257020 Tork Constant Air Freshener Breeze

Safety Data Sheet

according to OSHA Hazard Communication Standard

Date of issue: 10/08/2024 Revision date: 10/08/2024 Version: 0

SECTION 1: Identification

1.1. Product name

Product name	257020 Tork Constant Air Freshener Breeze

1.2. Manufacturer or supplier's details

Company name of supplier	Essity Professional Hygiene North America
Address	P.O. Box 2400 Neenah, WI 54957-2400
Telephone	+1-800-424-9300
Emergency telephone	CHEMTREC: 1-800-424-9300 (24-Hour) Customer Service: Essity Professional Hygiene North America 1-866-722-8675
E-mail address	info@essity.com

1.3. Recommended use of the chemical and restrictions on use

Recommended use	Perfumes
Restrictions on use	Not applicable

SECTION 2: Hazards identification

2.1. GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Flammable liquids	Category 4
Skin sensitization	Category 1

2.2. GHS Label elements

Hazard pictograms

Signal Word: Warning

Hazard Statements:

H227 Combustible liquid.
H315 Causes skin irritation.

Precautionary Statements

Prevention:

P210 Keep away from heat, sparks, open flame and hot surfaces. No smoking.
P261 Avoid breathing mist or vapors.
P264 Wash skin thoroughly after handling.
P272 Contaminated work clothing must not be allowed out of the workplace.
P280 Wear protective gloves, eye protection and face protection.

Response:

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P333 + P313 If skin irritation or rash occurs: Get medical atten-tion.
P362 + P364 Take off contaminated clothing and wash it before reuse.

Storage:

P403 + P235 Store in a well-ventilated place. Keep cool.

Disposal:
P501 Dispose of contents and container to an approved waste disposal plant.

Other Hazards:
Vapors may form explosive mixture with air.

SECTION 3: Composition/information on ingredients

3.1. Substance/Mixture

Mixture

Components:

Chemical name	CAS No	Concentration (% w/w)
Methyl Benzoate	93-58-3	>= 5 - < 10
2,2-Dimethyl 7-octen-2-ol	18479-58-8	>= 1 - < 5
Allyl (cyclohexyloxy)acetate	68901-15-5	>= 1 - < 5
Ionone, methyl-	1335-46-2	>= 1 - < 5
Lavender, Lavandula hybrida, ext.	93455-96-0	>= 1 - < 5
p-tert-Butylcyclohexyl Acetate	32210-23-4	>= 1 - < 5
3,7-Dimethyl 2,6-octadienal	5392-40-5	>= 0.1 - < 1

Actual concentration is withheld as a trade secret

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice
In the case of accident or if you feel unwell, seek medical ad-vice immediately.
When symptoms persist or in all cases of doubt seek medical advice.

If inhaled
If inhaled, remove to fresh air. Get medical attention if symptoms occur.

In case of skin contact
In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.
Get medical attention.
Wash clothing before reuse.
Thoroughly clean shoes before reuse.

In case of eye contact
Flush eyes with water as a precaution.
Get medical attention if irritation develops and persists.

If swallowed
If swallowed, DO NOT induce vomiting. Get medical attention if symptoms occur.
Rinse mouth thoroughly with water.

Most important symptoms and effects, both acute and delayed
May cause an allergic skin reaction.

Protection of first aiders
First Aid responders should pay attention to self-protection, and use the recommended personal protective equipment when the potential for exposure exists (see section 8).

Notes to physician
Treat symptomatically and supportively.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Water spray. Alcohol-resistant foam Carbon dioxide (CO2) Dry chemical

5.2. Unsuitable extinguishing media

High volume water jet

5.3. Specific hazards during fire fighting

Do not use a solid water stream as it may scatter and spread fire.
Flash back possible over considerable distance.
Vapors may form explosive mixtures with air.
Exposure to combustion products may be a hazard to health.

5.4. Hazardous Combustion Products

Carbon oxides.

5.5. Specific extinguishing methods

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Use water spray to cool unopened containers.
Remove undamaged containers from fire area if it is safe to do so.
Evacuate area.

