acc. to 29 CFR 1910.1200 App D

Blueberry

SECTION 1: Identification 1.1 **Product identifier** Trade name Blueberry Product number 6-01-1000 1.2 Relevant identified uses of the substance or mixture and uses advised against Relevant identified uses Industrial use Details of the supplier of the safety data sheet 1.3 23 Pa'amei Aviv St P.O. 1074 43905 Givat Hen Israel Telephone: +972 507305819 e-mail: lior@eybna.com Website: http://www.eybna.com/

e-mail (competent person)

1.4 Emergency telephone number

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 cat- egory	Hazard state- ment
A.10	acute toxicity (oral)	4	Acute Tox. 4	H302
A.2	skin corrosion/irritation	2	Skin Irrit. 2	H315
A.3	serious eye damage/eye irritation	2	Eye Irrit. 2	H319
A.4S	skin sensitization	1	Skin Sens. 1	H317
A.8R	specific target organ toxicity - single exposure (respirat- ory tract irritation)	3	STOT SE 3	H335
A.10	aspiration hazard	1	Asp. Tox. 1	H304
B.6	flammable liquid	3	Flam. Liq. 3	H226

For full text of abbreviations: see SECTION 16.

The most important adverse physicochemical, human health and environmental effects The product is combustible and can be ignited by potential ignition sources.

2.2 Label elements

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

- Signal word danger
- Pictograms

GHS02, GHS07, GHS08



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Date of compilation: 2019-02-11

lior@eybna.com (Lior Chatow)

+1 4158544820



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- Hazard statements					
H226	Flammable liquid and vapor.				
H302	Harmful if swallowed.				
H304	May be fatal if swallowed and ente	lay be fatal if swallowed and enters airways.			
H315	Causes skin irritation.				
H317	May cause an allergic skin reactior	1.			
H319	Causes serious eye irritation.				
H335	May cause respiratory irritation.				
- Precautionary state	ements				
P210	Keep away from heat/sparks/open	flames/hot surfaces. No smoking.			
P240	Ground/bond container and receiv				
P241	Use explosion-proof electrical/ven				
P242	Use only non-sparking tools.				
P243	Take precautionary measures again	inst static discharge.			
P261	Avoid breathing dust/fume/gas/m				
P270	Do not eat, drink or smoke when ι				
P271	Use only outdoors or in a well-ven				
P272	Contaminated work clothing must	not be allowed out of the workplace.			
P280	Wear protective gloves/eye protec	tion/face protection.			
P301+P310	If swallowed: Immediately call a po	pison center/doctor.			
P301+P312	If swallowed: Call a poison center/	doctor if you feel unwell.			
P302+P352	If on skin: Wash with plenty of wat	er.			
P303+P361+P353	If on skin (or hair): Take off immed shower.	liately all contaminated clothing. Rinse skin with water/			
P304+P340	If inhaled: Remove person to fresh	air and keep comfortable for breathing.			
P305+P351+P338	If in eyes: Rinse cautiously with wa and easy to do. Continue rinsing.	ter for several minutes. Remove contact lenses, if present			
P312	Call a poison center/doctor if you f	eel unwell.			
P321	Specific treatment (see on this labe	el).			
P330	Rinse mouth.				
P331	Do NOT induce vomiting.				
P362	Take off contaminated clothing an	d wash it before reuse.			
P363	Wash contaminated clothing befor	re reuse.			
P370+P378	In case of fire: Use sand, carbon dioxide or powder extinguisher to extinguish.				
P403+P233	Store in a well-ventilated place. Keep container tightly closed.				
P403+P235	Store in a well-ventilated place. Ke	ep cool.			
P405	Store locked up.				
P501	Dispose of contents/container to in	ndustrial combustion plant.			
- Hazardous ingredi	ents for labelling	Alpha-Pinene , Beta-Myrcene , (R)-p-mentha-1,8- diene, linalool, L-borneol, Beta-Pinene			

2.3 Other hazards

Hazards not otherwise classified

Very toxic to aquatic life with long lasting effects (GHS category 1: 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.



