SAFETY DATA SHEET

According to Regulation (EU) No 830/2015

SECTION 1 IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name : EDGE FRESH CITRUS
Product code : E101201

1.2. Relevant identified uses of the substance or mixture and uses advised against

Application : Professional use. (SU22). Air care products (PC3). Airfreshener.

1.3. Details of the supplier of the safety data sheet

Supplier : HIS
G.Jubileumplein 19
B-3582 Koersel, Belgium
Telephone : +32 78 15 80 81
E-mail : info@hisbvba.com

1.4. Emergency telephone number

EMERGENCY TELEPHONE NUMBER, for DOCTORS/FIRE BRIGADE/POLICE only:
BE - Telephone : +32 78 15 80 81 (During office hours only)

EMERGENCY TELEPHONE NUMBER (in the UK and Ireland for healthcare professionals only):
National Poisons Information Service +44-344 892 0111 (24/7)

SECTION 2 HAZARDS IDENTIFICATION *

2.1. Classification of the substance or mixture

CLP classification (1272/2008/EC) : Aerosols, category 1. Eye irritation, category 2. Skin sensitization, category 1. Specific target organ toxicity after single exposure, category 3. Hazardous to the aquatic environment — Chronic category 3.
Remarks : The classification of this product is based on the non-aerosolised form of the mixture (on basis of section 1.1.3.7. of Regulation (EC) No 1272/2008).

2.2. Label elements

Label elements (1272/2008/EC):
Hazard pictograms :

Signal word : Danger

H- and P-phrases :

H222	Extremely flammable aerosol.
H317	May cause an allergic skin reaction.
H229	Pressurised container: May burst if heated.
H412	Harmful to aquatic life with long lasting effects.
P251	Do not pierce or burn, even after use.
P410 + P412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211	Do not spray on an open flame or other ignition source.
P261 spray	Avoid breathing spray.

Additional labelling

: Contains: l-beta-Pinene; 2,4-Dimethyl-3-cyclohexene carboxaldehyde; Terpinolene; Geranyl acetate; Delta-damascone; Citronellal; Alpha-Pinenes; Methylundecanal; Citral; Citronellol; Linalool; Limonene; Hexyl cinnamal; Propan-2-ol.

Other information : The product does not need to carry all label elements required by Article 17 of Regulation (EC) No 1272/2008 on the basis of Annex I, point 1.5.2.1. Exemption for packages where the contents do not exceed 125 ml.

2.3. Other hazards

Human health hazards : May cause an allergic skin reaction. Causes serious eye irritation. May cause drowsiness or dizziness. Exposure to high vapour concentrations may result in a narcotic effect. Use only as directed. Intentional misuse by deliberately concentrating and inhaling contents can be harmful or fatal.

Physical/chemical hazards : Extremely flammable. Keep away from sources of ignition — No smoking. Do not spray on a naked flame or any incandescent material. Do not spray near fire, sources of heat or live electrical equipment. Aerosol may explode from internal pressure build-up when exposed to temperatures exceeding 50 °C.

Environmental hazards : Does not contain PBT or vPvB substances in concentrations higher than 0,1%. Harmful to aquatic life with long lasting effects.

Other information : Keep out of reach of children. Avoid contact with skin. Wear suitable gloves. Caution: Do not breathe spray. Use only in well-ventilated areas. Spray in short intervals for a short period only. Ventilate well after use. Harmful to house pets.

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS *

3.2. Mixtures

Product description : Mixture.

Information on hazardous substances:

Substance name	Concentration (w/w) (%)	CAS nr.	EC number	REACH nr.	OEL
Butane Flam. Gas 1; Press. Gas H220; H280	25 - < 50	106-97-8	203-448-7	01-2119474691-32	#
Propane Flam. Gas 1; Press. Gas H220; H280	10 - < 20	74-98-6	200-827-9	01-2119486944-21	#
Ethanol Flam. Liq. 2; Eye Irrit. 2 H225; H319	10 - < 20	64-17-5	200-578-6	01-2119457610-43	#
Propan-2-ol Flam. Liq. 2; Eye Irrit. 2; STOT SE 3 H225; H319; H336	5 - < 10	67-63-0	200-661-7	01-2119457558-25	#
Oxydipropanol ----- -----	5 - < 10	25265-71-8	246-770-3	01-2119456811-38	#
Propane-1,2-diol ----- -----	1 - 5	57-55-6	200-338-0	01-2119456809-23	#
Isobutane Flam. Gas 1; Press. Gas H220; H280	1 - < 5	75-28-5	200-857-2	01-2119485395-27	#
2,6-Dimethyloct-7-en-2-ol	0,1 - < 1	18479-58-8	242-362-4	01-2119457274-37	

