

acc. to 29 CFR 1910.1200 App D

Refresh Vent Sticks - Mixed Berries

Version number: 3.0 Revision: 2020-10-21 Replaces version of: 2020-06-09 (2)

SECTION 1: Identification

1.1 Product identifier

Trade name Refresh Vent Sticks - Mixed Berries

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

Relevant identified uses Consumer use: Air Freshener

1.3 Details of the supplier of the safety data sheet

Energizer Manufacturing, Inc. 25225 Detroit Rd. Westlake OH 44145 United States

Telephone: 800-383-7323; 314-985-2000 (USA / CANADA)

Website: http://data.energizer.com

Energizer Trading Ltd.

Sword House, Totteridge Road, High Wycombe, HP13 6DG, UK

Telephone: +44(0)8000353376

e-mail: ConsumerServiceEU@energizer.com

1.4 Emergency telephone number

Emergency information service 1-314-985-1511 Int'l: 1-800-526-4727

This number is only available during the following

office hours: Mon-Fri 09:00 AM - 05:00 PM

SECTION 2: Hazard(s) identification

2.1 Classification of the substance or mixture

Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

Section	Hazard class	Category	Hazard class and category	Hazard state- ment
A.4S	skin sensitization	1	Skin Sens. 1	H317

For full text of abbreviations: see SECTION 16.

2.2 Label elements

Labelling acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

- Signal word warning

- Pictograms

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GHS07



- Hazard statements

H317 May cause an allergic skin reaction.

- Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children. P103 Read label before use.

P261 Avoid breathing dust/fume/gas/mist/vapors/spray.

P272 Contaminated work clothing must not be allowed out of the workplace.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

P302+P352 If on skin: Wash with plenty of water. P321 Specific treatment (see on this label).

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P363 Wash contaminated clothing before reuse.

P501 Dispose of contents/container in accordance with local/regional/national/international regula-

tions.

2.2.1.7 - Hazardous ingredients for labelling

Orange Oil Valencia, Aldehyde C-16, Geraniol, Coumarin, Linalool

2.3 Other hazards

Hazards not otherwise classified

Harmful to aquatic life with long lasting effects (GHS category 3: aquatic toxicity - acute and/or chronic).

Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not relevant (mixture)

3.2 Mixtures

Description of the mixture

Name of substance	Identifier	Wt%	Classification acc. to GHS	Pictograms
benzyl benzoate	CAS No 120-51-4	5 – < 10	Acute Tox. 4 / H302	(1)
Aldehyde C-16	CAS No 77-83-8	1-<5	Skin Sens. 1B / H317	1

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Name of substance	Identifier	Wt%	Classification acc. to GHS	Pictograms
methyl anthranilate	CAS No 134-20-3	1-<5	Eye Irrit. 2 / H319	<u>(1)</u>
Linalool	CAS No 78-70-6	<1	Skin Irrit. 2 / H315 Eye Irrit. 2 / H319 Skin Sens. 1B / H317 Flam. Liq. 4 / H227	<u>(1)</u>
Orange Oil Valencia	CAS No 8008-57-9 8028-48-6 68606-94-0	<1	Skin Irrit. 2 / H315 Skin Sens. 1A / H317 Asp. Tox. 1 / H304 Flam. Liq. 3 / H226	(1)
Geraniol	CAS No 106-24-1	<1	Skin Irrit. 2 / H315 Eye Dam. 1 / H318 Skin Sens. 1 / H317	(!)
Coumarin	CAS No 91-64-5	<1	Acute Tox. 3 / H301 Acute Tox. 3 / H311 Skin Sens. 1 / H317	\$ \(\frac{1}{2}\)

For full text of abbreviations: see SECTION 16.

SECTION 4: First-aid measures

4.1 Description of first- aid measures

General notes

Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything by mouth.

Following inhalation

If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. Provide fresh air.

Following skin contact

Wash with plenty of soap and water.

Following eye contact

Remove contact lenses, if present and easy to do. Continue rinsing. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

Following ingestion

Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms and effects are not known to date.

