

# SAFETY DATA SHEET

## 1. Identification

**Product identifier:** PACIFIC BREEZE STRESS FREE AIR FRESHENER

**Other means of identification**

**SDS number:** RE1000038790

**Recommended restrictions**

**Product Use:** Air Freshener

**Restrictions on use:** Not known.

**Manufacturer/Importer/Distributor Information**

**Manufacturer**

**Company Name:** PACIFIC BREEZE PRODUCTS, INC.  
**Address:** P.O. BOX 1663  
Woodinville, WA 98072  
**Telephone:** 1-425-485-2112  
**Fax:**

**Emergency telephone number:** 1-866-836-8855

## 2. Hazard(s) identification

**Hazard Classification**

**Physical Hazards**

Flammable aerosol Category 1

**Health Hazards**

Toxic to reproduction Category 2

**Label Elements**

**Hazard Symbol:**



**Signal Word:** Danger

**Hazard Statement:** Extremely flammable aerosol.  
Suspected of damaging fertility or the unborn child.

**Precautionary Statements**

**Prevention:** Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition

source. Do not pierce or burn, even after use. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required.

**Response:** IF exposed or concerned: Get medical advice/attention.

**Storage:** Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. Store locked up.

**Disposal:** Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

**Hazard(s) not otherwise classified (HNOC):** None.

### 3. Composition/information on ingredients

#### Mixtures

Chemical Identity	CAS number	Content in percent (%)*
Benzenepropanal, 4-(1,1-dimethylethyl)- $\alpha$ -methyl-	80-54-6	0.1 - <1%
Acetic acid, phenylmethyl ester	140-11-4	0.1 - <1%
Ethane, 1,1-difluoro-	75-37-6	15%
Phenol, 2,6-bis(1,1-dimethylethyl)-4-methyl-	128-37-0	0 - <0.1%
Bicyclo[3.1.1]hept-2-ene, 2,6,6-trimethyl-	80-56-8	0 - <0.1%
2,6-Octadienal, 3,7-dimethyl-	5392-40-5	0 - <0.1%
Benzene, 1,1'-oxybis-	101-84-8	0 - <0.1%

\* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

### 4. First-aid measures

**Ingestion:** Rinse mouth thoroughly.

**Inhalation:** Move to fresh air.

**Skin Contact:** Remove contaminated clothing and wash the skin thoroughly with soap and water after work.

**Eye contact:** Rinse immediately with plenty of water.

#### Most important symptoms/effects, acute and delayed

**Symptoms:** No data available.

**Hazards:** No data available.

#### Indication of immediate medical attention and special treatment needed

**Treatment:** No data available.

### 5. Fire-fighting measures

**General Fire Hazards:** Use water spray to keep fire-exposed containers cool. Fight fire from a protected location. Move containers from fire area if you can do so without risk.

**Suitable (and unsuitable) extinguishing media**

**Suitable extinguishing media:** Use fire-extinguishing media appropriate for surrounding materials.

**Unsuitable extinguishing media:** Do not use water jet as an extinguisher, as this will spread the fire.

**Specific hazards arising from the chemical:** Vapors may travel considerable distance to a source of ignition and flash back.

**Special protective equipment and precautions for firefighters**

**Special fire fighting procedures:** No data available.

**Special protective equipment for fire-fighters:** Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

**6. Accidental release measures**

**Personal precautions, protective equipment and emergency procedures:** Ventilate closed spaces before entering them. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Keep upwind.

**Methods and material for containment and cleaning up:** Stop the flow of material, if this is without risk. Absorb with sand or other inert absorbent.

**Notification Procedures:** ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop leak if you can do so without risk.

**Environmental Precautions:** Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water sources or sewer. Environmental manager must be informed of all major spillages.

**7. Handling and storage**

**Precautions for safe handling:** Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Use personal protective equipment as required.