	Skin Irrit. 2; Eye Irrit. 2 H315; H319				
Hexyl cinnamal		0,1 - < 1	101-86-0	202-983-3	01-2119533092-50
	Skin Sens. 1B; Aquatic Chronic 2; Aquatic Acute 1 H317; H400; H411				
Limonene		0,1 - < 1	5989-27-5	227-813-5	01-2119529223-47 #
	Flam. Liq. 3; Skin Irrit. 2; Skin Sens. 1B; Asp. Tox. 1; Aquatic Acute 1; Aquatic Chronic 1 H226; H304; H315; H317; H410				
Trimethylhexyl acetate		0,1 - < 1	58430-94-7	261-245-9	01-2119972325-34
	Aquatic Chronic 2; Skin Irrit. 2 H315; H411				
Linalool		0,1 - < 1	78-70-6	201-134-4	01-2119474016-42
	Skin Irrit. 2; Eye Irrit. 2; Skin Sens. 1B H315; H319; H317				
Citronellol		0,1 - < 1	106-22-9	203-375-0	01-2119453995-23
	Eye Irrit. 2; Skin Irrit. 2; Skin Sens. 1B H319; H317; H315				
Citral		0,1 - < 1	5392-40-5	226-394-6	01-2119462829-23 #
	Eye Irrit. 2; Skin Irrit. 2; Skin Sens. 1 H319; H315; H317				
Methylundecanal			110-41-8	203-765-0	01-2119969443-29
	Skin Irrit. 2; Skin Sens. 1B; Aquatic Chronic 1; Aquatic Acute 1 H315; H317; H410; H400				
Alpha-Pinenes			80-56-8	201-291-9	01-2119519223-49
	Flam. Liq. 3; Skin Sens. 1; Asp. Tox. 1; Skin irrit 2 H226; H317; H315; H304				
Citronellal			106-23-0	203-376-6	01-2119474900-37
	Skin Sens. 1; Skin Irrit. 2; Eye Irrit. 2 H317; H315; H319				
Delta-damascone			57378-68-4	260-709-8	
	Skin Sens. 1A; Acute Tox. 4; Skin Irrit. 2; Aquatic Chronic 1; Aquatic Acute 1 H317; H302; H315; H410; H400				
Geranyl acetate			105-87-3	203-341-5	01-2119973480-35
	Skin Irrit. 2; Skin Sens. 1B; Aquatic Chronic 3 H315; H317; H412				
Terpinolene			586-62-9	209-578-0	
	Skin Sens. 1B; Asp. Tox. 1; Aquatic Chronic 1; Aquatic Acute 1 H317; H304; H400; H410				
2,4-Dimethyl-3-cyclohexene carboxaldehyde			68039-49-6	268-264-1	
	Eye Irrit. 2; Skin Irrit. 2; Skin Sens. 1; Aquatic Chronic 3 H319; H315; H317; H412				
l-beta-Pinene			18172-67-3	242-060-2	01-2119519230-54
	Flam. Liq. 3; Asp. Tox. 1; Skin Sens. 1B; Skin Irrit. 2; Aquatic Acute 1; Aquatic Chronic 1 H226; H304; H317; H315; H400; H410				

Reference is made to chapter 16 for full text of each relevant H phrase. Substance(s) with an Occupational Exposure Limit are marked with #. Occupational exposure limit(s) are listed in section 8.

SECTION 4 FIRST AID MEASURES *

4.1. Description of first aid measures

First aid measures

Inhalation	:	Move victim into fresh air. Consult a doctor if victim feels unwell.
Skin contact	:	Take off contaminated clothing. Wash off skin with plenty of water and soap before product dries up. Consult a doctor if irritation occurs.
Eye contact	:	Wash out with (lukewarm) water for at least 15 minutes. Remove contact lenses. Consult a doctor.
Ingestion	:	Aerosol/mist: Ingestion is unlikely to occur.

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

Effects and symptoms

Inhalation	:	May cause headache, dizziness and a feeling of sickness. May cause irritation to respiratory airways and coughing.
Skin contact	:	May cause dry skin. May cause redness and irritation, sensitisation. May produce an allergic reaction.
Eye contact	:	Irritant. May cause redness and pain.
Ingestion	:	Aerosol/mist: Ingestion is unlikely to occur.

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

Note to physicians : None known.

SECTION 5 FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media

Suitable	:	Carbondioxide (CO_2). Alcohol resistant foam. Dry chemical. Water fog.
Not suitable	:	Water jet.

5.2. Special hazards arising from the substance or mixture

Special exposure hazards	:	Aerosol may explode from internal pressure build-up when exposed to temperatures exceeding 50 °C. Do not expose emergency personnel to overheated aerosol containers. Water may be used to cool container and prevent explosion of the aerosol.
Hazardous thermal decomposition products	:	Carbon monoxide may be evolved if incomplete combustion occurs.

5.3. Advice for firefighters

Special protective equipment for fire-fighters	:	Fight a fire where aerosols are involved from a protected position. Use adequate respiratory equipment in case of insufficient ventilation.

SECTION 6 ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	:	Danger of slipping. Clean up spills immediately. Wear shoes with non-slip soles. Avoid contact with spilled or released material. Do not breathe vapours and/or spray. Keep away from sources of ignition — No smoking. Build up of highly flammable gasses involves an explosion risk. Vapours are heavier than air. Build up (of gasses) in low areas involves risk of suffocation.

6.2. Environmental precautions

Environmental precautions	:	Avoid release of product into sewers, surface water and/or ground water. Waste product should not be allowed to contaminate soil or water.
Other information	:	Notify authorities if any exposure to the general public or the environment occurs or is likely to occur.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Collect spilled material in containers. Collect cans in an approved container. Do not pierce aerosols. Wash away remainder with plenty of water and soap.

6.4. Reference to other sections

Reference to other sections : For guidance on selection of personal protective equipment see section 8. For guidance on disposal of spilled material see section 13.

SECTION 7 HANDLING AND STORAGE *

7.1. Precautions for safe handling

Handling : Handle in accordance with good occupational hygiene and safety practices in well-ventilated areas. Important: Pressurized container; protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Keep away from sources of ignition — No smoking. Do not spray on a naked flame or any incandescent material. Do not spray near fire, sources of heat or live electrical equipment. Electrostatic discharge may cause fire. Ensure electrical continuity by bonding and grounding (earthing) all equipment. Do not breathe spray. Avoid contact with skin and eyes.

7.2. Conditions for safe storage, including any incompatibilities

Storage : Keep frost-free, in a cool (< 35°), dry and well-ventilated place. Protect from sunlight and keep away from heat.

Recommended packaging : Not applicable.

Directive 2012/18/EU : P3a - Flammable aerosols

Qualifying quantity (tonnes) - lower-tier : 150 (net)

Qualifying quantity (tonnes) - upper-tier : 500 (net)

7.3. Specific end use(s)

Use : Use only as directed.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION *

8.1. Control parameters

Occupational exposure limits : Occupational exposure limits have not been established for this product. Derived no-effect levels (DNEL) have not been established for this product. Predicted no-effect concentrations (PNEC) have not been established for this product.