4.3 Indication of any immediate medical attention and special treatment needed

none

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SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water, Foam, ABC-powder

Unsuitable extinguishing media

Water jet

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products

Carbon monoxide (CO), Carbon dioxide (CO2)

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Coordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Remove persons to safety.

For emergency responders

Wear breathing apparatus if exposed to vapors/dust/aerosols/gases.

6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it.

6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill

Covering of drains, Take up mechanically

Advice on how to clean up a spill

Take up mechanically.

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

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SECTION 7: Handling and storage

7.1 **Precautions for safe handling**

Recommendations

- Measures to prevent fire as well as aerosol and dust generation
- Use local and general ventilation. Use only in well-ventilated areas. Ground/bond container and receiving equipment.
- Specific notes/details

Dust deposits may accumulate on all deposition surfaces in a technical room. The product in the delivered form is not dust explosion capable; the enrichment of fine dust however leads to the danger of dust explosion.

Advice on general occupational hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

7.2 Conditions for safe storage, including any incompatibilities

Managing of associated risks

- Explosive atmospheres Removal of dust deposits.

7.3 Specific end use(s)

See section 16 for a general overview.

SECTION 8: Exposure controls/personal protection

8.1 **Control parameters**

Occupational exposure limit values (Workplace Exposure Limits)

Coun try	Name of agent	CAS No	Iden- tifier	TWA [ppm]	TWA [mg/ m³]	STEL [ppm]	STEL [mg/ m³]	Ceil- ing-C [ppm]	Ceil- ing-C [mg/ m³]	Nota tion	Sourc e
US	polyvinyl chloride	9002-86-	TLV®		1					r	AC- GIH® 2019

Notation

Ceiling-C ceiling value is a limit value above which exposure should not occur

respirable fraction

STEL short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period

(unless otherwise specified)

TWA time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-

weighted average (unless otherwise specified

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Relevant DNELs of components of the mixture

Name of substance	CAS No	End- point	Threshold level	Protection goal, route of exposure	Used in	Exposure time
benzyl benzoate	120-51-4	DNEL	5.1 mg/m ³	human, inhalatory	worker (industry)	chronic - system- ic effects
benzyl benzoate	120-51-4	DNEL	102 mg/m ³	human, inhalatory	worker (industry)	acute - systemic effects
benzyl benzoate	120-51-4	DNEL	2.6 mg/kg bw/day	human, dermal	worker (industry)	chronic - system- ic effects
Aldehyde C-16	77-83-8	DNEL	2.45 mg/m³	human, inhalatory	worker (industry)	chronic - system- ic effects
Aldehyde C-16	77-83-8	DNEL	0.7 mg/kg bw/day	human, dermal	worker (industry)	chronic - system- ic effects
Linalool	78-70-6	DNEL	2.8 mg/m ³	human, inhalatory	worker (industry)	chronic - system- ic effects
Linalool	78-70-6	DNEL	16.5 mg/m³	human, inhalatory	worker (industry)	acute - systemic effects
Linalool	78-70-6	DNEL	2.5 mg/kg bw/day	human, dermal	worker (industry)	chronic - system- ic effects
Linalool	78-70-6	DNEL	5 mg/kg bw/day	human, dermal	worker (industry)	acute - systemic effects
Orange Oil Valencia	8008-57-9 8028-48-6 68606-94-0	DNEL	31.1 mg/m³	human, inhalatory	worker (industry)	chronic - system- ic effects
Orange Oil Valencia	8008-57-9 8028-48-6 68606-94-0	DNEL	8.89 mg/kg bw/day	human, dermal	worker (industry)	chronic - system- ic effects
Orange Oil Valencia	8008-57-9 8028-48-6 68606-94-0	DNEL	185.8 µg/ cm²	human, dermal	worker (industry)	acute - local ef- fects
Geraniol	106-24-1	DNEL	161.6 mg/ m³	human, inhalatory	worker (industry)	chronic - system- ic effects
Geraniol	106-24-1	DNEL	12.5 mg/kg bw/day	human, dermal	worker (industry)	chronic - system- ic effects
Geraniol	106-24-1	DNEL	11,800 µg/ cm²	human, dermal	worker (industry)	chronic - local ef- fects
Coumarin	91-64-5	DNEL	6.78 mg/m ³	human, inhalatory	worker (industry)	chronic - system- ic effects
Coumarin	91-64-5	DNEL	0.79 mg/kg bw/day	human, dermal	worker (industry)	chronic - system- ic effects