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SECTION 3: Composition/information on ingredients

3.1 Substances

Not relevant (mixture)

3.2 Mixtures

Description of the mixture

Name of substance	Wt%	Classification acc. to GHS	
Proprietary Monoterpene	25 - < 50	Skin Irrit. 2 / H315 Eye Irrit. 2 / H319 Asp. Tox. 1 / H304 Flam. Liq. 3 / H226	
Proprietary Sesquiterpene	10 - < 25	Acute Tox. 4 / H302	
Proprietary Monoterpene	10 - < 25	Acute Tox. 4 / H302 Skin Irrit. 2 / H315 Eye Irrit. 2 / H319 Skin Sens. 1 / H317 STOT SE 3 / H335 Asp. Tox. 1 / H304 Flam. Liq. 3 / H226	
Proprietary Monoterpenic Alcohol	5-<10	Skin Irrit. 2 / H315 Eye Irrit. 2 / H319 Skin Sens. 1B / H317 STOT SE 3 / H335 Flam. Liq. 4 / H227	
Proprietary Monoterpene	5-<10	Skin Irrit. 2 / H315 Eye Irrit. 2 / H319 Skin Sens. 1 / H317 Asp. Tox. 1 / H304 Flam. Liq. 3 / H226	
Proprietary Sesquiterpenic Alcohol	5 - < 10	Skin Irrit. 2 / H315 Eye Irrit. 2 / H319 STOT SE 3 / H335	
Proprietary Monoterpene	5-<10	Acute Tox. 4 / H302 Acute Tox. 4 / H312 Acute Tox. 4 / H332 Skin Irrit. 2 / H315 Eye Irrit. 2 / H319 Skin Sens. 1B / H317 STOT SE 3 / H335 Asp. Tox. 1 / H304 Flam. Liq. 3 / H226	
Proprietary Sesquiterpene	1 - < 5	Acute Tox. 4 / H302	
Proprietary Monoterpenic Alcohol	1-<5	Skin Irrit. 2 / H315 Eye Irrit. 2 / H319 STOT SE 3 / H335	
Proprietary Monoterpenic Alcohol	1-<5	Skin Irrit. 2 / H315 Eye Irrit. 2 / H319 STOT SE 3 / H335	
Proprietary Diterpenic Alcohol	1-<5	Skin Irrit. 2 / H315 Eye Irrit. 2 / H319 STOT SE 3 / H335	



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Name of substance	Wt%	Classification acc. to GHS
Proprietary Monoterpenic Alcohol	0 - < 1	Acute Tox. 4 / H302 Skin Sens. 1 / H317 Flam. Sol. 1 / H228

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. In case of respiratory tract irritation, consult a physician. 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

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water spray, BC-powder, Carbon dioxide (CO2)

Unsuitable extinguishing media

Water jet

5.2 Special hazards arising from the substance or mixture

In case of insufficient ventilation and/or in use, may form flammable/explosive vapor-air mixture. Solvent vapors are heavier than air and may spread along floors. Places which are not ventilated, e.g. unventilated below ground level areas such as trenches, conduits and shafts, are particularly prone to the presence of flammable substances or mix-tures.

Hazardous combustion products

Nitrogen oxides (NOx), Carbon monoxide (CO), Carbon dioxide (CO2)



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5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Co-ordinate 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. If substance has entered a water course or sewer, inform the responsible authority.

6.3 Methods and material for containment and cleaning up

Advices on how to contain a spill

Covering of drains

Advices on how to clean up a spill

Wipe up with absorbent material (e.g. cloth, fleece). Collect spillage: sawdust, kieselgur (diatomite), sand, universal binder

Appropriate containment techniques

Use of adsorbent materials.

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.

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. Avoidance of ignition sources. Keep away from sources of ignition - No smoking. Take precautionary measures against static discharge. Use only in well-ventilated areas. Due to danger of explosion, prevent leakage of vapours into cellars, flues and ditches. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/equipment. Use only non-sparking tools.