Occupational exposure limits (mg/m³):

Chemical name	Country	TWA 8 hour (mg/m3)	STEL 15 min (mg/m3)	Comments
Butane	GB	1450	1810	-
Butane		300	900	MAC RU
Propane		1800	-	
Ethanol	GB	1920	-	-
Ethanol		260	1900	Mac: NL
Propan-2-ol	GB	999	1250	-
Oxydipropanol		67	-	MAC: DE
Propane-1,2-diol	GB	474	-	Total Vapour and Particulates
Propane-1,2-diol		79	117	OEL: NO
Isobutane		1900	2400	

Limonene		110	-	MAC: DE, CH, NL
Citral		27	54	OEL: Poland

Derived no-effect level (DNEL) for workers:

Chemical name	Route of exposure	DNEL, short-term		DNEL, long-term	
		Local effect	Systemic effect	Local effect	Systemic effect
Ethanol	Dermal				343 mg/kg bw/day
	Inhalation	1900 mg/m3			950 mg/m3
Propan-2-ol	Dermal				888 mg/kg bw/day
	Inhalation				500 mg/m3
Oxydipropanol	Dermal				84 mg/kg bw/day
	Inhalation				238 mg/m3
Propane-1,2-diol	Inhalation			10 mg/m3	168 mg/m3
2,6-Dimethyloct-7-en-2-ol	Dermal				20,8 mg/kg bw/day
	Inhalation				73,5 mg/m3
Hexyl cinnamal	Dermal	0,525 mg/kg bw		0,525 mg/kg bw/day	18,2 mg/kg bw/day
	Inhalation	6,28 mg/m3			0,078 mg/m3
Limonene	Inhalation				33,3 mg/m3
Linalool	Dermal		5 mg/kg bw		2,5 mg/kg bw/day
	Inhalation		16,5 mg/m3		2,8 mg/m3
Citronellol	Dermal				45,8 mg/kg bw/day
	Inhalation				161,6 mg/m3
Citral	Dermal				1,7 mg/kg bw/day
	Inhalation				9 mg/m3
Methylundecanal	Dermal	1,67 mg/kg bw			7 mg/kg bw/day
	Inhalation				25,2 mg/m3
Alpha-Pinenes	Inhalation				5,98 mg/m3
Citronellal	Dermal				1,7 mg/kg bw/day
	Inhalation				9 mg/m3
Geranyl acetate	Dermal				35,5 mg/kg bw/day
	Inhalation				62,59 mg/m3
Terpinolene	Dermal				0,52 mg/kg bw/day
	Inhalation				3,6 mg/m3

Derived no-effect level (DNEL) for consumers:

Chemical name	Route of exposure	DNEL, short-term		DNEL, long-term	
		Local effect	Systemic effect	Local effect	Systemic effect
Ethanol	Dermal				206 mg/kg bw/day
	Inhalation	950 mg/m3			114 mg/m3
	Oral				87 mg/kg bw/day
Propan-2-ol	Dermal				319 mg/kg bw/day
	Inhalation				89 mg/m3
	Oral				26 mg/kg bw/day
Oxydipropanol	Dermal				51 mg/kg bw/day
	Inhalation				70 mg/m3
	Oral				24 mg/kg bw/day
Propane-1,2-diol	Inhalation			10 mg/m3	50 mg/m3
2,6-Dimethyloct-7-en-2-ol	Dermal				12,5 mg/kg bw/day
	Inhalation				21,7 mg/m3
	Oral				12,5 mg/kg bw/day
Hexyl cinnamal	Dermal	0,0787 mg/kg bw		0,0787 mg/kg bw/day	9,11 mg/kg bw/day
	Inhalation	4,71 mg/m3			0,019 mg/m3
	Oral				0,056 mg/kg bw/day
Limonene	Inhalation				8,33 mg/m3

	Oral				4,76 mg/kg bw/day
Linalool	Dermal		2,5 mg/kg bw	15 mg/kg bw/day	1,25 mg/kg bw/day
	Inhalation		4,1 mg/m3		0,7 mg/m3
	Oral		1,2 mg/kg bw		0,2 mg/kg bw/day
Citronellol	Dermal				27,5 mg/kg bw/day
	Inhalation				47,8 mg/m3
	Oral				13,75 mg/kg bw/day
Citral	Dermal				1 mg/kg bw/day
	Inhalation				2,7 mg/m3
	Oral				0,6 mg/kg bw/day
Methylundecanal	Dermal	0,83 mg/kg bw			3,5 mg/kg bw/day
	Inhalation				3,1 mg/m3
	Oral				3,5 mg/kg bw/day
Alpha-Pinenes	Inhalation				1,06 mg/m3
	Oral				0,31 mg/kg bw/day
Citronellal	Dermal				1 mg/kg bw/day
	Inhalation				2,7 mg/m3
	Oral				0,6 mg/kg bw/day
Geranyl acetate	Dermal				17,75 mg/kg bw/day
	Inhalation				15,4 mg/m3
	Oral				8,9 mg/kg bw/day
Terpinolene	Dermal				0,26 mg/kg bw/day
	Inhalation				0,9 mg/m3
	Oral				0,26 mg/kg bw/day

Predicted no-effect concentration (PNEC):

Chemical name	Route of exposure	Fresh water	Marine water	
Ethanol	Water	0,96 mg/l	0,79 mg/l	
	Sediment	3,6 mg/kg	2,9 mg/kg	
	Intermittent water			2,75 mg/l
	STP			580 mg/l
	Soil			0,63 mg/kg
	Oral			0,72 mg/kg food
Propan-2-ol	Water	140,9 mg/l	140,9 mg/l	
	Sediment	552 mg/kg	552 mg/kg	
	Intermittent water			140,9 mg/l
	STP			2251 mg/l
	Soil			28 mg/kg
	Oral			160 mg/kg food
Oxydipropanol	Water	0,1 mg/l	0,01 mg/l	
	Sediment	0,238 mg/kg	0,0238 mg/kg	
	Intermittent water			1 mg/l
	STP			1000 mg/l
	Soil			0,0253 mg/kg
	Oral			313 mg/kg food
Propane-1,2-diol	Water	260 mg/l	26 mg/l	
	Sediment	572 mg/kg	57,2 mg/kg	
	Intermittent water			183 mg/l
	STP			20000 mg/l
	Soil			50 mg/kg
	Oral			1133 mg/kg food
2,6-Dimethyloct-7-en-2-ol	Water	0,0278 mg/l	0,0027 mg/l	
	Sediment	0,594 mg/kg	0,0594 mg/kg	
	Intermittent water			0,278 mg/l
	STP			10 mg/l
	Soil			0,103 mg/kg
	Oral			111 mg/kg food
Hexyl cinnamal	Water	0,03 mg/l	0,003 mg/l	