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Relevant PNECs of components of the mixture

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Name of substance	CAS No	End- point	Threshold level	Organism	Environmental compartment	Exposure time
benzyl benzoate	120-51-4	PNEC	0.017 ^{mg} / _l	aquatic organisms	freshwater	short-term (single instance)
benzyl benzoate	120-51-4	PNEC	0.002 ^{mg} / _l	aquatic organisms	marine water	short-term (single instance)
benzyl benzoate	120-51-4	PNEC	100 ^{mg} / _l	aquatic organisms	sewage treat- ment plant (STP)	short-term (single instance)
benzyl benzoate	120-51-4	PNEC	10.66 ^{mg} / _{kg}	aquatic organisms	freshwater sedi- ment	short-term (single instance)
benzyl benzoate	120-51-4	PNEC	1.07 ^{mg} / _{kg}	aquatic organisms	marine sediment	short-term (single instance)
benzyl benzoate	120-51-4	PNEC	2.12 ^{mg} / _{kg}	terrestrial organ- isms	soil	short-term (single instance)
Aldehyde C-16	77-83-8	PNEC	23.3 ^{mg} / _{kg}	aquatic organisms	water	short-term (single instance)
Aldehyde C-16	77-83-8	PNEC	0.084 ^{mg} / _l	aquatic organisms	water	intermittent re- lease
Aldehyde C-16	77-83-8	PNEC	0.008 ^{mg} / _l	aquatic organisms	freshwater	short-term (single instance)
Aldehyde C-16	77-83-8	PNEC	8.4 ^{µg} / _I	aquatic organisms	marine water	short-term (single instance)
Aldehyde C-16	77-83-8	PNEC	10 ^{mg} / _l	aquatic organisms	sewage treat- ment plant (STP)	short-term (single instance)
Aldehyde C-16	77-83-8	PNEC	0.214 ^{mg} / _{kg}	aquatic organisms	freshwater sedi- ment	short-term (single instance)
Aldehyde C-16	77-83-8	PNEC	0.021 ^{mg} / _{kg}	aquatic organisms	marine sediment	short-term (single instance)
Aldehyde C-16	77-83-8	PNEC	0.038 ^{mg} / _{kg}	terrestrial organ- isms	soil	short-term (single instance)
Linalool	78-70-6	PNEC	7.8 ^{mg} / _{kg}	aquatic organisms	water	short-term (single instance)
Linalool	78-70-6	PNEC	2 ^{mg} / _l	aquatic organisms	water	intermittent re- lease
Linalool	78-70-6	PNEC	0.2 ^{mg} / _l	aquatic organisms	freshwater	short-term (single instance)
Linalool	78-70-6	PNEC	0.02 ^{mg} / _l	aquatic organisms	marine water	short-term (single instance)

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Relevant PNECs of components of the mixture