5.6. Protective equipment and precautions for firefighters

In the event of fire, wear self-contained breathing apparatus.
Use personal protective equipment.

SECTION 6: Accidental release measure

6.1. Personal precautions, protective equipment and emergency procedure

Remove all sources of ignition. Use personal protective equipment.

Follow safe handling advice (see section 7) and personal protective equipment recommendations (see section 8).

6.2. Environmental precautions

Avoid release to the environment.
Prevent further leakage or spillage if safe to do so.
Prevent spreading over a wide area (e.g., by containment or oil barriers).
Retain and dispose of contaminated wash water.
Local authorities should be advised if significant spillages cannot be contained.

6.3. Methods and material for containment and cleaning up

Non-sparking tools should be used.
Soak up with inert absorbent material.
Suppress (knock down) gases/vapors/mists with a water spray jet.
For large spills, provide diking or other appropriate contain-ment to keep material from spreading. If diked material can be pumped, store recovered material in appropriate container. Clean up remaining materials from spill with suitable absor-bent.
Local or national regulations may apply to releases and dispo-sal of this material, as well as those materials and items em-ployed in the cleanup of releases. You will need to determine which regulations are applicable.
Sections 13 and 15 of this SDS provide information regarding certain local or national requirements.

SECTION 7: Handling and storage

7.1. Handling and storage

Technical measures	See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.
Local/Total ventilation	If sufficient ventilation is unavailable, use with local exhaust ventilation.
Advice on safe handling	Do not get on skin or clothing. Avoid breathing mist or vapors. Do not swallow. Avoid contact with eyes. Handle in accordance with good industrial hygiene and safety practice, based on the results of the workplace exposure assessment Keep container tightly closed. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharges. Take care to prevent spills, waste and minimize release to the environment.
Conditions for safe storage	Keep in properly labeled containers. Keep tightly closed. Keep in a cool, well-ventilated place. Store in accordance with the particular national regulations. Keep away from heat and sources of ignition.
Materials to avoid	Do not store with the following product types Strong oxidizing agents Explosives Gases
Recommended storage temperature	50 - 86 °F / 10 - 30 °C

SECTION 8: Exposure controls/personal protection

8.1. Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parame-ters / Permissible concentration	Basis
3,7-Dimethyl 2,6-octadienal	5392-40-5	TWA (Inhalable fraction and vapor)	5 ppm	ACGIH

8.2. Engineering measures

Engineering Measures Ensure adequate ventilation, especially in confined areas. Minimize workplace exposure concentrations.

8.3. Personal protective equipment

Respiratory protection General and local exhaust ventilation is recommended to maintain vapor exposures below recommended limits. Where concentrations are above recommended limits or are unknown, appropriate respiratory protection should be worn. Follow OSHA respirator regulations (29 CFR 1910.134) and use NIOSH/MSHA approved respirators. Protection provided by air purifying respirators against exposure to any hazar-dous chemical is limited. Use a positive pressure air supplied respirator if there is any potential for uncontrolled release, exposure levels are unknown, or any other circumstance where air purifying respirators may not provide adequate protection.

Hand protection:
Material Chemical-resistant gloves
Breakthrough time > 10 min

Remarks Choose gloves to protect hands against chemicals depending on the concentration specific to place of work. For special applications, we recommend clarifying the resistance to chemicals of the aforementioned protective gloves with the glove manufacturer. Wash hands before breaks and at the end of workday.

Eye protection Wear the following personal protective equipment:
Safety glasses

Skin and body protection Select appropriate protective clothing based on chemical resistance data and an assessment of the local exposure potential.
Wear the following personal protective equipment:
If assessment demonstrates that there is a risk of explosive atmospheres or flash fires, use flame retardant antistatic protective clothing.
Skin contact must be avoided by using impervious protective clothing (gloves, aprons, boots, etc).

Hygiene measures If exposure to chemical is likely during typical use, provide eye flushing systems and safety showers close to the wor-king place.
When using do not eat, drink or smoke.
Contaminated work clothing should not be allowed out of the workplace.
Wash contaminated clothing before re-use.