	Sediment	47,7 mg/kg	4,77 mg/kg	
	Intermittent water			0,03 mg/l
	STP			10 mg/l
	Soil			9,51 mg/kg
	Oral			6,6 mg/kg food
Limonene	Water	0,0054 mg/l	0,0005 mg/l	
	Sediment	1,32 mg/kg	0,13 mg/kg	
	STP			1,8 mg/l
	Soil			0,262 mg/kg
	Oral			3,33 mg/kg food
Linalool	Water	0,2 mg/l	0,02 mg/l	
	Sediment	2,22 mg/kg	0,222 mg/kg	
	Intermittent water			2 mg/l
	STP			10 mg/l
	Soil			0,327 mg/kg
	Oral			7,8 mg/kg food
Citronellol	Water	0,0024 mg/l	0,00024 mg/l	
	Sediment	0,0256 mg/kg	0,00256 mg/kg	
	Intermittent water			0,024 mg/l
	STP			580 mg/l
	Soil			0,00371 mg/kg
Citral	Water	0,0067 mg/l	0,0006 mg/l	
	Sediment	0,125 mg/kg	0,0125 mg/kg	
	Intermittent water			0,0678 mg/l
	STP			1,6 mg/l
	Soil			0,0209 mg/kg
Methylundecanal	Sediment	0,072 mg/kg	0,007 mg/kg	
	STP			10 mg/l
	Soil			0,014 mg/kg
	Oral			313 mg/kg food
Alpha-Pinenes	Water	0,004 mg/l	0,0004 mg/l	
	Sediment	1,033 mg/kg	0,103 mg/kg	
	STP			3,26 mg/l
	Soil			0,539 mg/kg
	Oral			1,35 mg/kg food
Citronellal	Water	0,00868 mg/l	0,00087 mg/l	
	Sediment	0,159 mg/kg	0,0159 mg/kg	
	Intermittent water			0,0868 mg/l
	STP			4 mg/l
	Soil			0,0267 mg/kg
Geranyl acetate	Water	0,00372 mg/l	0,000372 mg/l	
	Sediment	0,442 mg/kg	0,442 mg/kg	
	Intermittent water			0,0372 mg/l
	STP			8 mg/l
	Soil			0,0859 mg/kg
Terpinolene	Water	0,000634 mg/l	0,000063 mg/l	
	Sediment	0,147 mg/kg	0,0147 mg/kg	
	Intermittent water			0,00634 mg/l
	STP			0,2 mg/l
	Soil			0,0291 mg/kg
	Oral			10,31 mg/kg food

8.2. Exposure controls

Engineering measures : Comply with standard precautionary measures for working with chemicals.
Hygienic measures : When using do not eat, drink or smoke.

Personal protective equipment:

The efficiency of personal protective equipment depends among other things on temperature and degree of ventilation. Always get professional advice for the particular local situation.

:

Body protection	:	Wear appropriate protective clothing, overalls or suit, and similar boots in accordance with EN 365/367 resp. 345. Suitable material: butyl. Indication of permeation breakthrough time: not known.
Respiratory protection	:	Take care of sufficient ventilation. Wear suitable respiratory protection in case of large scale exposure. Suitable: gas filter type A (brown), class I or higher on e.g. a facemask in accordance with EN 140.
Hand protection	:	Wear appropriate safety gloves in accordance with EN 374. Suitable material: butyl. ± 0,5 mm. Indication of permeation breakthrough time: not known.
Eye protection	:	Wear appropriate safety glasses with side shields, in accordance with EN 166, when there is danger of possible eye contact.
Thermal hazards	:	Aerosol may explode from internal pressure build-up when exposed to temperatures exceeding 50 °C.
Environmental exposure controls	:	Avoid release of product into surface- and/or ground water. Local guidelines on emission limits for volatile substances must be observed for the discharge of exhaust air containing vapour.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES *

9.1. Information on basic physical and chemical properties

Appearance	:	Aerosol.	
Colour	:	Colourless.	
Odour	:	Perfumed.	
Odour threshold	:	Not known.	
pH	:	Not applicable.	Almost waterfree product.
Solubility in water	:	Soluble.	
Partition coefficient (n-octanol/water)	:	Not known.	
Flash point	:	Not applicable.	Not measurable.
Flammability (solid, gas)	:	Extremely flammable.	
Auto ignition temperature	:	Not applicable.	Aerosol container explodes before reaching the auto-ignition point.
Boiling point/boiling range	:	Not known.	Not measurable.
Melting point/melting range	:	< 0 °C	
Explosive properties	:		Pressurised container: May burst if heated.
Explosion limits (in air)	:	Not known.	Lower explosion limit in air (%): 1.3 (Butane)
	:		Upper explosion limit in air (%): 19 Ethanol
Oxidising properties	:	Not applicable.	Does not contain oxidizing substances.
Decomposition temperature	:	Not applicable.	
Viscosity (20°C)	:	Not known.	
Viscosity (40°C)	:	Not relevant.	The product contains < 10% substances having an aspiration hazard.
Vapour pressure (20°C)	:	310000 Pa	
Vapour density (20°C)	:	> 1	(air = 1)
Relative density (20°C)	:	0.645 g/ml	
Evaporation rate	:	Not known.	(n-butyl acetate = 1)

SECTION 10 STABILITY AND REACTIVITY

10.1. Reactivity

Reactivity	:	See sub-sections below.

