-butylcyclohexyl acetate	No data available	No data available	No data available	No data available
2,4-dimethylcyclohex-3-ene-1-carbaldehyde	No data available	No data available	No data available	No data available
allyl heptanoate	No data available	No data available	No data available	No data available
undecan-4-olide	No data available	No data available	No data available	No data available
3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-inden-6-yl propionate	No data available	No data available	No data available	No data available
allyl (3-methylbutoxy)acetate	No data available	No data available	No data available	No data available
ethyl 2-naphthyl ether	No data available	No data available	No data available	No data available
hexyl acetate	No data available	No data available	No data available	No data available
1-(2,6,6-trimethyl-3-cyclohexen-1-yl)-2-buten-1-one	No data available	No data available	No data available	No data available

Environmental exposure - PNEC, continued

Ingredient(s)	Sediment, freshwater (mg/kg)	Sediment, marine (mg/kg)	Soil (mg/kg)	Air (mg/m³)
2-tert-butylcyclohexyl acetate	No data available	No data available	No data available	No data available
2,4-dimethylcyclohex-3-ene-1-carbaldehyde	No data available	No data available	No data available	No data available
allyl heptanoate	No data available	No data available	No data available	No data available
undecan-4-olide	No data available	No data available	No data available	No data available
3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-inden-6-yl propionate	No data available	No data available	No data available	No data available
allyl (3-methylbutoxy)acetate	No data available	No data available	No data available	No data available
ethyl 2-naphthyl ether	No data available	No data available	No data available	No data available
hexyl acetate	No data available	No data available	No data available	No data available
1-(2,6,6-trimethyl-3-cyclohexen-1-yl)-2-buten-1-one	No data available	No data available	No data available	No data available

8.2 Exposure controls

The following information applies for the uses indicated in subsection 1.2 of the Safety Data Sheet.
If available, please refer to the product information sheet for application and handling instructions.

Normal use conditions are assumed for this section.

Recommended safety measures for handling the undiluted product:

Appropriate engineering controls: No special requirements under normal use conditions.
Appropriate organisational controls: Avoid direct contact and/or splashes where possible. Train personnel.

Personal protective equipment
Eye / face protection: No special requirements under normal use conditions.
Hand protection: Chemical-resistant protective gloves (EN 374). Verify instructions regarding permeability and breakthrough time, as provided by the gloves supplier. Consider specific local use conditions, such as risk of splashes, cuts, contact time and temperature.
Suggested gloves for prolonged contact: Material: butyl rubber Penetration time: >= 480 min Material thickness: >= 0.7 mm
Suggested gloves for protection against splashes: Material: nitrile rubber Penetration time: >= 30 min Material thickness: >= 0.4 mm
In consultation with the supplier of protective gloves a different type providing similar protection may be chosen.
Body protection: No special requirements under normal use conditions.
Respiratory protection: No special requirements under normal use conditions.

Environmental exposure controls: Should not reach sewage water or drainage ditch undiluted or unneutralised.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties
Information in this section refers to the product, unless it is specifically stated that substance data is listed

Method / remark

Physical State: Solid
Colour: White
Odour: Perfumed
Odour threshold: Not applicable
pH:
Melting point/freezing point (°C): Not determined — Not relevant to classification of this product
Initial boiling point and boiling range (°C): Not determined

Substance data, boiling point

Ingredient(s)	Value (°C)	Method	Atmospheric pressure (hPa)
2-tert-butylcyclohexyl acetate	No data available		
2,4-dimethylcyclohex-3-ene-1-carbaldehyde	No data available		
allyl heptanoate	No data available		
undecan-4-olide	No data available		
3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-inden-6-yl propionate	No data available		
allyl (3-methylbutoxy)acetate	No data available		
ethyl 2-naphthyl ether	No data available		
hexyl acetate	No data available		
1-(2,6,6-trimethyl-3-cyclohexen-1-yl)-2-buten-1-one	No data available		