SECTION 9: Physical and chemical properties

9.1. Physical and Chemical Properties

Appearance	Liquid
Color	Red
Odor	Fruity
Odor Threshold	No data available
pH	Substance/mixture is non-soluble (in water)
Melting point/freezing point	No data available
Initial boiling point and boiling range	No data available
Flash point	147 °F / 64 °C Method: closed cup
Evaporation rate	No data available
Flammability (solid, gas)	Not applicable

Flammability (liquids)	No data available
Upper explosion limit / Upper flammability limit	No data available
Lower explosion limit / Lower flammability limit	No data available
Vapor pressure	0.5261 hPa (68 °F / 20 °C)
Relative vapor density	No data available
Relative density	No data available
Density	0.9413 g/cm³ (68 °F / 20 °C)
Solubility(ies) **Water solubility**	Practically insoluble
Partition coefficient: Noctanol/water	Not applicable
Autoignition temperature	No data available
Decomposition temperature	No data available
Viscosity, kinematic	No data available
Explosive properties	Not explosive
Oxidizing properties	The substance or mixture is not classified as oxidizing.
Particle characteristics: Particle size	Not applicable

SECTION 10: Stability and reactivity

10.1. Reactivity
Not classified as a reactivity hazard.

10.2. Chemical stability
Stable under normal conditions.

10.3. Possibility of hazardous reactions
Combustible liquid.
Vapors may form explosive mixture with air.
Can react with strong oxidizing agents.

10.5. Conditions to avoid
Heat, flames and sparks.

10.6. Incompatible materials
Oxidizing agents

10.7. Hazardous decomposition products
No hazardous decomposition products are known.

SECTION 11: Toxicological information

11.1. Toxicologgical information

Product Information

Inhalation

Eye contact

Skin contact

Ingestion

Acute toxicity:
Not classified based on available information.

Product:

Acute oral toxicity	Acute toxicity estimate: > 5,000 mg/kg Method: Calculation method

Components:

methyl benzoate:

Acute oral toxicity	LD50 (Rat): 1,625 mg/kg

	Method: OECD Test Guideline 401
2,2-Dimethyl 7-octen-2-ol:	
Acute oral toxicity	LD50 (Rat): 3,020 mg/kg
Acute dermal toxicity	LD50 (Rabbit): > 5,000 mg/kg
Allyl (cyclohexyloxy)acetate:	
Acute oral toxicity	LD50 (Rat): 620 mg/kg
Acute dermal toxicity	LD50 (Rabbit): > 2,000 mg/kg
Ionone, methyl-:	
Acute oral toxicity	LD50 (Rat): > 2,000 mg/kg Method: OECD Test Guideline 423 Assessment: The substance or mixture has no acute oral toxicity
Acute dermal toxicity	LD50 (Rabbit): > 5,000 mg/kg
Lavender, Lavandula hybrida, ext.:	
Acute oral toxicity	LD50 (Rat): > 5,000 mg/kg
Acute dermal toxicity	LD50 (Rabbit): > 5,000 mg/kg
p-tert-Butylcyclohexyl Acetate:	
Acute oral toxicity	LD50 (Rat): 3,323 mg/kg
Acute dermal toxicity	LD50 (Rabbit): > 4,680 mg/kg Assessment: The substance or mixture has no acute dermal
3,7-Dimethyl 2,6-octadienal:	
Acute oral toxicity	LD50 (Rat, female): 4,895 mg/kg
Acute inhalation toxicity	LC50 (Rat): > 0.68 mg/l Exposure time: 7 h Test atmosphere: vapor
Acute dermal toxicity	LD50 (Rabbit): 2,250 mg/kg

Skin corrosion/irritation: Not classified based on available information.