- Specific notes/details

Places which are not ventilated, e.g. unventilated below ground level areas such as trenches, conduits and shafts, are particularly prone to the presence of flammable substances or mixtures. Vapors are heavier than air, spread along floors and form explosive mixtures with air.



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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

Keep container tightly closed and in a well-ventilated place. Use local and general ventilation. Keep cool. Protect from sunlight.

- Flammability hazards

Keep away from sources of ignition - No smoking. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharge. Protect from sunlight.

- Ventilation requirements

Use local and general ventilation. Ground/bond container and receiving equipment.

- Packaging compatibilities

Only packagings which are approved (e.g. acc. to the Dangerous Goods Regulations) may be used.

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)

Country	Name of substance	Identifi- er	TWA [ppm]	TWA [mg/ m³]	STEL [ppm]	STEL [mg/ m³]	Ceiling-C [ppm]	Ceiling-C [mg/m³]	Nota- tion	Source
US	Beta-Pinene	TLV®	20							ACGIH® 2018
US	Alpha-Pinene	TLV®	20							ACGIH® 2018

Notation

STEL

TWA

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

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)

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

Relevant DNELs of co	Relevant DNELs of components of the mixture					
Name of substance	Endpoint	Threshold level	Protection goal, route of exposure	Used in	Exposure time	
Proprietary Monoterpene	DNEL	3.8 mg/m ³	human, inhalatory	worker (industry)	chronic - systemic ef- fects	
Proprietary Monoterpene	DNEL	0.542 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic ef- fects	





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Name of substance	Endpoint	Threshold	Protection goal, route	Used in	Exposure time
		level	of exposure		
Proprietary Monoter- penic Alcohol	DNEL	2.8 mg/m ³	human, inhalatory	worker (industry)	chronic - systemic e fects
Proprietary Monoter- penic Alcohol	DNEL	16.5 mg/m ³	human, inhalatory	worker (industry)	acute - systemic ef- fects
Proprietary Monoter- penic Alcohol	DNEL	2.5 mg/kg bw/ day	human, dermal	worker (industry)	chronic - systemic e fects
Proprietary Monoter- penic Alcohol	DNEL	5 mg/kg bw/ day	human, dermal	worker (industry)	acute - systemic ef- fects
Proprietary Monoterpene	DNEL	66.7 mg/m ³	human, inhalatory	worker (industry)	chronic - systemic e fects
Proprietary Monoterpene	DNEL	9.5 mg/kg bw/ day	human, dermal	worker (industry)	chronic - systemic e fects
Proprietary Sesquiter- penic Alcohol	DNEL	10 mg/m ³	human, inhalatory	worker (industry)	chronic - systemic e fects
Proprietary Sesquiter- penic Alcohol	DNEL	2.8 mg/kg bw/ day	human, dermal	worker (industry)	chronic - systemic e fects
Proprietary Sesquiter- penic Alcohol	DNEL	122.5 µg/cm²	human, dermal	worker (industry)	chronic - local effect
Proprietary Monoterpene	DNEL	5.69 mg/m ³	human, inhalatory	worker (industry)	chronic - systemic e fects
Proprietary Monoterpene	DNEL	0.8 mg/kg bw/ day	human, dermal	worker (industry)	chronic - systemic e fects
Proprietary Monoterpene	DNEL	54 µg/cm²	human, dermal	worker (industry)	chronic - local effect
Proprietary Monoter- penic Alcohol	DNEL	9.03 mg/m ³	human, inhalatory	worker (industry)	chronic - systemic e fects
Proprietary Monoter- penic Alcohol	DNEL	158 mg/kg bw/ day	human, dermal	worker (industry)	chronic - systemic e fects
Proprietary Diterpenic Al- cohol	DNEL	8.8 mg/m ³	human, inhalatory	worker (industry)	chronic - systemic e fects
Proprietary Diterpenic Al- cohol	DNEL	5 mg/kg bw/ day	human, dermal	worker (industry)	chronic - systemic e fects
Proprietary Monoter- penic Alcohol	DNEL	17.63 mg/m ³	human, inhalatory	worker (industry)	chronic - systemic e fects
Proprietary Monoter- penic Alcohol	DNEL	10 mg/kg bw/ day	human, dermal	worker (industry)	chronic - systemic e fects