10.2. Chemical stability

Stability : Stable under normal conditions.

10.3. Possibility of hazardous reactions

Reactivity : No other hazardous reactions known.

10.4. Conditions to avoid

Conditions to avoid : Keep away from sources of ignition and sources of heat. See section 7.

10.5. Incompatible materials

Materials to avoid : Not applicable.

10.6. Hazardous decomposition products

Hazardous decomposition products : Not known.

SECTION 11 TOXICOLOGICAL INFORMATION *

11.1. Information on toxicological effects

No toxicological research has been carried out on this product.

Inhalation

- Acute toxicity : Calculated LC50: > 10 mg/l. Ingredients of unknown toxicity: 2 %. ATE: > 5 mg/l. Low toxicity. Not classified - based on available data, the classification criteria are not met. May cause damage to organs. Target organ(s): Central nervous system. Effect(s): Breathing of high vapour concentrations may cause central nervous system (CNS) depression resulting in dizziness, lightheadedness, headache, nausea and loss of coordination. Continued inhalation may result in unconsciousness and death.
- Corrosion/irritation : May cause irritation to respiratory airways and coughing. Not classified - based on available data, the classification criteria are not met.
- Sensitisation : Not classified - based on available data, the classification criteria are not met.
- Carcinogenicity : Not classified - based on available data, the classification criteria are not met.
- Mutagenicity : Not expected to be mutagenic. Not classified - based on available data, the classification criteria are not met.

Skin contact

- Acute toxicity : Calculated LD50: > 5000 mg/kg.bw. Ingredients of unknown toxicity: < 1 %. ATE: > 2000 mg/kg.bw. Low toxicity. Not classified - based on available data, the classification criteria are not met.
- Corrosion/irritation : Prolonged contact may dry out and defat the skin. Not classified - based on available data, the classification criteria are not met.
- Sensitisation : May cause sensitisation by skin contact. May produce an allergic reaction.
- Mutagenicity : Not expected to be mutagenic. Not classified - based on available data, the classification criteria are not met.

Eye contact

- Corrosion/irritation : Irritant.

Ingestion

- Acute toxicity : Aerosol/mist: Ingestion is unlikely to occur. Ingredients of unknown toxicity: < 1 %. ATE: > 2000 mg/kg.bw. Low toxicity. Not classified - based on available data, the classification criteria are not met. May cause hampered eyesight.
- Corrosion/irritation : Aerosol/mist: Ingestion is unlikely to occur. May cause a feeling of sickness, vomiting and diarrhoea. Not classified - based on available data, the classification criteria are not met.
- Carcinogenicity : Aerosol/mist: Ingestion is unlikely to occur. Not classified - based on available data, the classification criteria are not met.

Mutagenicity : Aerosol/mist: Ingestion is unlikely to occur. Not expected to be mutagenic. Not classified - based on available data, the classification criteria are not met.

Toxicological information:

Chemical name	Property		Method	Test animal
Ethanol	Skin irritation	Non-irritant	OECD 404	Rabbit
	Mutagenicity	Negative	OECD 471	Salmonella typhimurium
	Genotoxicity - in vitro	Not genotoxic	OECD 476	
	NOEL (carcinogenicity, inh.)	13 mg/m3		
	Genotoxicity - in vivo	Not genotoxic	OECD 478	Mouse
	NOEL (carcinogenicity, oral)	> 4400 mg/kg bw/d		Mouse
	Eye irritation	Irritant	OECD 405	Rabbit
	LD50 (oral)	10470 mg/kg bw	OECD 401	Rat
	NOAEL (development, oral)	6400 mg/kg bw/d		
	Skin sensitisation	Not sensitizing	OECD 406	Guinea pig
	NOAEL (fertility, oral)	20000 mg/kg bw/d	OECD 415	Rat
	NOAEL (inhalation)	23000 mg/m3		Rat
	LD50 (dermal)	15800 mg/kg bw	-----	Rabbit
	NOAEL (oral)	1730 mg/kg bw/d	OECD 408	Rat
	LC50 (inhalation)	117000 mg/m3	OECD 403	Rat
Propan-2-ol	LD50 (oral)	5840 mg/kg bw	OECD 401	Rat
	LC50 (inhalation)	> 25062 mg/m3	OECD 403	Rat
	LD50 (dermal)	12800 mg/kg bw	OECD 402	Rabbit
	NOAEL (oral)	870 mg/kg bw/d	-----	Rat
	Genotoxicity - in vitro	Not genotoxic	OECD 476	
	NOEL (carcinogenicity, inh.)	12500 mg/m3		Mouse
	Genotoxicity - in vivo	Not genotoxic	OECD 474	Mouse
	NOAEL (inhalation)	12500 mg/m3	OECD 451	Rat
	Mutagenicity	Negative	OECD 471	
	Skin sensitisation	Not sensitizing	OECD 406	Guinea pig
	NOEL (carcinogenicity, oral)	Not carcinogenic	OECD 416	Rat
	NOAEL (development, oral)	400 mg/kg bw/d		Rat
	NOAEL (fertility, oral)	407 mg/kg bw/d		Rat
	Eye irritation	Irritant	OECD 405	Rabbit
	Skin irritation	Slightly irritant	OECD 404	Rabbit
2,6-Dimethyloct-7-en-2-ol	LC50 (inhalation) - estimate	> 5000 mg/m3		
	NOAEL (development) - estimate	1000 mg/kg.d	Read across	Rat
	Mutagenicity	Not mutagenic	OECD 471	
	Genotoxicity - in vitro	Not genotoxic	OECD 476	
	NOAEL (oral) - estimate	500 mg/kg bw/d	Read across	Rat
	LD50 (oral)	3600 mg/kg bw	-----	Rat
	Skin sensitisation	Not sensitizing		
	Skin irritation	Slightly irritant	-----	Rabbit
	Eye irritation	Moderately irritant	OECD 405	Rabbit
	LD50 (dermal)	> 5000 mg/kg bw	-----	Rabbit
Hexyl cinnamal	Genotoxicity - in vivo	Not genotoxic	OECD 474	
	Genotoxicity - in vitro	Not genotoxic	OECD 476	
	NOAEL (oral) - estimate	30 mg/kg bw/d	Read across	Rat