Components:

methyl benzoate:	
Species	Rabbit
Method	OECD Test Guideline 404
Result	No skin irritation
2,2-Dimethyl 7-octen-2-ol:	
Species	Reconstructed human epidermis (RhE)
Method	OECD Test Guideline 439
Species	Reconstructed human epidermis (RhE)
Method	OECD Test Guideline 431
Result	Skin irritation
Allyl (cyclohexyloxy)acetate:	
Species	Rabbit
Result	No skin irritation
Ionone, methyl-:	
Species	Rabbit

Result	Skin irritation

Lavender, Lavandula hybrida, ext.:

Species	Rabbit
Method	OECD Test Guideline 404
Result	No skin irritation

p-tert-Butylcyclohexyl Acetate:

Species	Reconstructed human epidermis (RhE)
Method	OECD Test Guideline 439
Result	No skin irritation

3,7-Dimethyl 2,6-octadienal:

Species	Rabbit
Result	Skin irritation

Serious eye damage/eye irritation: Not classified based on available information.

Components:

methyl benzoate:

Species	Rabbit
Method	OECD Test Guideline 405
Result	No eye irritation

2,2-Dimethyl 7-octen-2-ol:

Species	Rabbit
Result	Irritation to eyes, reversing within 21 days

Allyl (cyclohexyloxy)acetate:

Species	Rabbit
Method	OECD Test Guideline 405
Result	No eye irritation
Remarks	Based on data from similar materials

Ionone, methyl-:

Species	Rabbit
Result	Irritation to eyes, reversing within 7 days
Remarks	Based on data from similar materials

Lavender, Lavandula hybrida, ext.:

Result	Irritation to eyes, reversing within 21 days
Remarks	Based on data from similar materials

p-tert-Butylcyclohexyl Acetate:

Species	Rabbit
Result	No eye irritation

3,7-Dimethyl 2,6-octadienal:

Species	Rabbit
Result	Irritation to eyes, reversing within 21 days

Respiratory or skin sensitization:

Skin sensitization May cause an allergic skin reaction.

Respiratory sensitization Not classified based on available information.

Components:

methyl benzoate:

Test Type	Local lymph node assay (LLNA)
Routes of exposure	Skin contact
Species	Mouse
Method	OECD Test Guideline 429
Result	Negative

2,2-Dimethyl 7-octen-2-ol:

Test Type	Maximization Test
Routes of exposure	Skin contact
Species	Guinea pig
Method	OECD Test Guideline 406
Result	Negative

Allyl (cyclohexyloxy)acetate:

Routes of exposure	Skin contact
Species	Guinea pig
Result	Negative

Ionone, methyl-:

Test Type	Maximization Test
Routes of exposure	Skin contact
Species	Guinea pig
Result	Negative

Lavender, Lavandula hybrida, ext.:

Test Type	Local lymph node assay (LLNA)
Routes of exposure	Skin contact
Species	Mouse
Method	OECD Test Guideline 429
Result	Positive
Assessment	Probability or evidence of low to moderate skin sensitization rate in humans

p-tert-Butylcyclohexyl Acetate:

Test Type	Local lymph node assay (LLNA)
Routes of exposure	Skin contact
Species	Mouse
Method	OECD Test Guideline 429
Result	Positive
Assessment	Probability or evidence of low to moderate skin sensitization rate in humans

3,7-Dimethyl 2,6-octadiena

Test Type	Human repeat insult patch test (HRIPT)
Routes of exposure	Skin contact
Result	Positive
Assessment	Probability or evidence of skin sensitization in humans

Germ cell mutagenicity Not classified based on available information.

Components:

methyl benzoate:

Genotoxicity in vitro	Test Type: In vitro mammalian cell gene mutation test Method: OECD Test Guideline 476 Result: negative

2,2-Dimethyl 7-octen-2-ol:

Genotoxicity in vitro	Test Type: Bacterial reverse mutation assay (AMES) Method: OECD Test Guideline 471

Result: negative

Test Type: In vitro mammalian cell gene mutation test
Method: OECD Test Guideline 476
Result: negative

Test Type: Chromosome aberration test in vitro
Method: OECD Test Guideline 473
Result: negative

Allyl (cyclohexyloxy)acetate:

Genotoxicity in vitro

Test Type: In vitro mammalian cell gene mutation test
Method: OECD Test Guideline 476
Result: negative
Remarks: Based on data from similar materials