Name of substance	CAS No	End- point	Threshold level	Organism	Environmental compartment	Exposure time
Linalool	78-70-6	PNEC	10 ^{mg} / _l	aquatic organisms	sewage treat- ment plant (STP)	short-term (single instance)
Linalool	78-70-6	PNEC	2.22 ^{mg} / _{kg}	aquatic organisms	freshwater sedi- ment	short-term (single instance)
Linalool	78-70-6	PNEC	0.222 ^{mg} / _{kg}	aquatic organisms	marine sediment	short-term (single instance)
Linalool	78-70-6	PNEC	0.327 ^{mg} / _{kg}	terrestrial organ- isms	soil	short-term (single instance)
Orange Oil Valencia	8008-57-9 8028-48-6 68606-94-0	PNEC	5.4 ^{µg} / _l	aquatic organisms	freshwater	short-term (single instance)
Orange Oil Valencia	8008-57-9 8028-48-6 68606-94-0	PNEC	0.54 ^{µg} / _l	aquatic organisms	marine water	short-term (single instance)
Orange Oil Valencia	8008-57-9 8028-48-6 68606-94-0	PNEC	2.1 ^{mg} / _l	aquatic organisms	sewage treat- ment plant (STP)	short-term (single instance)
Orange Oil Valencia	8008-57-9 8028-48-6 68606-94-0	PNEC	1.3 ^{mg} / _{kg}	aquatic organisms	freshwater sedi- ment	short-term (single instance)
Orange Oil Valencia	8008-57-9 8028-48-6 68606-94-0	PNEC	0.13 ^{mg} / _{kg}	aquatic organisms	marine sediment	short-term (single instance)
Orange Oil Valencia	8008-57-9 8028-48-6 68606-94-0	PNEC	0.261 ^{mg} / _{kg}	terrestrial organ- isms	soil	short-term (single instance)
Geraniol	106-24-1	PNEC	0.108 ^{mg} / _l	aquatic organisms	water	intermittent re- lease
Geraniol	106-24-1	PNEC	0.011 ^{mg} / _l	aquatic organisms	freshwater	short-term (single instance)
Geraniol	106-24-1	PNEC	0.001 ^{mg} / _l	aquatic organisms	marine water	short-term (single instance)
Geraniol	106-24-1	PNEC	0.7 ^{mg} / _l	aquatic organisms	sewage treat- ment plant (STP)	short-term (single instance)
Geraniol	106-24-1	PNEC	0.115 ^{mg} / _{kg}	aquatic organisms	freshwater sedi- ment	short-term (single instance)
Geraniol	106-24-1	PNEC	0.011 ^{mg} / _{kg}	aquatic organisms	marine sediment	short-term (single instance)

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Relevant PNECs of components of the mixture

Name of substance	CAS No	End- point	Threshold level	Organism	Environmental compartment	Exposure time
Geraniol	106-24-1	PNEC	0.017 ^{mg} / _{kg}	terrestrial organ- isms	soil	short-term (single instance)
Coumarin	91-64-5	PNEC	0.056 ^{mg} / _l	aquatic organisms	water	intermittent re- lease
Coumarin	91-64-5	PNEC	19 ^{µg} / _l	aquatic organisms	freshwater	short-term (single instance)
Coumarin	91-64-5	PNEC	1.9 ^{µg} / _l	aquatic organisms	marine water	short-term (single instance)
Coumarin	91-64-5	PNEC	6.4 ^{mg} / _l	aquatic organisms	sewage treat- ment plant (STP)	short-term (single instance)
Coumarin	91-64-5	PNEC	0.15 ^{mg} / _{kg}	aquatic organisms	freshwater sedi- ment	short-term (single instance)
Coumarin	91-64-5	PNEC	0.015 ^{mg} / _{kg}	aquatic organisms	marine sediment	short-term (single instance)
Coumarin	91-64-5	PNEC	0.018 ^{mg} / _{kg}	terrestrial organ- isms	soil	short-term (single instance)

8.2 Exposure controls

Appropriate engineering controls

General ventilation.

Individual protection measures (personal protective equipment)

Eye/face protection

Wear eye/face protection.

Skin protection

- Hand protection

Wear protective gloves.

- Other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

Environmental exposure controls

Use appropriate container to avoid environmental contamination. Keep away from drains, surface and ground water.

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SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties Appearance

Physical state	solid
Color	light blue - Conforms to Standard
Odor	Conforms to standard

Other safety parameters

pH (value)	not applicable
Melting point/freezing point	not determined
Initial boiling point and boiling range	263.8 °C at 966 hPa
Flash point	93.33 °C
Evaporation rate	not determined
Flammability (solid, gas)	this material is combustible, but will not ignite readily
Explosion limits of dust clouds	not determined
Vapor pressure	0.545 Pa at 25 °C
Density	not determined
Vapor density	this information is not available
Relative density	information on this property is not available
Solubility(ies)	not determined

Partition coefficient

- n-octanol/water (log KOW)

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Auto-ignition temperature	480 °C
Viscosity	not relevant (solid matter)
Explosive properties	none
Oxidizing properties	none
Other information	there is no additional information

SECTION 10: Stability and reactivity

10.1 Reactivity

9.2

Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials".