	LD50 (dermal)	> 3000 mg/kg bw	OECD 402	Rabbit
	LC50 (inhalation)	> 5000 mg/m3	OECD 403	Rat
	LD50 (oral)	> 2450 mg/kg bw	OECD 401	Rat
	Mutagenicity	Negative	OECD 471	Salmonella typhimurium
	Skin sensitisation	2372 ug/cm2	OECD 429	Mouse
	Skin irritation	Moderately irritant	OECD 404	Rabbit
	NOAEL (development, oral)	100 mg/kg bw/d	OECD 421	Rat
	Eye irritation	Non-irritant		Rabbit
	NOAEL (dermal)	25 mg/kg bw/d		Rat
Limonene	NOEL (carcinogenicity) - estimate	Not carcinogenic	-----	-----
	NOEL (carcinogenicity, oral)	> 75 mg/kg bw/d	OECD 451	Rat
	LC50 (inhalation) - estimate	> 5000 mg/m3	-----	-----
	Genotoxicity - in vivo	> 2000 mg/kg bw/d		Rat
	Eye irritation	Non-irritant	OECD 405	Rabbit
	Mutagenicity	Negative	OECD 471	
	Skin sensitisation	10075 ug/cm2	OECD 429	Mouse
	NOAEL (development, oral)	600 mg/kg bw/d		Rat
	Skin irritation	Irritant	-----	-----
	NOEL (oral)	5 mg/kg bw/d	-----	Rat
	LD50 (dermal)	> 2000 mg/kg bw	-----	Rabbit
	LD50 (oral)	4400 mg/kg bw	-----	Rat
	Genotoxicity - in vitro	Not genotoxic		
	NOAEL (oral)	150 mg/kg bw/d		Rat
Linalool	Skin irritation	Mildly irritant	-----	Human
	LD50 (oral)	2790 mg/kg bw	-----	Rat
	Genotoxicity - in vivo	Not genotoxic	OECD 475	Mouse
	Skin irritation	Irritant	OECD 404	Rabbit
	Mutagenicity	Negative	OECD 471	Salmonella typhimurium
	Skin sensitisation	12650 ug/cm2	OECD 429	Mouse
	NOAEL (fertility, oral)	365 mg/kg bw/d	OECD 421	Rat
	NOAEL (development, oral)	365 mg/kg bw/d	OECD 421	Rat
	LD50 (dermal)	5610 mg/kg bw	OECD 402	Rabbit
	LC50 (inhalation)	> 3200 mg/m3	-----	Mouse
	NOAEL (oral)	117 mg/kg bw/d	OECD 407	Rat
	NOAEL (dermal)	250 mg/kg bw/d	OECD 411	Rat
	Eye irritation	Irritant	OECD 405	Rabbit
Citronellol	Genotoxicity - in vitro	Not genotoxic		
	Skin sensitisation	10875 ug/cm2	OECD 429	Mouse
	Mutagenicity	Not mutagenic	OECD 471	Salmonella typhimurium
	NOAEL (oral)	> 50 mg/kg bw/d		Rat
	Skin irritation	Moderately irritant		Rabbit
	LD50 (oral)	3450 mg/kg bw	-----	Rat
	LD50 (dermal)	2650 mg/kg bw		Rabbit
	NOAEL (fertility, dermal)	300 mg/kg bw/d	OECD 421	Rat
	NOAEL (developmental toxicity, dermal)	> 300 mg/kg bw/d	OECD 421	Rat
	Skin irritation	Moderately irritant	Patch test	Human
	Eye irritation	Moderately irritant		Rabbit
Citral	Skin sensitisation	1414 ug/cm2	OECD 429	Mouse
	NOAEL (development, oral)	200 mg/kg bw/d	OECD 421	Rat

	LD50 (dermal)	2250 mg/kg bw	-----	Rabbit
	NOAEL (oral)	833 mg/kg bw/d	-----	Rat
	Genotoxicity - in vitro	Not genotoxic		
	LD50 (oral)	4960 mg/kg bw	-----	Rat
	Mutagenicity	Negative	OECD 471	
	NOEL (carcinogenicity, oral)	> 100 mg/kg bw/d	OECD 453	Rat
	NOAEL (developmental toxicity, inh.)	423 mg/m3	-----	Rat
	Skin irritation	Irritant		Human
	Skin irritation	Moderately irritant		Rabbit
	Eye irritation	Slightly irritant	OECD 405	Rabbit
	Genotoxicity - in vivo	Negative	OECD 474	Mouse
	NOAEL (fertility, oral)	> 1000 mg/kg bw/d	OECD 421	Rat
Methylundecanal	LD50 (dermal)	> 10000 mg/kg bw		Rabbit
	LD50 (oral)	> 5000 mg/kg bw		Rat
Alpha-Pinenes	NOAEL (dermal) - estimate	> 100 mg/kg bw/d		
	Skin sensitisation	Sensitizing.	-----	Guinea pig
	Skin irritation	Non-irritant	-----	Human
	NOAEL (development, oral)	260 mg/kg bw/d		Rat
	Skin irritation	Moderately irritant	-----	Rabbit
	LD50 (dermal)	> 5000 mg/kg bw	-----	Rabbit
	Mutagenicity	Not mutagenic	-----	Salmonella typhimurium
	Eye irritation - estimate	Moderately irritant	Read across	Rabbit
	Genotoxicity - estimate	Not genotoxic	Read across	
	NOAEL (development) - estimate	250 mg/kg.d	Read across	Rat
	LD50 (oral)	3700 mg/kg bw	-----	Rat
	NOAEL (inhalation)	170 mg/m3	OECD 413	Rat
	NOAEL (oral) - estimate	250 mg/kg bw/d	Read across	
Citronellal	LD50 (oral)	2423 mg/kg bw	OECD 401	Rat
	LD50 (dermal)	> 2500 mg/kg bw		Rabbit
	Skin irritation	Irritant		Rabbit
	Eye irritation	Irritant		Rabbit
	Mutagenicity	Negative	OECD 471	Salmonella typhimurium
	Genotoxicity - in vitro	Not genotoxic	OECD 476	
	NOAEL (fertility) - estimate	1000 mg/kg.d	Read across	Rat
	Skin sensitisation	Sensitizing.	OECD 406	Guinea pig
	NOAEL (oral) - estimate	100 mg/kg bw/d	OECD 453	Rat
	NOEL (carcinogenicity) - estimate	100 mg/kg.d	OECD 453	Rat
	NOAEL (development) - estimate	200 mg/kg.d	Read across	Rat
	LC50 (inhalation)	> 1390 mg/m3	-----	Rat
Geranyl acetate	Skin sensitisation	Sensitizing.	OECD 429	Mouse
	Mutagenicity	Negative	OECD 471	-----
	LD50 (oral)	6330 mg/kg bw	-----	Rat
	LD50 (dermal)	> 5460 mg/kg bw		Rabbit
	Skin irritation	Non-irritant		Rabbit
	NOAEL (dermal) - estimate	> 1000 mg/kg bw/d	Read across	Mouse
	NOAEL (oral)	2000 mg/kg bw/d		Rat