**Conditions for safe storage, including any incompatibilities:** Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Store locked up. Aerosol Level 1

**8. Exposure controls/personal protection**

**Control Parameters**

### Occupational Exposure Limits

Chemical Identity	Type	Exposure Limit Values	Source
Acetic acid, phenylmethyl ester	TWA	10 ppm	US. ACGIH Threshold Limit Values (2008)
	TWA PEL	10 ppm 61 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (09 2006)
	ST ESL	100 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	AN ESL	10 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	ST ESL	610 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	AN ESL	61 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
Phenol, 2,6-bis(1,1-dimethylethyl)-4-methyl-	TWA	10 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	TWA	10 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)
Phenol, 2,6-bis(1,1-dimethylethyl)-4-methyl- - Inhalable fraction and vapor.	TWA	2 mg/m3	US. ACGIH Threshold Limit Values (2008)
Phenol, 2,6-bis(1,1-dimethylethyl)-4-methyl-	REL	10 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	TWA PEL	10 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (02 2012)
Bicyclo[3.1.1]hept-2-ene, 2,6,6-trimethyl-	TWA	20 ppm	US. ACGIH Threshold Limit Values (2008)
	ST ESL	3,500 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	ST ESL	630 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	AN ESL	63 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	AN ESL	350 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
2,6-Octadienal, 3,7-dimethyl- - Inhalable fraction and vapor.	TWA	5 ppm	US. ACGIH Threshold Limit Values (01 2010)
2,6-Octadienal, 3,7-dimethyl-	ST ESL	50 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	ST ESL	310 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	AN ESL	31 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	AN ESL	5 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	STEL	2 ppm	US. ACGIH Threshold Limit Values (03 2018)
Benzene, 1,1'-oxybis- - Vapor.	TWA	1 ppm	US. ACGIH Threshold Limit Values (03 2018)
	PEL	1 ppm 7 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
	TWA PEL	1 ppm 7 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (09 2006)
	REL	1 ppm 7 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	TWA	1 ppm 7 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)

Benzene, 1,1'-oxybis-	ST ESL	70 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	AN ESL	7 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
Benzene, 1,1'-oxybis- - Vapor.	TWA	1 ppm 7 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)
Benzene, 1,1'-oxybis-	ST ESL	10 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	AN ESL	1 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)

**Appropriate Engineering Controls** No data available.

**Individual protection measures, such as personal protective equipment**

**General information:** Use personal protective equipment as required. Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

**Eye/face protection:** Wear goggles/face shield.

**Skin Protection**

**Hand Protection:** No data available.

**Other:** No data available.

**Respiratory Protection:** In case of inadequate ventilation use suitable respirator. Seek advice from local supervisor.

**Hygiene measures:** When using do not smoke. Observe good industrial hygiene practices. Do not handle until all safety precautions have been read and understood. Obtain special instructions before use.

**9. Physical and chemical properties**

**Appearance**

**Physical state:** liquid  
**Form:** Spray Aerosol  
**Color:** No data available.  
**Odor:** No data available.  
**Odor threshold:** No data available.  
**pH:** No data available.  
**Melting point/freezing point:** No data available.  
**Initial boiling point and boiling range:** No data available.  
**Flash Point:** -50 °C  
**Evaporation rate:** No data available.  
**Flammability (solid, gas):** No data available.

**Upper/lower limit on flammability or explosive limits**

**Flammability limit - upper (%):** No data available.  
**Flammability limit - lower (%):** No data available.  
**Explosive limit - upper (%):** No data available.  
**Explosive limit - lower (%):** No data available.

**Vapor pressure:** No data available.

<b>Vapor density:</b>	No data available.
<b>Density:</b>	No data available.
<b>Relative density:</b>	No data available.
<b>Solubility(ies)</b>	
<b>Solubility in water:</b>	No data available.
<b>Solubility (other):</b>	No data available.
<b>Partition coefficient (n-octanol/water):</b>	No data available.
<b>Auto-ignition temperature:</b>	No data available.
<b>Decomposition temperature:</b>	No data available.
<b>Viscosity:</b>	No data available.