10.2 Chemical stability

See below "Conditions to avoid".

10.3 Possibility of hazardous reactions

No known hazardous reactions.

10.4 Conditions to avoid

There are no specific conditions known which have to be avoided.

Hints to prevent fire or explosion

The product in the delivered form is not dust explosion capable; the enrichment of fine dust however leads to the danger of dust explosion.

10.5 Incompatible materials

Oxidizers

10.6 Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Test data are not available for the complete mixture.

Classification procedure

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

Acute toxicity

Shall not be classified as acutely toxic.

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Acute toxicity estimate (ATE) of components of the mixture

Name of substance	CAS No	Exposure route	ATE
Coumarin	91-64-5	oral	293 ^{mg} / _{kg}
Coumarin	91-64-5	dermal	293 ^{mg} / _{kg}

Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

Serious eye damage/eye irritation

Shall not be classified as seriously damaging to the eye or eye irritant.

Respiratory or skin sensitization

May cause an allergic skin reaction.

Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

Carcinogenicity

Shall not be classified as carcinogenic.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans

Name of substance	CAS No	Classification	Number
Coumarin	91-64-5	3	

Legend

Not classifiable as to carcinogenicity in humans

Reproductive toxicity

Shall not be classified as a reproductive toxicant.

Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure).

Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

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SECTION 12: Ecological information

12.1 Toxicity

Harmful to aquatic life with long lasting effects.

Aquatic toxicity (acute) of components of the mixture

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
benzyl benzoate	120-51-4	LC50	2.32 ^{mg} / _l	fish	96 h
benzyl benzoate	120-51-4	EC50	4.26 ^{mg} / _l	aquatic invertebrates	24 h
benzyl benzoate	120-51-4	ErC50	0.475 ^{mg} / _l	algae	72 h
Aldehyde C-16	77-83-8	LC50	4.2 ^{mg} / _l	fish	96 h
Aldehyde C-16	77-83-8	EC50	95 ^{mg} / _l	aquatic invertebrates	24 h
Aldehyde C-16	77-83-8	ErC50	36 ^{mg} / _I	algae	72 h
Linalool	78-70-6	LC50	27.8 ^{mg} / _l	fish	96 h
Linalool	78-70-6	EC50	59 ^{mg} / _l	aquatic invertebrates	48 h
Linalool	78-70-6	ErC50	156.7 ^{mg} / _l	algae	96 h
Orange Oil Valencia	8008-57-9 8028-48-6 68606-94-0	LL50	5.65 ^{mg} / _l	fish	96 h
Orange Oil Valencia	8008-57-9 8028-48-6 68606-94-0	EL50	1.4 ^{mg} / _l	aquatic invertebrates	24 h
Geraniol	106-24-1	LC50	22 ^{mg} / _l	fish	96 h
Geraniol	106-24-1	EC50	10.8 ^{mg} / _l	aquatic invertebrates	48 h
Geraniol	106-24-1	ErC50	13.1 ^{mg} / _l	algae	72 h
Coumarin	91-64-5	LC50	2.94 ^{mg} / _l	fish	96 h
Coumarin	91-64-5	EC50	8.012 ^{mg} / _l	aquatic invertebrates	48 h

Aquatic toxicity (chronic) of components of the mixture

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
benzyl benzoate	120-51-4	LC50	11 ^{mg} / _l	aquatic invertebrates	24 h

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Aquatic toxicity (chronic) of components of the mixture

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
benzyl benzoate	120-51-4	EC50	>10,000 ^{mg} / _I	microorganisms	3 h
Aldehyde C-16	77-83-8	EC50	95 ^{mg} / _l	aquatic invertebrates	24 h
Linalool	78-70-6	LC50	27.8 ^{mg} / _l	fish	24 h
Linalool	78-70-6	EC50	>100 ^{mg} / _l	microorganisms	30 min
Geraniol	106-24-1	EC50	70 ^{mg} / _l	microorganisms	30 min

12.2 Persistence and degradability

Data are not available.

12.3 Bioaccumulative potential

Data are not available.

12.4 Mobility in soil

Data are not available.

12.5 Results of PBT and vPvB assessment

Data are not available.