	NOEL (carcinogenicity) - estimate	> 2000 mg/kg.d	Read across	Rat
Terpinolene	Genotoxicity - estimate	Not genotoxic	QSAR	-----
	Mutagenicity	Negative		
	Skin sensitisation	Sensitizing.	OECD 429	Mouse
	Skin irritation	Non-irritant		Rat
	NOAEL (oral)	161,5 mg/kg bw/d	OECD 422	Rat
	Eye irritation	Slightly irritant	OECD 405	Rabbit
	NOAEL (oral) - estimate	1200 mg/kg bw/d	Read across	
	Genotoxicity - in vitro	Not genotoxic		
	Mutagenicity - estimate	Not mutagenic	Read across	
	NOAEL (development) - estimate	591 mg/kg.d	Read across	
	NOAEL (fertility) - estimate	> 500 mg/kg.d	Read across	
	NOEL (carcinogenicity) - estimate	Not carcinogenic		
	LD50 (oral) - estimate	1200 mg/kg bw	Read across	
	LD50 (oral)	3860 mg/kg bw		Rat
	LD50 (dermal)	> 5000 mg/kg bw		Rabbit
2,4-Dimethyl-3-cyclohexene carboxaldehyde	Skin sensitisation	5900 ug/cm2		
	LD50 (oral)	> 2000 mg/kg bw		Rat
	LD50 (dermal)	> 2000 mg/kg bw		Rabbit
	Mutagenicity	Not mutagenic		Salmonella typhimurium
l-beta-Pinene	Skin sensitisation	7250 ug/cm2	OECD 429	Mouse
	NOAEL (inhalation) - estimate	283 mg/m3	-----	Mouse
	Eye irritation	Non-irritant	OECD 405	Rabbit
	Skin irritation	Irritant	OECD 439	-----
	LD50 (dermal)	2000 mg/kg bw	-----	-----
	LD50 (oral)	3700 mg/kg bw	-----	-----

SECTION 12 ECOLOGICAL INFORMATION *

12.1. Toxicity

No ecotoxicological research has been carried out on this product.

Ecotoxicity : Harmful to aquatic organisms. Calculated LC50 (fish): 52 mg/l. Calculated EC50 (waterflea): 45 mg/l. Contains < 1 % of components with unknown hazards to the aquatic environment.

12.2. Persistence and degradability

Persistence – degradability : May cause long-term adverse effects in the aquatic environment.

12.3. Bioaccumulative potential

Bioaccumulative potential : Contains substances that are potentially bioaccumulating (Log Pow > 3).

12.4. Mobility in soil

Mobility : Not applicable.

12.5. Results of PBT and vPvB assessment

PBT/vPvB assessment : Does not contain PBT or vPvB substances in concentrations higher than 0,1%.

12.6. Other adverse effects

Other information : Not applicable.

Ecological information:

Chemical name	Property		Method	Test animal
Hexyl cinnamal	LC50 (fish)	1,7 mg/l	OECD 203	Pimephales promelas
	IC50 (algea)	> 0,32 mg/l	OECD 201	Desmodesmus subspicatus
	NOEC (fish)	0,93 mg/l	OECD 203	Pimephales promelas
	Ultimate aerobic biodegradation (%)	97 %	OECD 301 F	
	Log P(ow)	5,3		
Limonene	LC50 (fish)	0,720 mg/l	OECD 203	Pimephales promelas
	EC50 (waterflea)	0,36 mg/l	OECD 202	Daphnia magna
	NOEC (waterflea) - chronic	0,15 mg/l.d		Daphnia magna
	Ultimate aerobic biodegradation (%)	> 92 %		
	Log P(ow)	4,38		
	BCF	683		
Trimethylhexyl acetate	LC50 (fish)	7,7 mg/l	OECD 203	Pimephales promelas
	EC50 (waterflea)	> 5,4 mg/l	OECD 202	Daphnia magna
	Ultimate aerobic biodegradation (%)	80 %	OECD 301 F	
	Log P(ow)	4,6		
Methylundecanal	LC50 (fish)	0,35 mg/l	OECD 203	Oncorhynchus mykiss
	EC50 (waterflea)	0,21 mg/l	OECD 202	Daphnia magna
	Ultimate aerobic biodegradation (%)	> 68 %	OECD 301 F	
	Log P(ow)	4,97		
Geranyl acetate	EC50 (waterflea)	14,1 mg/l	OECD 202	Daphnia magna
	IC50 (algea)	3,72 mg/l	OECD 201	Desmodesmus subspicatus
	LC50 (fish) - estimate	68 mg/l	Read across	Leuciscus idus
	Ultimate aerobic biodegradation (%)	> 70 %		
	Log P(ow)	4,3		
	BCF	235		
Terpinolene	LC50 (fish)	0,805 mg/l	OECD 203	Brachydanio rerio
	EC50 (waterflea)	0,634 mg/l	OECD 202	Daphnia magna
	IC50 (algea)	0,692 mg/l	OECD 201	Pseudokirchnerella subcapitata
	LC50 (bacteria)	46 mg/l	OECD 209	
	Ultimate aerobic biodegradation (%)	81 %	OECD 301 D	
	Log P(ow)	5,1000		
2,4-Dimethyl-3-cyclohexene carboxaldehyde	Log P(ow)	2,7		
l-beta-Pinene	LC50 (fish)	0,502 mg/l	-----	Pimephales promelas
	EC50 (waterflea) - estimate	1,250 mg/l	-----	Daphnia magna
	Ultimate aerobic biodegradation (%)	76 %	OECD 301 D	
	Log P(ow)	4,4		