Ionone, methyl-:

Genotoxicity in vitro

Test Type: Bacterial reverse mutation assay (AMES)
Result: negative

Genotoxicity in vivo

Test Type: Mammalian erythrocyte micronucleus test (in vivo cytogenetic assay)
Species: Mouse
Application Route: Intraperitoneal injection
Result: negative

Lavender, Lavandula hybrida, ext.:

Genotoxicity in vitro

Test Type: Bacterial reverse mutation assay (AMES)
Method: OECD Test Guideline 471
Result: negative

Test Type: In vitro mammalian cell gene mutation test
Method: OECD Test Guideline 476
Result: negative

Test Type: in vitro micronucleus test
Method: OECD Test Guideline 487
Result: negative
Remarks: Based on data from similar materials

p-tert-Butylcyclohexyl Acetate:

Genotoxicity in vitro

Test Type: Bacterial reverse mutation assay (AMES)
Method: OECD Test Guideline 471
Result: negative
Remarks: Based on data from similar materials

Test Type: In vitro mammalian cell gene mutation test
Method: OECD Test Guideline 476
Result: negative
Remarks: Based on data from similar materials

Test Type: Chromosome aberration test in vitro
Method: OECD Test Guideline 473
Result: negative
Remarks: Based on data from similar materials

3,7-Dimethyl 2,6-octadienal:

Genotoxicity in vitro

Test Type: Bacterial reverse mutation assay (AMES)
Result: negative

Test Type: In vitro mammalian cell gene mutation test
Method: OECD Test Guideline 476
Result: negative

	Test Type: Chromosome aberration test in vitro Result: negative Test Type: In vitro sister chromatid exchange assay in mam-malian cells Result: positive
Genotoxicity in vitro	Test Type: Mammalian erythrocyte micronucleus test (in vivo cytogenetic assay) Species: Mouse Application Route: Ingestion Result: negative

Carcinogenicity Not classified based on available information.

Components:

3,7-Dimethyl 2,6-octadienal:

Species	Mouse
Application Route	Ingestion
Exposure time	104 - 105 weeks
Result	Negative

IARC No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

NTP No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Reproductive toxicity Not classified based on available information.

Components:

methyl benzoate:

Effects on fertility	Test Type: Four-generation reproduction toxicity study Species: Rat Application Route: Ingestion Result: negative Remarks: Based on data from similar materials
Effects on fetal development	Test Type: Embryo-fetal development Species: Mouse Application Route: Ingestion Result: negative Remarks: Based on data from similar materials

2,2-Dimethyl 7-octen-2-ol:

Effects on fetal development	Test Type: Embryo-fetal development Species: Rat Application Route: Ingestion Result: negative Remarks: Based on data from similar materials

Allyl (cyclohexyloxy)acetate:

Effects on fertility	Test Type: One-generation reproduction toxicity study Species: Rat Application Route: Ingestion Method: OECD Test Guideline 415 Result: negative Remarks: Based on data from similar materials
Effects on fetal development	Test Type: Embryo-fetal development Species: Rat Application Route: Ingestion

	Method: OECD Test Guideline 414 Result: negative Remarks: Based on data from similar materials

Ionone, methyl-:

Effects on fertility	Test Type: Two-generation reproduction toxicity study Species: Rat Application Route: Ingestion Result: negative Remarks: Based on data from similar materials
Effects on fetal development	Test Type: Embryo-fetal development Species: Rat Application Route: Ingestion Result: negative Remarks: Based on data from similar materials

p-tert-Butylcyclohexyl Acetate:

Effects on fetal development	Test Type: Embryo-fetal development Species: Rat Application Route: Ingestion Result: negative

3,7-Dimethyl 2,6-octadienal:

Effects on fertility	Test Type: One-generation reproduction toxicity study Species: Rat Application Route: Ingestion Method: OECD Test Guideline 443 Result: negative
Effects on fetal development	Test Type: One-generation reproduction toxicity study Species: Rat Application Route: Ingestion Method: OECD Test Guideline 443 Result: negative

STOT-single exposure	Not classified based on available information.