## 10. Stability and reactivity

<b>Reactivity:</b>	No data available.
<b>Chemical Stability:</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions:</b>	No data available.
<b>Conditions to avoid:</b>	Avoid heat or contamination.
<b>Incompatible Materials:</b>	No data available.
<b>Hazardous Decomposition Products:</b>	No data available.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation:</b>	No data available.
<b>Skin Contact:</b>	No data available.
<b>Eye contact:</b>	No data available.
<b>Ingestion:</b>	No data available.

### Symptoms related to the physical, chemical and toxicological characteristics

<b>Inhalation:</b>	No data available.
<b>Skin Contact:</b>	No data available.
<b>Eye contact:</b>	No data available.
<b>Ingestion:</b>	No data available.

## Information on toxicological effects

### Acute toxicity (list all possible routes of exposure)

#### Oral

**Product:** Not classified for acute toxicity based on available data.

**Specified substance(s):**

Benzenepropanal, 4-(1,1-dimethylethyl)- $\alpha$ -methyl- LD 50 (Rat): 1,390 mg/kg

Acetic acid, phenylmethyl ester LD 50 (Rat): > 2,000 mg/kg  
LD 50 (Mouse): > 2,000 mg/kg  
LD 50 (Rat): 2,490 mg/kg

Phenol, 2,6-bis(1,1-dimethylethyl)-4-methyl- LD 50 (Rat): > 6,000 mg/kg

Bicyclo[3.1.1]hept-2-ene, 2,6,6-trimethyl- LD 50 (Rat): 3,700 mg/kg

2,6-Octadienal, 3,7-dimethyl- LD 50 (Rat): 6,800 mg/kg

Benzene, 1,1'-oxybis- LD 50 (Rat): 2.83 g/kg

#### Dermal

**Product:** Not classified for acute toxicity based on available data.

**Specified substance(s):**

Benzenepropanal, 4-(1,1-dimethylethyl)- $\alpha$ -methyl- LD 50 (Rat): > 2,000 mg/kg

Acetic acid, phenylmethyl ester LD 50 (Rabbit): > 5 g/kg

Phenol, 2,6-bis(1,1-dimethylethyl)-4-methyl- LD 50 (Rat): > 2,000 mg/kg

Bicyclo[3.1.1]hept-2-ene, 2,6,6-trimethyl- LD 50 (Rabbit): > 2,000 mg/kg

2,6-Octadienal, 3,7-dimethyl- LD 50 (Rat): > 2,000 mg/kg

Benzene, 1,1'-oxybis- LD 50 (Rabbit): > 7,940 mg/kg

#### Inhalation

**Product:** Not classified for acute toxicity based on available data.

**Specified substance(s):**

Acetic acid, phenylmethyl ester LC Lo (Rat): > 0.766 mg/l

Phenol, 2,6-bis(1,1-dimethylethyl)-4-methyl- LC 50: > 5 mg/l  
LC 50: > 20 mg/l

Bicyclo[3.1.1]hept-2-ene, 2,6,6-trimethyl- LC 50: > 5 mg/l  
LC 50: > 20 mg/l

Benzene, 1,1'-oxybis- LC 50: > 20 mg/l

**Repeated dose toxicity**

**Product:** No data available.

**Specified substance(s):**

Benzenepropanal, 4-(1,1-dimethylethyl)- $\alpha$ -methyl- NOAEL (Rat(Female, Male), Oral, 30 d): 5 mg/kg Oral Other, Key study  
NOAEL (Rat(Female, Male), Oral, 90 d): 25 mg/kg Oral Experimental result, Key study

Acetic acid, phenylmethyl ester NOAEL (Rat(Male), Dermal, 5 d): 1,000 mg/kg Dermal Other, Key study  
NOAEL (Rat(Female, Male), Oral, 30 d): 25 mg/kg Oral Other, Key study  
NOAEL (Rat(Male), Oral, 13 Weeks): 900 mg/kg Oral Experimental result, Supporting study  
NOAEL (Rat(Female), Oral, 13 Weeks): 480 mg/kg Oral Experimental result, Supporting study