Method / remark

Flash point (°C): ≈ 79 — closed cup
Sustained combustion: Not applicable.
(UN Manual of Tests and Criteria, section 32, L.2)
Evaporation rate: Not determined
Flammability (solid, gas): Not determined
Upper/lower flammability limit (%): Not determined

Substance data, flammability or explosive limits, if available:

Method / remark

Vapour pressure: Not determined

Substance data, vapour pressure

Ingredient(s)	Value (Pa)	Method	Temperature (°C)
2-tert-butylcyclohexyl acetate	No data available		
2,4-dimethylcyclohex-3-ene-1-carbaldehyde	No data available		
allyl heptanoate	No data available		
undecan-4-olide	No data available		
3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-inden-6-yl propionate	No data available		
allyl (3-methylbutoxy)acetate	No data available		

ethyl 2-naphthyl ether	No data available		
hexyl acetate	No data available		
1-(2,6,6-trimethyl-3-cyclohexen-1-yl)-2-buten-1-one	No data available		

Method / remark

Vapour density: Not determined
Relative density: ≈ 0.95 (20 °C)
Solubility in / Miscibility with Water: Insoluble

Substance data, solubility in water

Ingredient(s)	Value (g/l)	Method	Temperature (°C)
2-tert-butylcyclohexyl acetate	No data available		
2,4-dimethylcyclohex-3-ene-1-carbaldehyde	No data available		
allyl heptanoate	No data available		
undecan-4-olide	No data available		
3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-inden-6-yl propionate	No data available		
allyl (3-methylbutoxy)acetate	No data available		
ethyl 2-naphthyl ether	No data available		
hexyl acetate	No data available		
1-(2,6,6-trimethyl-3-cyclohexen-1-yl)-2-buten-1-one	No data available		

Substance data, partition coefficient n-octanol/water (log Kow): see subsection 12.3

Method / remark

Autoignition temperature: Not determined
Decomposition temperature: Not applicable.
Viscosity: Not determined
Explosive properties: Not explosive.
Oxidising properties: Not oxidising.

9.2 Other information
Surface tension (N/m): Not determined — Not relevant to classification of this product
Corrosion to metals: Not determined — Not applicable to solids or gases

Substance data, dissociation constant, if available:

SECTION 10: Stability and reactivity

10.1 Reactivity
No reactivity hazards known under normal storage and use conditions.

10.2 Chemical stability
Stable under normal storage and use conditions.

10.3 Possibility of hazardous reactions
No hazardous reactions known under normal storage and use conditions.

10.4 Conditions to avoid
None known under normal storage and use conditions.

10.5 Incompatible materials
None known under normal use conditions.

10.6 Hazardous decomposition products
None known under normal storage and use conditions.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Mixture data:.

Relevant calculated ATE(s):
ATE - Oral (mg/kg): >2000
ATE - Dermal (mg/kg): >2000

Substance data, where relevant and available, are listed below:.

Acute toxicity
Acute oral toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)
2-tert-butylcyclohexyl acetate		No data available			
2,4-dimethylcyclohex-3-ene-1-carbaldehyde		No data available			
allyl heptanoate		No data available			
undecan-4-olide		No data available			
3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-inden-6-yl propionate		No data available			
allyl (3-methylbutoxy)acetate		No data available			
ethyl 2-naphthyl ether		No data available			
hexyl acetate		No data available			
1-(2,6,6-trimethyl-3-cyclohexen-1-yl)-2-buten-1-one		No data available			

Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)
2-tert-butylcyclohexyl acetate		No data available			
2,4-dimethylcyclohex-3-ene-1-carbaldehyde		No data available			
allyl heptanoate		No data available			
undecan-4-olide		No data available			
3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-inden-6-yl propionate		No data available			
allyl (3-methylbutoxy)acetate		No data available			
ethyl 2-naphthyl ether		No data available			
hexyl acetate		No data available			
1-(2,6,6-trimethyl-3-cyclohexen-1-yl)-2-buten-1-one		No data available			

Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
2-tert-butylcyclohexyl acetate		No data available			
2,4-dimethylcyclohex-3-ene-1-carbaldehyde		No data available			
allyl heptanoate		No data available			
undecan-4-olide		No data available			
3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-inden-6-yl propionate		No data available			
allyl (3-methylbutoxy)acetate		No data available			
ethyl 2-naphthyl ether		No data available			
hexyl acetate		No data available			
1-(2,6,6-trimethyl-3-cyclohexen-1-yl)-2-buten-1-one		No data available			

Irritation and corrosivity

Skin irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
2-tert-butylcyclohexyl acetate	No data available			
2,4-dimethylcyclohex-3-ene-1-carbaldehyde	No data available			
allyl heptanoate	No data available			
undecan-4-olide	No data available			
3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-inden-6-yl propionate	No data available			
allyl (3-methylbutoxy)acetate	No data available			
ethyl 2-naphthyl ether	No data available			
hexyl acetate	No data available			
1-(2,6,6-trimethyl-3-cyclohexen-1-yl)-2-buten-1-one	No data available			

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
2-tert-butylcyclohexyl acetate	No data available			
2,4-dimethylcyclohex-3-ene-1-carbaldehyde	No data available			
allyl heptanoate	No data available			
undecan-4-olide	No data available			
3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-inden-6-yl propionate	No data available			
allyl (3-methylbutoxy)acetate	No data available			
ethyl 2-naphthyl ether	No data available			
hexyl acetate	No data available			
1-(2,6,6-trimethyl-3-cyclohexen-1-yl)-2-buten-1-one	No data available			

Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
2-tert-butylcyclohexyl acetate	No data available			
2,4-dimethylcyclohex-3-ene-1-carbaldehyde	No data available			
allyl heptanoate	No data available			
undecan-4-olide	No data available			
3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-inden-6-yl propionate	No data available			
allyl (3-methylbutoxy)acetate	No data available			
ethyl 2-naphthyl ether	No data available			
hexyl acetate	No data available			
1-(2,6,6-trimethyl-3-cyclohexen-1-yl)-2-buten-1-one	No data available			

Sensitisation

Sensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure time (h)
2-tert-butylcyclohexyl acetate	No data available			
2,4-dimethylcyclohex-3-ene-1-carbaldehyde	No data available			
allyl heptanoate	No data available			
undecan-4-olide	No data available			
3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-inden-6-yl propionate	No data available			
allyl (3-methylbutoxy)acetate	No data available			
ethyl 2-naphthyl ether	No data available			
hexyl acetate	No data available			
1-(2,6,6-trimethyl-3-cyclohexen-1-yl)-2-buten-1-one	No data available			

Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
2-tert-butylcyclohexyl acetate	No data available			
2,4-dimethylcyclohex-3-ene-1-carbaldehyde	No data available			
allyl heptanoate	No data available			
undecan-4-olide	No data available			
3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-inden-6-yl propionate	No data available			
allyl (3-methylbutoxy)acetate	No data available			
ethyl 2-naphthyl ether	No data available			
hexyl acetate	No data available			
1-(2,6,6-trimethyl-3-cyclohexen-1-yl)-2-buten-1-one	No data available			

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Mutagenicity

Ingredient(s)	Result (in-vitro)	Method (in-vitro)	Result (in-vivo)	Method (in-vivo)
2-tert-butylcyclohexyl acetate	No data available		No data available	
2,4-dimethylcyclohex-3-ene-1-carbaldehyde	No data available		No data available	
allyl heptanoate	No data available		No data available	
undecan-4-olide	No data available		No data available	
3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-inden-6-yl propionate	No data available		No data available	
allyl (3-methylbutoxy)acetate	No data available		No data available	
ethyl 2-naphthyl ether	No data available		No data available	
hexyl acetate	No data available		No data available	
1-(2,6,6-trimethyl-3-cyclohexen-1-yl)-2-buten-1-one	No data available		No data available	

Carcinogenicity

Ingredient(s)	Effect
2-tert-butylcyclohexyl acetate	No data available
2,4-dimethylcyclohex-3-ene-1-carbaldehyde	No data available

allyl heptanoate	No data available
undecan-4-olide	No data available
3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-inden-6-yl propionate	No data available
allyl (3-methylbutoxy)acetate	No data available
ethyl 2-naphthyl ether	No data available
hexyl acetate	No data available
1-(2,6,6-trimethyl-3-cyclohexen-1-yl)-2-buten-1-one	No data available