12.6 Other adverse effects

Endocrine disrupting potential

None of the ingredients are listed.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets.

Waste treatment of containers/packages

Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

Remarks

Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

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SECTION 14: Transport information

14.1 UN number not assigned
 14.2 UN proper shipping name not assigned
 14.3 Transport hazard class(es) not assigned
 14.4 Packing group not assigned

14.5 Environmental hazards non-environmentally hazardous acc. to the danger-

ous goods regulations

14.6 Special precautions for user

There is no additional information.

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

The cargo is not intended to be carried in bulk.

Information for each of the UN Model Regulations

DOT

Transport of dangerous goods by road or rail (49 CFR US DOT)

Not subject to transport regulations.

International Maritime Dangerous Goods Code (IMDG)

Not subject to IMDG.

International Civil Aviation Organization (ICAO-IATA/DGR)

Not subject to ICAO-IATA.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question

National regulations (United States)

Toxic Substance Control Act (TSCA) all ingredients are listed

Superfund Amendment and Reauthorization Act (SARA TITLE III)

- The List of Extremely Hazardous Substances and Their Threshold Planning Quantities (EPCRA Section 302, 304)

none of the ingredients are listed

- Specific Toxic Chemical Listings (EPCRA Section 313) none of the ingredients are listed

Clean Air Act

none of the ingredients are listed

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Right to Know Hazardous Substance List

- Cleaning Product Right to Know Act Substance List (CA-RTK)

Name of substance	Name acc. to inventory	CAS No	Functional- ity	Authoritative Lists
Polyvinyl Chloride		9002-86-2	stabilizer	
Benzyl benzoate	Benzyl benzoate	120-51-4	fragrance	EU Fragrance Allergens
Aldehyde C-14		104-67-6	fragrance	
Aldehyde C-16		77-83-8	fragrance	
Ionone Beta		14901-07-6	fragrance	
Anisic Aldehyde		123-11-5	fragrance	
Methyl anthranilate		134-20-3	fragrance	
2-t-Butylcyclohexyl Acetate		88-41-5	fragrance	
Vanillin		121-33-5	fragrance	
Linalool	Linalool	78-70-6	fragrance	EU Fragrance Allergens
Pentyl acetate		628-63-7	fragrance	
Orange Oil Valencia		8008-57-9 8028-48-6 68606-94-0	fragrance	
Ethyl butyrate		105-54-4	fragrance	
Coumarin	Coumarin	91-64-5	fragrance	EU Fragrance Allergens
Geraniol	Geraniol	106-24-1	fragrance	EU Fragrance Allergens
Ethyl heptanoate		106-30-9	fragrance	
Ethyl acetate	Ethyl acetate	141-78-6	fragrance	CDC 4th National Exposure Report

- Toxic or Hazardous Substance List (MA-TURA)

Name of substance	Name acc. to inventory	CAS No	DEP CODE	PBT / HHS / LHS	PBT / HHS Thres hold	De Minimis Concentra- tion Threshold
pentyl acetate	iso-Amyl acetate	123-92-2				1.0 %
pentyl acetate	sec-Amyl acetate	626-38-0				1.0 %
ethyl acetate	Ethyl acetate	141-78-6				1.0 %

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- Hazardous Substance List (NJ-RTK)

Name of substance	Name acc. to inventory	CAS No	Remarks	Classifications
Polyvinyl Chloride	PVC (polyvinyl chloride)	9002-86-2		
pentyl acetate	n-amyl acetate (1-pentyl acetate)	628-63-7		F3
ethyl butyrate	ethyl butyrate	105-54-4		CO F3
ethyl acetate	ethyl acetate (acetic acid, ethyl ester)	141-78-6		F3

Legend

CO Corrosive

F3 Flammable - Third Degree

- Hazardous Substance List (Chapter 323) (PA-RTK)

Name of substance	Name acc. to inventory	CAS No	Classification
pentyl acetate	ACETIC ACID, PENTYL ESTER	628-63-7	Е
ethyl acetate	ACETIC ACID ETHYL ESTER	141-78-6	Е

<u>Legen</u>d

E Environmental hazard

- Hazardous Substance List (RI-RTK)

Name of substance	Name acc. to inventory	CAS No	References
pentyl acetate	n-Amyl acetate	628-63-7	Т
ethyl acetate	Ethyl acetate	141-78-6	Т, F

Legend

F Flammability (NFPA®)
T Toxicity (ACGIH®)

California Environmental Protection Agency (Cal/EPA): Proposition 65 - Safe Drinking Water and Toxic Enforcement Act of 1987

none of the ingredients are listed

Industry or sector specific available guidance(s)

NPCA-HMIS® III

Hazardous Materials Identification System. American Coatings Association.