Ethane, 1,1-difluoro- NOAEL (Rat(Female, Male), Inhalation, 104 Weeks): 2.5 %(m) Inhalation Experimental result, Key study

Phenol, 2,6-bis(1,1-dimethylethyl)-4-methyl- NOAEL (Rat(Male), Oral, 1.25 - 22.75 Months): 25 mg/kg Oral Experimental result, Key study

Bicyclo[3.1.1]hept-2-ene, 2,6,6-trimethyl- NOAEL (Mouse(Female, Male), Inhalation, 14 Weeks): 50 ppm(m) Inhalation Experimental result, Key study

2,6-Octadienal, 3,7-dimethyl- LOAEL (Rat(Female, Male), Oral, 104 - 105 Weeks): 210 mg/kg Oral Experimental result, Key study

LOAEL (Rat(Female), Oral, 14 Weeks): 335 mg/kg Oral Experimental result, Key study

Benzene, 1,1'-oxybis- NOAEL (Rat(Female, Male), Dermal, 13 Weeks): 100 mg/kg Dermal Experimental result, Key study

NOAEL (Rat(Male), Oral, 13 Weeks): 301 mg/kg Oral Experimental result, Key study

**Skin Corrosion/Irritation**

**Product:** No data available.

**Specified substance(s):**



Benzenepropanal, 4-(1,1-dimethylethyl)- $\alpha$ -methyl-	in vivo (Rabbit): Irritating Experimental result, Key study
Acetic acid, phenylmethyl ester	in vivo (Rabbit): Not irritant Experimental result, Key study
Phenol, 2,6-bis(1,1-dimethylethyl)-4-methyl-	in vivo (Rabbit): Not irritant Experimental result, Key study
Bicyclo[3.1.1]hept-2-ene, 2,6,6-trimethyl-	In vitro (Human): Irritating Experimental result, Key study
Benzene, 1,1'-oxybis-	in vivo (Rabbit): Not irritant Experimental result, Key study

### Serious Eye Damage/Eye Irritation

**Product:** No data available.

**Specified substance(s):**

Phenol, 2,6-bis(1,1-dimethylethyl)-4-methyl-	Rabbit, 24 - 72 hrs: Not irritating
Bicyclo[3.1.1]hept-2-ene, 2,6,6-trimethyl-	Rabbit, 24 - 72 hrs: Not irritating
Benzene, 1,1'-oxybis-	Rabbit, 48 - 72 hrs: Irritating.

### Respiratory or Skin Sensitization

**Product:** No data available.

**Specified substance(s):**

Benzenepropanal, 4-(1,1-dimethylethyl)- $\alpha$ -methyl-	Skin sensitization:, in vivo (Guinea pig): Sensitising
Acetic acid, phenylmethyl ester	Skin sensitization:, in vivo (Guinea pig): Sensitising
Phenol, 2,6-bis(1,1-dimethylethyl)-4-methyl-	Skin sensitization:, in vivo (Human): Non sensitising Skin sensitization:, in vivo (Guinea pig): Non sensitising
Bicyclo[3.1.1]hept-2-ene, 2,6,6-trimethyl-	Skin sensitization:, in vivo (Guinea pig): Sensitising
Benzene, 1,1'-oxybis-	Skin sensitization:, in vivo (Guinea pig): Non sensitising Skin sensitization:, in vivo (Human): Non sensitising

### Carcinogenicity

**Product:** No data available.

### IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

No carcinogenic components identified

### US. National Toxicology Program (NTP) Report on Carcinogens:

No carcinogenic components identified

### US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):

No carcinogenic components identified

### Germ Cell Mutagenicity

**In vitro**  
**Product:** No data available.

**In vivo**  
**Product:** No data available.

### Reproductive toxicity

**Product:** No data available.

**Specified substance(s):**  
Benzenepropanal, 4-(1,1-dimethylethyl)- $\alpha$ -methyl- Suspected of damaging fertility or the unborn child.