Components:

2,2-Dimethyl 7-octen-2-ol:

Assessment	May cause drowsiness or dizziness.

STOT-repeated exposure	Not classified based on available information.

Repeated dose toxicity

Components:

2,2-Dimethyl 7-octen-2-ol:

Species	Rat
LOAEL	> 100 mg/kg
Application Route	Ingestion
Exposure time	90 Days
Method	OECD Test Guideline 408
Remarks	Based on data from similar materials

Allyl (cyclohexyloxy)acetate:

Species	Rat
NOAEL	> 214 mg/kg
Application Route	Ingestion
Exposure time	1 y

Method	Based on data from similar materials

Ionone, methyl-:

Species	Rat
NOAEL	50 mg/m3
Application Route	inhalation (dust/mist/fume)
Exposure time	90 Days

p-tert-Butylcyclohexyl Acetate:

Species	Rat
NOAEL	> 300 mg/kg
Application Route	Ingestion
Exposure time	28 Days
Method	OECD Test Guideline 407
Remarks	Based on data from similar materials

3,7-Dimethyl 2,6-octadienal:

Species	Rat, female
NOAEL	335 mg/kg
Application Route	Ingestion
Exposure time	14 Weeks

Aspiration toxicity Not classified based on available information.

SECTION 12: Ecological information

12.1. Ecotoxicity

Components:

methyl benzoate:

Toxicity to fish	LC50 (Danio rerio (zebra fish)): 23 mg/ll Exposure time: 96 h Method: Directive 67/548/EEC, Annex V, C.1.
Toxicity to algae/aquatic plants	EC50 (Scenedesmus capricornutum (fresh water algae)): 111.9 mg/l Exposure time: 72 h Method: Directive 67/548/EEC, Annex V, C.3.
Toxicity to microorganisms	EC50: 815 mg/l Exposure time: 3 h Method: OECD Test Guideline 209

2,2-Dimethyl 7-octen-2-ol:

Toxicity to fish	LC50 : > 10 - 100 mg/l Exposure time: 96 h Method: OECD Test Guideline 203 Remarks: Based on data from similar materials
Toxicity to daphnia and other aquatic invertebrates	EC50 (Daphnia magna (Water flea)): 38 mg/l Exposure time: 48 h Method: OECD Test Guideline 202
Toxicity to algae/aquatic plants	ErC50 (Desmodesmus subspicatus (green algae)): 80 mg/l Exposure time: 72 h Method: OECD Test Guideline 201 NOEC (Desmodesmus subspicatus (green algae)): 25 mg/l Exposure time: 72 h

	Method: OECD Test Guideline 201
Toxicity to microorganisms	EC50 (activated sludge): > 100 mg/l Exposure time: 3 h Method: OECD Test Guideline 209 Remarks: Based on data from similar materials
Allyl (cyclohexyloxy)acetate:	
Toxicity to fish	LC50 (Danio rerio (zebra fish)): 0.205 mg/l Exposure time: 96 h Method: OECD Test Guideline 203
Toxicity to daphnia and other aquatic invertebrates	EC50 (Daphnia magna (Water flea)): 6.09 mg/l Exposure time: 48 h Method: OECD Test Guideline 202
Toxicity to algae/aquatic plants	ErC50 (Pseudokirchneriella subcapitata (green algae)): 69.2 mg/l Exposure time: 72 h Method: OECD Test Guideline 201
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	EC10 (Pseudokirchneriella subcapitata (green algae)): 30.2 mg/l Exposure time: 72 h Method: OECD Test Guideline 201
	NOEC: 3.2 mg/l Exposure time: 21 d Method: OECD Test Guideline 211
Ionone, methyl-:	
Toxicity to fish	LC50 (Danio rerio (zebra fish)): 2.3 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	EC50 (Daphnia magna (Water flea)): 2.42 mg/l Exposure time: 48 h Method: OECD Test Guideline 202
Toxicity to algae/aquatic plants	ErC50 (Desmodesmus subspicatus (green algae)): > 9.42 mg/l Exposure time: 72 h Method: OECD Test Guideline 201
	NOEC (Desmodesmus subspicatus (green algae)): > 9.42 mg/l Exposure time: 72 h Method: OECD Test Guideline 201
Toxicity to microorganisms	EC50 (Pseudomonas putida): 10,000 mg/l Exposure time: 16 h
Lavender, Lavandula hybrida, ext.:	
Toxicity to fish	LC50 (Cyprinus carpio (Carp)): > 10 - 100 mg/l Exposure time: 96 h Method: OECD Test Guideline 203 Remarks: Based on data from similar materials
Toxicity to daphnia and other aquatic invertebrates	EC50 (Daphnia magna (Water flea)): > 10 - 100 mg/l Exposure time: 48 h Method: OECD Test Guideline 202 Remarks: Based on data from similar materials
Toxicity to microorganisms	EC50 (activated sludge): > 100 mg/l Exposure time: 3 h Method: OECD Test Guideline 209 Remarks: Based on data from similar materials
p-tert-Butylcyclohexyl Acetate:	
Toxicity to fish	LC50 (Cyprinus carpio (Carp)): 8.6 mg/l