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Category	Rating	Description
Chronic	/	none
Health	2	temporary or minor injury may occur
Flammability	2	material that must be moderately heated or exposed to relatively high ambient tem- peratures before ignition can occur
Physical hazard	0	material that is normally stable, even under fire conditions, and will not react with water, polymerize, decompose, condense, or self-react. Non-explosive
Personal protection	-	

NFPA® 704

National Fire Protection Association: Standard System for the Identification of the Hazards of Materials for Emergency Response (United States).

Category	Degree of hazard	Description
Flammability	2	material that must be moderately heated or exposed to relatively high ambient tem- peratures before ignition can occur
Health	2	material that, under emergency conditions, can cause temporary incapacitation or residual injury
Instability	0	material that is normally stable, even under fire conditions
Special hazard		

National inventories

Country	Inventory	Status
AU	AICS	all ingredients are listed
CA	DSL	all ingredients are listed
CN	IECSC	all ingredients are listed
EU	ECSI	not all ingredients are listed
EU	REACH Reg.	not all ingredients are listed
JP	CSCL-ENCS	not all ingredients are listed
JP	ISHA-ENCS	not all ingredients are listed
KR	KECI	all ingredients are listed
MX	INSQ	not all ingredients are listed
NZ	NZIoC	all ingredients are listed
PH	PICCS	all ingredients are listed

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Country	Inventory	Status
TR	CICR	not all ingredients are listed
TW	TCSI	all ingredients are listed
US	TSCA	all ingredients are listed

Legend

AICS Australian Inventory of Chemical Substances CICR

Chemical Inventory and Control Regulation List of Existing and New Chemical Substances (CSCL-ENCS) CSCL-ENCS

DSL Domestic Substances List (DSL)

EC Substance Inventory (EINECS, ELINCS, NLP) **ECSI**

Inventory of Existing Chemical Substances Produced or Imported in China National Inventory of Chemical Substances

IECSC INSQ

ISHA-ENCS Inventory of Existing and New Chemical Substances (ISHA-ENCS)

KECI Korea Existing Chemicals Inventory

NZIoC New Zealand Inventory of Chemicals

Philippine Inventory of Chemicals and Chemical Substances (PICCS) **PICCS**

REACH Reg. REACH registered substances TCSI Taiwan Chemical Substance Inventory

TSCA Toxic Substance Control Act

Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information, including date of preparation or last revision

Indication of changes (revised safety data sheet)

Section	Former entry (text/value)	Actual entry (text/value)	Safety- relev- ant
3.2		Description of the mixture: change in the listing (table)	yes
4.1	Following skin contact: Rinse skin with water/shower.	Following skin contact: Wash with plenty of soap and water.	yes
5.2	Special hazards arising from the substance or mixture: Deposited combustible dust has considerable explosion potential.	Special hazards arising from the substance or mixture	yes
7.1	- Measures to prevent fire as well as aerosol and dust generation: Use local and general ventilation. Take precau- tionary measures against static discharge. Use only in well-ventilated areas. Ground/bond con- tainer and receiving equipment.	- Measures to prevent fire as well as aerosol and dust generation: Use local and general ventilation. Use only in well-ventilated areas. Ground/bond container and receiving equipment.	yes
7.2	- Ventilation requirements: Use local and general ventilation.		yes