Relevant PNECs of components of the mixture						
Other names or synonyms	Endpoint	Threshold level	Organism	Environmental com- partment	Exposure time	
Proprietary Monoterpene	PNEC	0.606 ^{µg} /I	aquatic organisms	freshwater	short-term (single in- stance)	

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Other names or synonyms	Endpoint	Threshold level	Organism	Environmental com- partment	Exposure time
Proprietary Monoterpene	PNEC	0.061 ^{µg} / _l	aquatic organisms	marine water	short-term (single in stance)
Proprietary Monoterpene	PNEC	0.2 ^{mg} / _l	aquatic organisms	sewage treatment plant (STP)	short-term (single in stance)
Proprietary Monoterpene	PNEC	157 ^{µg} / _{kg}	aquatic organisms	freshwater sediment	short-term (single in stance)
Proprietary Monoterpene	PNEC	15.7 ^{µg} / _{kg}	aquatic organisms	marine sediment	short-term (single in stance)
Proprietary Monoterpene	PNEC	31.7 ^{µg} / _{kg}	terrestrial organisms	soil	short-term (single in stance)
Proprietary Monoterpenic Al- cohol	PNEC	0.2 ^{mg} / _l	aquatic organisms	freshwater	short-term (single in stance)
Proprietary Monoterpenic Al- cohol	PNEC	0.02 ^{mg} / _l	aquatic organisms	marine water	short-term (single in stance)
Proprietary Monoterpenic Al- cohol	PNEC	10 ^{mg} / _l	aquatic organisms	sewage treatment plant (STP)	short-term (single in stance)
Proprietary Monoterpenic Al- cohol	PNEC	2.22 ^{mg} / _{kg}	aquatic organisms	freshwater sediment	short-term (single in stance)
Proprietary Monoterpenic Al- cohol	PNEC	0.222 ^{mg} / _{kg}	aquatic organisms	marine sediment	short-term (single ir stance)
Proprietary Monoterpenic Al- cohol	PNEC	0.327 ^{mg} / _{kg}	terrestrial organisms	soil	short-term (single ir stance)
Proprietary Monoterpene	PNEC	14 ^{µg} / _l	aquatic organisms	freshwater	short-term (single ir stance)
Proprietary Monoterpene	PNEC	1.4 ^{µg} / _l	aquatic organisms	marine water	short-term (single in stance)
Proprietary Monoterpene	PNEC	1.8 ^{mg} / _l	aquatic organisms	sewage treatment plant (STP)	short-term (single ir stance)
Proprietary Monoterpene	PNEC	3.85 ^{mg} / _{kg}	aquatic organisms	freshwater sediment	short-term (single ir stance)
Proprietary Monoterpene	PNEC	0.385 ^{mg} / _{kg}	aquatic organisms	marine sediment	short-term (single ir stance)
Proprietary Monoterpene	PNEC	0.763 ^{mg} / _{kg}	terrestrial organisms	soil	short-term (single ir stance)
Proprietary Ses- quiterpenic Alco- hol	PNEC	0.001 ^{mg} / _l	aquatic organisms	freshwater	short-term (single ir stance)