Toxicity for reproduction

Ingredient(s)	Endpoint	Specific effect	Value (mg/kg bw/d)	Species	Method	Exposure time	Remarks and other effects reported
2-tert-butylcyclohexyl acetate			No data available				
2,4-dimethylcyclohex-3-ene-1-carbaldehyde			No data available				
allyl heptanoate			No data available				
undecan-4-olide			No data available				
3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-inden-6-yl propionate			No data available				
allyl (3-methylbutoxy)acetate			No data available				
ethyl 2-naphthyl ether			No data available				
hexyl acetate			No data available				
1-(2,6,6-trimethyl-3-cyclohexen-1-yl)-2-buten-1-one			No data available				

Repeated dose toxicity

Sub-acute or sub-chronic oral toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
2-tert-butylcyclohexyl acetate		No data available				
2,4-dimethylcyclohex-3-ene-1-carbaldehyde		No data available				
allyl heptanoate		No data available				
undecan-4-olide		No data available				
3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-inden-6-yl propionate		No data available				
allyl (3-methylbutoxy)acetate		No data available				
ethyl 2-naphthyl ether		No data available				
hexyl acetate		No data available				
1-(2,6,6-trimethyl-3-cyclohexen-1-yl)-2-buten-1-one		No data available				

Sub-chronic dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
2-tert-butylcyclohexyl acetate		No data available				
2,4-dimethylcyclohex-3-ene-1-carbaldehyde		No data available				
allyl heptanoate		No data available				
undecan-4-olide		No data available				
3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-inden-6-yl propionate		No data available				
allyl (3-methylbutoxy)acetate		No data available				
ethyl 2-naphthyl ether		No data available				
hexyl acetate		No data available				
1-(2,6,6-trimethyl-3-cyclohexen-1-yl)-2-buten-1-one		No data available				

Sub-chronic inhalation toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
2-tert-butylcyclohexyl acetate		No data available				
2,4-dimethylcyclohex-3-ene-1-carbaldehyde		No data available				
allyl heptanoate		No data available				
undecan-4-olide		No data available				
3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-inden-6-yl propionate		No data available				
allyl (3-methylbutoxy)acetate		No data available				
ethyl 2-naphthyl ether		No data available				
hexyl acetate		No data available				
1-(2,6,6-trimethyl-3-cyclohexen-1-yl)-2-buten-1-one		No data available				

Chronic toxicity

Ingredient(s)	Exposure route	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time	Specific effects and organs affected	Remark
2-tert-butylcyclohexyl acetate			No data available					
2,4-dimethylcyclohex-3-ene-1-carbaldehyde			No data available					
allyl heptanoate			No data available					
undecan-4-olide			No data available					
3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-inden-6-yl propionate			No data available					
allyl (3-methylbutoxy)acetate			No data available					
ethyl 2-naphthyl ether			No data available					
hexyl acetate			No data available					
1-(2,6,6-trimethyl-3-cyclohexen-1-yl)-2-buten-1-one			No data available					

STOT-single exposure

Ingredient(s)	Affected organ(s)
2-tert-butylcyclohexyl acetate	No data available
2,4-dimethylcyclohex-3-ene-1-carbaldehyde	No data available
allyl heptanoate	No data available
undecan-4-olide	No data available
3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-inden-6-yl propionate	No data available
allyl (3-methylbutoxy)acetate	No data available
ethyl 2-naphthyl ether	No data available
hexyl acetate	No data available
1-(2,6,6-trimethyl-3-cyclohexen-1-yl)-2-buten-1-one	No data available

STOT-repeated exposure

Ingredient(s)	Affected organ(s)
2-tert-butylcyclohexyl acetate	No data available
2,4-dimethylcyclohex-3-ene-1-carbaldehyde	No data available
allyl heptanoate	No data available
undecan-4-olide	No data available
3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-inden-6-yl propionate	No data available
allyl (3-methylbutoxy)acetate	No data available
ethyl 2-naphthyl ether	No data available
hexyl acetate	No data available
1-(2,6,6-trimethyl-3-cyclohexen-1-yl)-2-buten-1-one	No data available

Aspiration hazard
Substances with an aspiration hazard (H304), if any, are listed in section 3. If relevant, see section 9 for dynamic viscosity and relative density of the product.