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Section	Former entry (text/value)	Actual entry (text/value)	Safety- relev- ant
8.1		Occupational exposure limit values (Workplace Exposure Limits): change in the listing (table)	yes
8.1		Relevant DNELs of components of the mixture: change in the listing (table)	yes
8.1		Relevant PNECs of components of the mixture: change in the listing (table)	yes
8.2	Respiratory protection: Particulate filter device (EN 143).	Respiratory protection: In case of inadequate ventilation wear respirat- ory protection.	yes
9.2	Other information	other information: there is no additional information	yes
9.2	Solvent content: 92.4 %		yes
9.2	Solid content: 7.6 %		yes
11.1		Acute toxicity estimate (ATE) of components of the mixture: change in the listing (table)	yes
12.1		Aquatic toxicity (acute) of components of the mix- ture: change in the listing (table)	yes
14.1	UN number: not subject to transport regulations	UN number: not assigned	yes
15.1		Cleaning Product Right to Know Act Substance List (CA-RTK): change in the listing (table)	yes
15.1		Toxic or Hazardous Substance List (MA-TURA): change in the listing (table)	yes
15.1		Hazardous Substance List (NJ-RTK): change in the listing (table)	yes
15.1		Hazardous Substance List (Chapter 323) (PA-RTK): change in the listing (table)	yes
15.1		Hazardous Substance List (RI-RTK): change in the listing (table)	yes

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Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
49 CFR US DOT	49 CFR U.S. Department of Transportation
ACGIH®	American Conference of Governmental Industrial Hygienists
ACGIH® 2019	From ACGIH®, 2019 TLVs® and BEIs® Book. Copyright 2019. Reprinted with permission. Information on the proper use of the TLVs® and BEIs®: http://www.acgih.org/tlv-bei-guidelines/policies-procedures-presentations/tlv-bei-position-statement
Acute Tox.	Acute toxicity
Asp. Tox.	Aspiration hazard
ATE	Acute Toxicity Estimate
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
Ceiling-C	Ceiling value
DEP CODE	Department of Environmental Protection Code
DGR	Dangerous Goods Regulations (see IATA/DGR)
DNEL	Derived No-Effect Level
DOT	Department of Transportation (USA)
EC50	Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causing 50 % changes in response (e.g. on growth) during a specified time interval
EINECS	European Inventory of Existing Commercial Chemical Substances
EL50	Effective Loading 50 %: the EL50 corresponds to the loading rate required to produce a response in 50% of the test organisms
ELINCS	European List of Notified Chemical Substances
ErC50	≡ EC50: in this method, that concentration of test substance which results in a 50 % reduction in either growth (EbC50) or growth rate (ErC50) relative to the control
Eye Dam.	Seriously damaging to the eye
Eye Irrit.	Irritant to the eye
Flam. Liq.	Flammable liquid
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
HHS	Higher hazard substance
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization

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Abbr.	Descriptions of used abbreviations
IMDG	International Maritime Dangerous Goods Code
LC50	Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethality during a specified time interval
LHS	Lower hazard substance
LL50	Lethal Loading 50 %: the LL50 corresponds to the loading rate causing 50 % lethality
MARPOL	International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant")
NFPA®	National Fire Protection Association (United States)
NLP	No-Longer Polymer
NPCA-HMIS® III	National Paint and Coatings Association: Hazardous Materials Identification System - HMIS® III, Third Edition
OSHA	Occupational Safety and Health Administration (United States)
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted No-Effect Concentration
ppm	Parts per million
RTECS	Registry of Toxic Effects of Chemical Substances (database of NIOSH with toxicological information)
Skin Corr.	Corrosive to skin
Skin Irrit.	Irritant to skin
Skin Sens.	Skin sensitization
STEL	Short-term exposure limit
TLV®	Threshold Limit Values
TWA	Time-weighted average
vPvB	Very Persistent and very Bioaccumulative

Key literature references and sources for data

OSHA Hazard Communication Standard (HCS), 29 CFR 1910.1200.

Transport of dangerous goods by road or rail (49 CFR US DOT). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

Classification procedure

Physical and chemical properties: The classification is based on tested mixture. Health hazards, Environmental hazards: The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

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List of relevant phrases (code and full text as stated in chapter 2 and 3)

Code	Text
H226	Flammable liquid and vapor.
H227	Combustible liquid.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H311	Toxic in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.

Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

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