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Other names or	Endpoint	Threshold level	Organism	Environmental com-	Exposure time
synonyms				partment	
Proprietary Ses- quiterpenic Alco- hol	PNEC	0 ^{mg} /l	aquatic organisms	marine water	short-term (single in stance)
Proprietary Ses- quiterpenic Alco- hol	PNEC	10 ^{mg} / _l	aquatic organisms	sewage treatment plant (STP)	short-term (single in stance)
Proprietary Ses- quiterpenic Alco- hol	PNEC	0.07 ^{mg} / _{kg}	aquatic organisms	freshwater sediment	short-term (single ir stance)
Proprietary Ses- quiterpenic Alco- hol	PNEC	0.007 ^{mg} / _{kg}	aquatic organisms	marine sediment	short-term (single in stance)
Proprietary Ses- quiterpenic Alco- hol	PNEC	0.014 ^{mg} / _{kg}	terrestrial organisms	soil	short-term (single ir stance)
Proprietary Monoterpene	PNEC	1.004 ^{µg} / _l	aquatic organisms	freshwater	short-term (single in stance)
Proprietary Monoterpene	PNEC	0.1 ^{µg} / _l	aquatic organisms	marine water	short-term (single in stance)
Proprietary Monoterpene	PNEC	3.26 ^{mg} / _l	aquatic organisms	sewage treatment plant (STP)	short-term (single ir stance)
Proprietary Monoterpene	PNEC	0.337 ^{mg} / _{kg}	aquatic organisms	freshwater sediment	short-term (single in stance)
Proprietary Monoterpene	PNEC	0.034 ^{mg} / _{kg}	aquatic organisms	marine sediment	short-term (single ir stance)
Proprietary Monoterpene	PNEC	0.067 ^{mg} / _{kg}	terrestrial organisms	soil	short-term (single ir stance)
Proprietary Monoterpenic Al- cohol	PNEC	68 ^{µg} /I	aquatic organisms	freshwater	short-term (single ir stance)
Proprietary Monoterpenic Al- cohol	PNEC	6.8 ^{µg} /I	aquatic organisms	marine water	short-term (single ir stance)
Proprietary Monoterpenic Al- cohol	PNEC	2.6 ^{mg} / _l	aquatic organisms	sewage treatment plant (STP)	short-term (single ir stance)
Proprietary Monoterpenic Al- cohol	PNEC	1.85 ^{mg} / _{kg}	aquatic organisms	freshwater sediment	short-term (single ir stance)
Proprietary Monoterpenic Al- cohol	PNEC	0.185 ^{mg} / _{kg}	aquatic organisms	marine sediment	short-term (single ir stance)
Proprietary Monoterpenic Al- cohol	PNEC	0.329 ^{mg} / _{kg}	terrestrial organisms	soil	short-term (single ir stance)
Proprietary Diter- penic Alcohol	PNEC	55.7 ^{µg} / _l	aquatic organisms	freshwater	short-term (single ir stance)

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Relevant PNEC	Relevant PNECs of components of the mixture						
Other names or synonyms	Endpoint	Threshold level	Organism	Environmental com- partment	Exposure time		
Proprietary Diter- penic Alcohol	PNEC	55.7 ^{µg} / _l	aquatic organisms	marine water	short-term (single in- stance)		
Proprietary Diter- penic Alcohol	PNEC	10 ^{mg} / _l	aquatic organisms	sewage treatment plant (STP)	short-term (single in- stance)		
Proprietary Diter- penic Alcohol	PNEC	18.6 ^{mg} / _{kg}	aquatic organisms	freshwater sediment	short-term (single in- stance)		
Proprietary Diter- penic Alcohol	PNEC	18.6 ^{mg} / _{kg}	aquatic organisms	marine sediment	short-term (single in- stance)		
Proprietary Diter- penic Alcohol	PNEC	6.55 ^{mg} / _{kg}	terrestrial organisms	soil	short-term (single in- stance)		
Proprietary Monoterpenic Al- cohol	PNEC	1.71 ^{µg} / _l	aquatic organisms	freshwater	short-term (single in- stance)		
Proprietary Monoterpenic Al- cohol	PNEC	0.171 ^{µg} / _l	aquatic organisms	marine water	short-term (single in- stance)		
Proprietary Monoterpenic Al- cohol	PNEC	1 ^{mg} / _l	aquatic organisms	sewage treatment plant (STP)	short-term (single in- stance)		
Proprietary Monoterpenic Al- cohol	PNEC	0.139 ^{mg} / _{kg}	aquatic organisms	freshwater sediment	short-term (single in- stance)		
Proprietary Monoterpenic Al- cohol	PNEC	0.017 ^{mg} / _{kg}	aquatic organisms	marine sediment	short-term (single in- stance)		
Proprietary Monoterpenic Al- cohol	PNEC	0.013 ^{mg} / _{kg}	terrestrial organisms	soil	short-term (single in- stance)		