Potential adverse health effects and symptoms
Effects and symptoms related to the product, if any, are listed in subsection 4.2.

SECTION 12: Ecological information

12.1 Toxicity

No data is available on the mixture.

Substance data, where relevant and available, are listed below:

Aquatic short-term toxicity

Aquatic short-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
2-tert-butylcyclohexyl acetate		No data available			
2,4-dimethylcyclohex-3-ene-1-carbaldehyde		No data available			
allyl heptanoate		No data available			
undecan-4-olide		No data available			
3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-inden-6-yl propionate		No data available			
allyl (3-methylbutoxy)acetate		No data available			
ethyl 2-naphthyl ether		No data available			
hexyl acetate		No data available			
1-(2,6,6-trimethyl-3-cyclohexen-1-yl)-2-buten-1-one		No data available			

Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
2-tert-butylcyclohexyl acetate		No data available			
2,4-dimethylcyclohex-3-ene-1-carbaldehyde		No data available			
allyl heptanoate		No data available			
undecan-4-olide		No data available			
3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-inden-6-yl propionate		No data available			
allyl (3-methylbutoxy)acetate		No data available			
ethyl 2-naphthyl ether		No data available			
hexyl acetate		No data available			
1-(2,6,6-trimethyl-3-cyclohexen-1-yl)-2-buten-1-one		No data available			

Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
2-tert-butylcyclohexyl acetate		No data available			
2,4-dimethylcyclohex-3-ene-1-carbaldehyde		No data available			
allyl heptanoate		No data available			
undecan-4-olide		No data available			
3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-inden-6-yl propionate		No data available			
allyl (3-methylbutoxy)acetate		No data available			
ethyl 2-naphthyl ether		No data available			
hexyl acetate		No data available			
1-(2,6,6-trimethyl-3-cyclohexen-1-yl)-2-buten-1-one		No data available			

Aquatic short-term toxicity - marine species

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
2-tert-butylcyclohexyl acetate		No data available			

2,4-dimethylcyclohex-3-ene-1-carbaldehyde		No data available			
allyl heptanoate		No data available			
undecan-4-olide		No data available			
3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-inden-6-yl propionate		No data available			
allyl (3-methylbutoxy)acetate		No data available			
ethyl 2-naphthyl ether		No data available			
hexyl acetate		No data available			
1-(2,6,6-trimethyl-3-cyclohexen-1-yl)-2-buten-1-one		No data available			

Impact on sewage plants - toxicity to bacteria

Ingredient(s)	Endpoint	Value (mg/l)	Inoculum	Method	Exposure time
2-tert-butylcyclohexyl acetate		No data available			
2,4-dimethylcyclohex-3-ene-1-carbaldehyde		No data available			
allyl heptanoate		No data available			
undecan-4-olide		No data available			
3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-inden-6-yl propionate		No data available			
allyl (3-methylbutoxy)acetate		No data available			
ethyl 2-naphthyl ether		No data available			
hexyl acetate		No data available			
1-(2,6,6-trimethyl-3-cyclohexen-1-yl)-2-buten-1-one		No data available			

Aquatic long-term toxicity

Aquatic long-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
2-tert-butylcyclohexyl acetate		No data available				
2,4-dimethylcyclohex-3-ene-1-carbaldehyde		No data available				
allyl heptanoate		No data available				
undecan-4-olide		No data available				
3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-inden-6-yl propionate		No data available				
allyl (3-methylbutoxy)acetate		No data available				
ethyl 2-naphthyl ether		No data available				
hexyl acetate		No data available				
1-(2,6,6-trimethyl-3-cyclohexen-1-yl)-2-buten-1-one		No data available				