	Exposure time: 96 h Method: Directive 67/548/EEC, Annex V, C.1.
Toxicity to daphnia and other aquatic invertebrates	EC50 (Daphnia magna (Water flea)): 5.3 mg/l Exposure time: 48 h Method: OECD Test Guideline 202
Toxicity to algae/aquatic plants	ErC50 (Desmodesmus subspicatus (green algae)): 22 mg/l Exposure time: 72 h Method: Directive 67/548/EEC, Annex V, C.3.
	EC10 (Desmodesmus subspicatus (green algae)): 11 mg/l Exposure time: 72 h Method: Directive 67/548/EEC, Annex V, C.3.
Toxicity to microorganisms	EC10: 122 mg/l Exposure time: 3 h

3,7-Dimethyl 2,6-octadienal:

Toxicity to fish	LC50 (Leuciscus idus (Golden orfe)): 6.78 mg/l Exposure time: 96 h Method: DIN 38412
Toxicity to daphnia and other aquatic invertebrates	EC50 (Daphnia magna (Water flea)): 6.8 mg/l Exposure time: 48 h
Toxicity to algae/aquatic plants	ErC50 (Desmodesmus subspicatus (green algae)): 103.8 mg/l Exposure time: 72 h
	EC10 (Desmodesmus subspicatus (green algae)): 3 mg/l Exposure time: 72 h
Toxicity to microorganisms	EC50 (activated sludge): 160 mg/l Exposure time: 30 min Method: OECD Test Guideline 209

12.2. Persistence and degradability

Components:

methyl benzoate:

Biodegradability	Result: Readily biodegradable. Biodegradation: 62 % Exposure time: 29 d Method: Directive 67/548/EEC Annex V, C.4.C.

2,2-Dimethyl 7-octen-2-ol:

Biodegradability	Result: Readily biodegradable. Biodegradation: 72 % Exposure time: 28 d Method: OECD Test Guideline 301B

Allyl (cyclohexyloxy)acetate:

Biodegradability	Result: Not Readily biodegradable. Biodegradation: 27.98 % Exposure time: 28 d Method: OECD Test Guideline 301D

Ionone, methyl-:

Biodegradability	Result: Readily biodegradable. Biodegradation: 76 % Exposure time: 28 d

Method: OECD Test Guideline 301F

Lavender, Lavandula hybrida, ext.:
Biodegradability — Result: Readily biodegradable.
Remarks: Based on data from similar materials

p-tert-Butylcyclohexyl Acetate:
Biodegradability — Result: Readily biodegradable.
Biodegradation: 75 %
Exposure time: 28 d
Method: Directive 67/548/EEC Annex V, C.4.C.

3,7-Dimethyl 2,6-octadienal:
Biodegradability — Result: Readily biodegradable.
Biodegradation: > 90 %
Exposure time: 28 d
Method: Directive 67/548/EEC Annex V, C.4.D.