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 suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. Check leaktightness/impermeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

- Other protection measures

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



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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.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state	liquid
Color	
Odor	characteristic

Other safety parameters

pH (value)	not determined
Melting point/freezing point	not determined
Initial boiling point and boiling range	154.3 °C at 1,010 hPa
Flash point	31 °C at 1 atm
Evaporation rate	not determined
Flammability (solid, gas)	not relevant, (fluid)
Explosive limits	not determined
Vapor pressure	690 Pa at 20 °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)	this information is not available



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2	Other information	there is no additional information
	Oxidizing properties	none
	Explosive properties	none
	Viscosity	not determined
	Auto-ignition temperature	237 °C

SECTION 10: Stability and reactivity

10.1 Reactivity

9.2

Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials". The mixture contains reactive substance(s). Risk of ignition.

If heated:

Risk of ignition

10.2 Chemical stability

See below "Conditions to avoid".

10.3 Possibility of hazardous reactions

No known hazardous reactions.

10.4 Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Hints to prevent fire or explosion

Use explosion-proof electrical/ventilating/lighting/equipment. Use only non-sparking tools. Take precautionary measures against static discharge.

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

Harmful if swallowed.



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- Acute toxicity estimate (ATE) Oral 1,518 mg

ral 1,518 ^{mg}/_{kg}

Acute toxicity estimate (ATE) of components of the mixture			
Other names or synonyms	Exposure route	ATE	
Proprietary Sesquiterpene	oral	500 ^{mg} / _{kg}	
Proprietary Monoterpene	oral	500 ^{mg} / _{kg}	
Proprietary Monoterpene	oral	500 ^{mg} / _{kg}	
Proprietary Monoterpene	dermal	1,100 ^{mg} / _{kg}	
Proprietary Monoterpene	inhalation: vapor	11 ^{mg} / _l /4h	
Proprietary Sesquiterpene	oral	500 ^{mg} / _{kg}	
Proprietary Monoterpenic Alcohol	oral	1,310 ^{mg} / _{kg}	

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/eye irritation

Causes serious eye irritation.

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	Classification	Number
Proprietary Monoterpene	3	

Legend 3

Not classifiable as to carcinogenicity in humans

Reproductive toxicity

Shall not be classified as a reproductive toxicant.

Specific target organ toxicity - single exposure

May cause respiratory irritation.

Specific target organ toxicity - repeated exposure

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

Aspiration hazard

May be fatal if swallowed and enters airways.



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SECTION 12: Ecological information

12.1 Toxicity

Very toxic to aquatic life with long lasting effects.