Aquatic long-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
2-tert-butylcyclohexyl acetate		No data available				
2,4-dimethylcyclohex-3-ene-1-carbaldehyde		No data available				
allyl heptanoate		No data available				
undecan-4-olide		No data available				
3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-inden-6-yl propionate		No data available				
allyl (3-methylbutoxy)acetate		No data available				
ethyl 2-naphthyl ether		No data available				
hexyl acetate		No data available				
1-(2,6,6-trimethyl-3-cyclohexen-1-yl)-2-buten-1-one		No data				

		available				

Aquatic toxicity to other aquatic benthic organisms, including sediment-dwelling organisms, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw sediment)	Species	Method	Exposure time (days)	Effects observed
2-tert-butylcyclohexyl acetate		No data available				
2,4-dimethylcyclohex-3-ene-1-carbaldehyde		No data available				
allyl heptanoate		No data available				
undecan-4-olide		No data available				
3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-inden-6-yl propionate		No data available				
allyl (3-methylbutoxy)acetate		No data available				
ethyl 2-naphthyl ether		No data available				
hexyl acetate		No data available				
1-(2,6,6-trimethyl-3-cyclohexen-1-yl)-2-buten-1-one		No data available				

Terrestrial toxicity

Terrestrial toxicity - soil invertebrates, including earthworms, if available:

Terrestrial toxicity - plants, if available:

Terrestrial toxicity - birds, if available:

Terrestrial toxicity - beneficial insects, if available:

Terrestrial toxicity - soil bacteria, if available:

12.2 Persistence and degradability

Abiotic degradation

Abiotic degradation - photodegradation in air, if available:

Abiotic degradation - hydrolysis, if available:

Abiotic degradation - other processes, if available:

Biodegradation

Ready biodegradability - aerobic conditions

Ingredient(s)	Inoculum	Analytical method	DT_{50}	Method	Evaluation
2-tert-butylcyclohexyl acetate				Method not given	Not readily biodegradable.
2,4-dimethylcyclohex-3-ene-1-carbaldehyde					Not readily biodegradable.
allyl heptanoate					No data available
undecan-4-olide				OECD 301F	Readily biodegradable
3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-inden-6-yl propionate					No data available
allyl (3-methylbutoxy)acetate					No data available
ethyl 2-naphthyl ether					No data available
hexyl acetate					No data available
1-(2,6,6-trimethyl-3-cyclohexen-1-yl)-2-buten-1-one					No data available

Ready biodegradability - anaerobic and marine conditions, if available:

Degradation in relevant environmental compartments, if available:

12.3 Bioaccumulative potential

Partition coefficient n-octanol/water (log Kow)

Ingredient(s)	Value	Method	Evaluation	Remark
2-tert-butylcyclohexyl acetate	No data available			
2,4-dimethylcyclohex-3-ene-1-carbaldehyde	No data available			
allyl heptanoate	No data available			
undecan-4-olide	No data available			
3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-inden-6-yl propionate	No data available			
allyl (3-methylbutoxy)acetate	No data available			
ethyl 2-naphthyl ether	No data available			
hexyl acetate	No data available			

1-(2,6,6-trimethyl-3-cyclohexen-1-yl)-2-buten-1-one	No data available			

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
2-tert-butylcyclohexyl acetate	No data available				
2,4-dimethylcyclohex-3-ene-1-carbaldehyde	No data available				
allyl heptanoate	No data available				
undecan-4-olide	No data available				
3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-inden-6-yl propionate	No data available				
allyl (3-methylbutoxy)acetate	No data available				
ethyl 2-naphthyl ether	No data available				
hexyl acetate	No data available				
1-(2,6,6-trimethyl-3-cyclohexen-1-yl)-2-buten-1-one	No data available				

12.4 Mobility in soil

Adsorption/Desorption to soil or sediment

Ingredient(s)	Adsorption coefficient Log Koc	Desorption coefficient Log Koc(des)	Method	Soil/sediment type	Evaluation
2-tert-butylcyclohexyl acetate	No data available				
2,4-dimethylcyclohex-3-ene-1-carbaldehyde	No data available				
allyl heptanoate	No data available				
undecan-4-olide	No data available				
3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-inden-6-yl propionate	No data available				
allyl (3-methylbutoxy)acetate	No data available				
ethyl 2-naphthyl ether	No data available				
hexyl acetate	No data available				
1-(2,6,6-trimethyl-3-cyclohexen-1-yl)-2-buten-1-one	No data available				

12.5 Results of PBT and vPvB assessment

Substances that fulfill the criteria for PBT/vPvB, if any, are listed in section 3.