12.3. Bioaccumulation potential

Components:

methyl benzoate:
Partition coefficient: noctanol/water — log Pow: 2.12

2,2-Dimethyl 7-octen-2-ol:
Partition coefficient: noctanol/water — log Pow: 3.25
Method: OECD Test Guideline 117

Allyl (cyclohexyloxy)acetate:
Partition coefficient: noctanol/water — log Pow: 2.8
Method: OECD Test Guideline 117

Ionone, methyl-:
Partition coefficient: noctanol/water — log Pow: > 4.5 - < 5

Lavender, Lavandula hybrida, ext.:
Partition coefficient: noctanol/water — log Pow: > 4
Remarks: Expert judgment

p-tert-Butylcyclohexyl Acetate:
Bioaccumulation — Bioconcentration factor (BCF): < 500

Partition coefficient: n-octanol/water — log Pow: 4.8

3,7-Dimethyl 2,6-octadienal:
Partition coefficient: noctanol/water — log Pow: 2.76

Mobility in soil: No data available

12.4. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste from residues
Dispose of in accordance with local regulations.
Do not dispose of waste into sewer.

Contaminated packaging
Empty containers should be taken to an approved waste handling site for recycling or disposal.
Empty containers retain residue and can be dangerous.
Do not pressurize, cut, weld, braze, solder, drill, grind, or ex-pose such containers to heat, flame, sparks, or other sources of ignition. They may explode and cause injury and/or death. If not otherwise specified: Dispose of as unused product.

SECTION 14: Transport information

International Regulations:

UNRTDG: Not regulated as a dangerous good

IATA-DGR: Not regulated as a dangerous good

IMDG-Code: Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not applicable for product as supplied.

Domestic Regulation:

49 CFR:

UN/ID/NA number	NA 1993
Proper shipping name	Combustible liquid, n.o.s. (methyl benzoate, 2,2-Dimethyl 7-octen-2-ol)
Class	CBL
Packing group	III
Labels	NONE
ERG Code	128
Marine pollutant	No
Remarks	Above applies only to containers over 119 gallons or 450 liters. Not regulated if shipped in packages less than or equal to 119 gallons (450 liters).

Special precautions for user: The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

SECTION 15: Regulatory information

15.1. Regulatory Information

CERCLA Reportable Quantity This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity This material does not contain any components with a section 304 EHS RQ.

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards	Flammable (gases, aerosols, liquids, or solids) Respiratory or skin sensitization Skin corrosion or irritation
SARA 313	This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.
Volatile organic compounds (VOC) content	40 CFR Part 59 National VOC Emission Standard For Consumer Products, Subpart C VOC content: 75.24 %

US State Regulations

Pennsylvania Right To Know

methyl benzoate	93-58-3
2,2-Dimethyl 7-octen-2-ol	18479-58-8

The ingredients of this product are reported in the following inventories:

TSCA	All substances listed as active on the TSCA inventory

SECTION 16: Other Information

NFPA 704:	**Health Hazards:** 2	**Flammability:** 2	**Instability:** 0	**Physical and Chemical Hazards:** N/A
HMIS® IV:	**Health Hazards:** 2	**Flammability:** 2	**Physical Hazard:** 0	**Personal Protection:** X

HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

Full text of other abbreviations

ACGIH	USA. ACGIH Threshold Limit Values (TLV)
ACGIH / TWA	8-hour, time-weighted average

AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardization; DOT - Department of Transportation; DSL - Domestic Sub-stances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organization for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bio accumulative and Toxic sub-stance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concern-ing the Registration, Evaluation, Authorization and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amend-ments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bio accumulative

REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorization and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bio accumulative

Sources of key data used to compile the Material Safety Data Sheet	Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agency, http://echa.europa.eu/
Revision Date	10/08/2024

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provided relates only to the specific material identified at the top of this SDS and may not be valid when the SDS mate-rial is used in combination with any other materials or in any process, unless specified in the text. Material users should review the information and recommendations in the specific context of their intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the SDS material in the user's end product, if applicable.

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