Other names or synonyms	Endpoint	Value	Species	Exposure time
Proprietary Monoterpene	EC50	1.47 ^{mg} / _l	aquatic invertebrates	48 h
Proprietary Monoterpene	ErC50	0.342 ^{mg} / _l	algae	72 h
Proprietary Monoterpene	LC50	0.303 ^{mg} /l	fish	96 h
Proprietary Monoterpene	EC50	0.475 ^{mg} / _l	aquatic invertebrates	48 h
Proprietary Monoterpenic Alco- hol	LC50	27.8 ^{mg} /l	fish	96 h
Proprietary Monoterpenic Alco- hol	EC50	59 ^{mg} / _l	aquatic invertebrates	48 h
Proprietary Monoterpenic Alco- hol	ErC50	156.7 ^{mg} / _l	algae	96 h
Proprietary Monoterpene	LC50	720 ^{µg} / _l	fish	96 h
Proprietary Monoterpene	EC50	688 ^{µg} /I	fish	96 h
Proprietary Monoterpene	ErC50	0.32 ^{mg} / _l	algae	72 h
Proprietary Ses- quiterpenic Alcohol	LC50	1.43 ^{mg} / _l	fish	96 h
Proprietary Ses- quiterpenic Alcohol	EC50	510.3 ^{µg} / _l	aquatic invertebrates	48 h
Proprietary Ses- quiterpenic Alcohol	ErC50	2 ^{mg} /l	algae	72 h
Proprietary Monoterpenic Alco- hol	LC50	>82 ^{mg} / _l	fish	96 h
Proprietary Monoterpenic Alco- hol	EC50	10 ^{mg} /l	aquatic invertebrates	48 h
Proprietary Aonoterpenic Alco- hol	ErC50	>11 ^{µg} / _l	algae	72 h
Proprietary Diter- penic Alcohol	LC50	>100 ^{mg} / _l	fish	96 h



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Aquatic toxicity	Aquatic toxicity (acute) of components of the mixture			
Other names or synonyms	Endpoint	Value	Species	Exposure time
Proprietary Diter- penic Alcohol	EC50	>100 ^{mg} / _l	aquatic invertebrates	48 h
Proprietary Diter- penic Alcohol	ErC50	>1.34 ^{mg} / _l	algae	72 h
Proprietary Monoterpenic Alco- hol	LC50	33.25 ^{mg} / _l	fish	96 h
Proprietary Monoterpenic Alco- hol	EC50	4.23 ^{mg} / _l	aquatic invertebrates	48 h
Proprietary Monoterpenic Alco- hol	ErC50	1.71 ^{mg} / _l	algae	72 h

Aquatic toxicity	c toxicity (chronic) of components of the mixture			
Other names or synonyms	Endpoint	Value	Species	Exposure time
Proprietary Monoterpenic Alco- hol	EC50	>100 ^{mg} / _l	microorganisms	30 min
Proprietary Monoterpene	EC50	<0.67 ^{mg} / _l	fish	8 d
Proprietary Monoterpene	LC50	0.41 ^{mg} / _l	fish	8 d
Proprietary Ses- quiterpenic Alcohol	EC50	>1,000 ^{mg} / _l	microorganisms	30 min
Proprietary Monoterpene	EC50	326 ^{mg} / _l	microorganisms	3 h
Proprietary Diter- penic Alcohol	EC50	>1,000 ^{mg} / _l	microorganisms	180 min
Proprietary Monoterpenic Alco- hol	EC50	>100 ^{mg} / _l	microorganisms	3 h

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.



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12.6 Other adverse effects

Data are not available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste treatment-relevant information

Solvent reclamation/regeneration.

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

Only packagings which are approved (e.g. acc. to DOT) may be used. 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.

SECT	SECTION 14: Transport information				
14.1	UN number	1993			
14.2	UN proper shipping name	Flammable liquid, n.o.s.			
	Technical name (hazardous ingredients)	Beta-Myrcene , Alpha-Pinene			
14.3	Transport hazard class(es)				
	Class	3 (flammable liquids)			
14.4	Packing group	III (substance presenting low danger)			
14.5	Environmental hazards	hazardous to the aquatic environment			
	Environmentally hazardous substance (aquatic environment)	Beta-Myrcene			
14.6	Special precautions for user There is no additional information.				
14.7	Transport in bulk according to Annex II of MA The cargo is not intended to be carried in bulk.	RPOL and the IBC Code			

Information for each of the UN Model Regu	ulations	
Transport of dangerous goods by road or rail (49 CFR US DOT)		
Index number	1993	
Proper shipping name	Flammable liquid, n.o.s.	
- Particulars in the shipper's declaration	UN1993, Flammable liquid, n.o.s., (contains: Beta- Myrcene , Alpha-Pinene), 3, III, environmentally hazardous	
Class	3	