12.6 Other adverse effects

No other adverse effects known.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste from residues / unused products: The concentrated contents or contaminated packaging should be disposed of by a certified handler or according to the site permit. Release of waste to sewers is discouraged. The cleaned packaging material is suitable for energy recovery or recycling in line with local legislation.

European Waste Catalogue: 16 03 05* - organic wastes containing dangerous substances.

Empty packaging Recommendation: Dispose of observing national or local regulations.

SECTION 14: Transport information

Land transport (ADR/RID), Sea transport (IMDG), Air transport (ICAO-TI / IATA-DGR)

14.1 UN number: 3077

14.2 UN proper shipping name:

Environmentally hazardous substance, solid, n.o.s. (2-tert-butylcyclohexyl acetate)

14.3 Transport hazard class(es):

Class: 9

Label(s): 9

14.4 Packing group: III

14.5 Environmental hazards:
Environmentally hazardous: Yes
Marine pollutant: Yes
14.6 Special precautions for user: None known.
14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code: The product is not transported in bulk tankers.

Other relevant information:
ADR
Classification code: M7
Tunnel restriction code: E
Hazard identification number: 90
IMO/IMDG
EmS: F-A, S-F

The product has been classified, labelled and packaged in accordance with the requirements of ADR and the provisions of the IMDG Code
Transport regulations include special provisions for dangerous goods packed in small quantities classified under UN3077 or UN3082

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulations:
• Regulation (EC) No 1272/2008 - CLP
• Regulation (EC) No. 1907/2006 - REACH

Authorisations or restrictions (Regulation (EC) No 1907/2006, Title VII respectively Title VIII): Not applicable.

15.2 Chemical safety assessment
A chemical safety assessment has not been carried out on the mixture

SECTION 16: Other information

The information in this document is based on our best present knowledge. However, it does not constitute a guarantee for any specific product features and does not establish a legally binding contract

SDS code: MS1002080 **Version:** 01.2 **Revision:** 2018-01-25

Reason for revision:
This data sheet contains changes from the previous version in section(s):, 2, 3, 16

Classification procedure
The classification of the mixture is in general based on calculation methods using substance data, as required by Regulation (EC) No 1272/2008. If for certain classifications data on the mixture is available or for example bridging principles or weight of evidence can be used for classification, this will be indicated in the relevant sections of the Safety Data Sheet. See section 9 for physical chemical properties, section 11 for toxicological information and section 12 for ecological information.

Full text of the H and EUH phrases mentioned in section 3:
• H226 - Flammable liquid and vapour.
• H302 - Harmful if swallowed.
• H312 - Harmful in contact with skin.
• H315 - Causes skin irritation.
• H317 - May cause an allergic skin reaction.
• H319 - Causes serious eye irritation.
• H400 - Very toxic to aquatic life.
• H410 - Very toxic to aquatic life with long lasting effects.
• H411 - Toxic to aquatic life with long lasting effects.
• H412 - Harmful to aquatic life with long lasting effects.

Abbreviations and acronyms:
• AISE - The international Association for Soaps, Detergents and Maintenance Products
• DNEL - Derived No Effect Limit
• EUH - CLP Specific hazard statement
• PBT - Persistent, Bioaccumulative and Toxic
• PNEC - Predicted No Effect Concentration
• REACH number - REACH registration number, without supplier specific part
• vPvB - very Persistent and very Bioaccumulative
• ATE - Acute Toxicity Estimate

End of Safety Data Sheet