VOC-content (EC) : 637 g/l

SECTION 13 DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Product residues	:	Recyclable metal container. Do not puncture or burn even after use. Do not dispose empty pack with waste produced by households. Containers may be recycled. Treat product residues and non-empty pack as hazardous waste.
Additional warning	:	Residues may cause an explosion hazard. Do not puncture, cut or weld uncleaned drums.
European waste catalogue	:	Dispose hazardous waste in accordance with Directive 91/689/EEC under acknowledgement of a waste code according to Commission Decision 2000/532/EC to an official chemical waste depot.
Local legislation	:	Disposal should be in accordance with applicable regional, national, and local laws and regulations. Local regulations may be more stringent than regional or national requirements and must be complied with.

SECTION 14 TRANSPORT INFORMATION

14.1. UN number

UN nr. : UN 1950

14.2. UN proper shipping name

Transport name : AEROSOLS

14.3/14.4/14.5. Transport hazard class(es)/Packing group/Environmental hazards

ADR/RID/ADN (road/railway/inland waterways)

Class	:	2
Classification code	:	5F
Packaging group	:	-
Danger label	:	2.1
	:	

Other information : Not intended for carriage by inland waterways in tank-vessels.

IMDG (sea)

Class	:	2
Packaging group	:	-
EmS (fire / spill)	:	F - D / S - U
Marine pollutant	:	No

IATA (air)

Class	:	2

14.6. Special precautions for user

Other information : Country specific variations may apply. It is possible that a "Limited Quantity" exemption applies to the transport of this product.

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Marpol : Not intended to be carried in bulk according to International Maritime Organisation (IMO) instruments. Packaged liquids are not considered bulk.

SECTION 15 REGULATORY INFORMATION

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

Community regulations	:	Regulation (EC) No 830/2015 (REACH), Regulation (EC) No 1272/2008 (CLP), 75/324/EEC (aerosols) and other regulations.
	:	In the UK it is recommended that all aerosols should be labelled on the back with the warning about the dangers of volatile solvent abuse. The label should contain the badge 'Solvent Abuse Can Kill Instantly' accompanied by the phrase 'Use only as directed'.

15.2. Chemical safety assessment

Chemical safety assessment	:	Not applicable.

SECTION 16 OTHER INFORMATION

16.1. Other information

The information in this safety data sheet is compiled in compliance with Regulation (EC) No 830/2015 and accurate to the best of our knowledge and experience at the date of issue specified. It is the user's obligation to use this product safely and to comply with all applicable laws and regulations concerning the use of the product. This safety data sheet complements the technical information sheets but does not replace them and offers no warranty with regard to product properties.

Users are also forewarned for any hazards involved when the product is used for other purposes than those for which it is designed.

Changed or new information with regard to the previous release is indicated with an asterisk (*).

Full text of H-phrases mentioned in section 3:

H220	Extremely flammable gas.
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H280	Contains gas under pressure; may explode if heated.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
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.

Full text of hazard classes mentioned in section 3:

Flam. Gas 1	:	Flammable gas, category 1.
Press. Gas	:	Compressed gas.
Flam. Liq. 2	:	Flammable liquid, category 2.
Flam. Liq. 3	:	Flammable liquid, hazard category 3.
Acute Tox. 4	:	Acute toxicity, category 4.
Skin Irrit. 2	:	Skin irritation, category 2.
Eye Irrit. 2	:	Eye irritation, category 2.
Skin Sens. 1	:	Skin sensitization, category 1.
STOT SE 3	:	Specific target organ toxicity after single exposure, category 3.
Asp. Tox. 1	:	Aspiration hazard, category 1.
Aquatic Chronic 1	:	Hazardous to the aquatic environment — Chronic category 1.
Aquatic Chronic 2	:	Hazardous to the aquatic environment — Chronic category 2.
Aquatic Chronic 3	:	Hazardous to the aquatic environment — Chronic category 3.
Aquatic Acute 1	:	Hazardous to the aquatic environment — Acute category 1.

List of abbreviations and acronyms that could be (but not necessarily are) used in this safety data sheet:

ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor

DNEL	Derived no-effect level
ECETOC TRA	European centre for ecotoxicology and toxicology of chemicals. Targeted risk assessment
EU	European Union
EUSES	European Union System for the Evaluation of Substances
IBC code	Intermediate Bulk Container
LD50 LC50	Lethal Dose/Concentration for 50% of a population
NOAEL	No Observed (Adverse) Effect Level
NOEC	No observed effect concentration
OEL	Occupational exposure limit
PBT	Persistent, Bioaccumulative and Toxic
PC	Chemical product category
PNEC	Predicted no-effect concentration
STP	Sewage Treatment Plant
SU	Sector of Use
SVHC	Substance of very high concern
TWA/STEL	Time-Weighted Average/Short Term Exposure Limit
vPvB	Very Persistent and Very Bioaccumulative

Number format : "," used as decimal separator.