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Packing group	III
Danger label(s)	3, fish and tree
Environmental hazards	Yes (hazardous to the aquatic environment)
Special provisions (SP)	B1, B52, IB3, T4, TP1, TP29
ERG No	128
International Maritime Dangerous Goods Code	(IMDG)
UN number	1993
Proper shipping name	FLAMMABLE LIQUID, N.O.S.
Class	3
Marine pollutant	Yes (hazardous to the aquatic environment)
Packing group	III
Danger label(s)	3, fish and tree
Special provisions (SP)	223, 274, 955
Excepted quantities (EQ)	E1
Limited quantities (LQ)	5 L
EmS	F-E, <u>S-E</u>
Stowage category	A
International Civil Aviation Organization (ICAO-	IATA/DGR)
UN number	1993
Proper shipping name	Flammable liquid, n.o.s.
Class	3
Environmental hazards	YES (hazardous to the aquatic environment)
Packing group	III
Danger label(s)	3
*	
Special provisions (SP)	A3
Excepted quantities (EQ)	E1
Limited quantities (LQ)	10 L



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SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question **National regulations (United States)**

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

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

- List of Hazardous Substances and Reportable Quantities (CERCLA section 102a) (40 CFR 302.4) none of the ingredients are listed

Clean Air Act

none of the ingredients are listed

New Jersey Worker and Community Right to Know Act

Right to Know Hazardous Substance List

5			
Name acc. to inventory	CAS No	Remarks	Classifications
alpha-PINENE (BICYCLO[3.1.1]HEPT-2-ENE, 2,6,6-TRIMETHYL-)	80-56-8		F3
BORNEOL (BICYCLO [2.2.1]HEPTAN-2-OL, 1,7,7-TRIMETHYL-, (1R,2S,4R)-rel-)	507-70-0		F2

Legend

Flammable - Second Degree Flammable - Third Degree F2

F3

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

Proposition 65 List of chemicals			
Name acc. to inventory	CAS No	Remarks	Type of the toxicity
beta-Myrcene	123-35-3		cancer

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	3	material that can be ignited under almost all ambient temperature conditions
Physical hazard	0	material that is normally stable, even under fire conditions, and will not react with wa- ter, 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	3	material that can be ignited under almost all ambient temperature conditions
Health	2	material that, under emergency conditions, can cause temporary incapacitation or re- sidual injury
Instability	0	material that is normally stable, even under fire conditions
Special hazard		

National inventories

Cou	intry	Inventory	Status
ι	JS	TSCA	not all ingredients are listed

Legend

TSCA Toxic Substance Control Act

15.2 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

Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
49 CFR US DOT	49 CFR § 40 U.S. Department of Transportation
ACGIH® 2018	From ACGIH®, 2018 TLVs® and BEIs® Book. Copyright 2018. 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





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Abbr.	Descriptions of used abbreviations
DGR	Dangerous Goods Regulations (see IATA/DGR)
DNEL	Derived No-Effect Level
DOT	Department of Transportation (USA)
EmS	Emergency Schedule
ERG No	Emergency Response Guidebook - Number
Eye Dam.	Seriously damaging to the eye
Eye Irrit.	Irritant to the eye
Flam. Liq.	Flammable liquid
Flam. Sol.	Flammable solid
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Na- tions
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code
MARPOL	International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant")
NPCA-HMIS® III	National Paint and Coatings Association: Hazardous Materials Identification System - HMIS® III, Third Edi- tion
OSHA	Occupational Safety and Health Administration (United States)
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted No-Effect Concentration
ppm	Parts per million
Skin Corr.	Corrosive to skin
Skin Irrit.	Irritant to skin
Skin Sens.	Skin sensitization
STEL	Short-term exposure limit
STOT SE	Specific target organ toxicity - single exposure
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).



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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).

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.
H228	Flammable solid.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory 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.