### Specific Target Organ Toxicity - Single Exposure

**Product:** No data available.

### Specific Target Organ Toxicity - Repeated Exposure

**Product:** No data available.

### Aspiration Hazard

**Product:** No data available.

**Specified substance(s):**  
Bicyclo[3.1.1]hept-2-ene, 2,6,6-trimethyl- May be fatal if swallowed and enters airways.

**Other effects:** No data available.

## 12. Ecological information

### Ecotoxicity:

#### Acute hazards to the aquatic environment:

##### Fish

**Product:** No data available.

**Specified substance(s):**  
Benzenepropanal, 4-(1,1-dimethylethyl)- $\alpha$ -methyl- NOAEL (Danio rerio, 96 h): 1.28 mg/l Experimental result, Key study  
EC 50 (Danio rerio, 96 h): 2.04 mg/l Experimental result, Key study

Acetic acid, phenylmethyl ester LC 50 (Medaka, high-eyes (*Oryzias latipes*), 96 h): 3.48 - 4.6 mg/l Mortality  
LC 50 (*Oryzias latipes*, 96 h): 4 mg/l Other, Key study

Phenol, 2,6-bis(1,1-dimethylethyl)-4-methyl- LC 50 (*Pimephales promelas*, 96 h): 0.363 mg/l

Bicyclo[3.1.1]hept-2-ene, 2,6,6-trimethyl- EC 50 (*Pimephales promelas*, 96 h): 179  $\mu$ g/l Read-across from supporting substance (structural analogue or surrogate), Supporting study

2,6-Octadienal, 3,7-dimethyl-	LC 50 (Leuciscus idus, 96 h): 6.78 mg/l Experimental result, Key study
Benzene, 1,1'-oxybis-	LC 50 (Oncorhynchus mykiss, 96 h): 4.2 mg/l Experimental result, Key study

#### **Aquatic Invertebrates**

**Product:** No data available.

**Specified substance(s):**

Benzenepropanal, 4-(1,1-dimethylethyl)- $\alpha$ -methyl- EC 50 (Daphnia magna, 48 h): 9.84 mg/l Experimental result, Key study

Acetic acid, phenylmethyl ester EC 50 (Daphnia magna, 24 h): 25 mg/l Experimental result, Key study  
EC 50 (Daphnia magna, 48 h): 17 mg/l Experimental result, Key study  
NOAEL (Daphnia magna, 48 h): 10 mg/l Experimental result, Key study

Phenol, 2,6-bis(1,1-dimethylethyl)-4-methyl- EC 50 (Daphnia magna, 48 h): 0.61 mg/l Experimental result, Key study  
NOAEL (Daphnia magna, 48 h): 0.15 mg/l Experimental result, Key study

Bicyclo[3.1.1]hept-2-ene, 2,6,6-trimethyl- LC 50 (Water flea (Daphnia magna), 48 h): 27 - 62 mg/l Mortality

2,6-Octadienal, 3,7-dimethyl- EC 50 (Daphnia magna, 48 h): 6.8 mg/l Experimental result, Key study

Benzene, 1,1'-oxybis- LC 50 (Daphnia magna, 48 h): 1.7 mg/l Experimental result, Key study  
NOAEL (Daphnia magna, 48 h): 1 mg/l Experimental result, Key study

#### **Chronic hazards to the aquatic environment:**

##### **Fish**

**Product:** No data available.

##### **Aquatic Invertebrates**

**Product:** No data available.

**Specified substance(s):**

Phenol, 2,6-bis(1,1-dimethylethyl)-4-methyl- NOAEL (Daphnia magna): 0.316 mg/l Experimental result, Key study

##### **Toxicity to Aquatic Plants**

**Product:** No data available.

#### **Persistence and Degradability**

##### **Biodegradation**

**Product:** No data available.

**Specified substance(s):**

Benzenepropanal, 4-(1,1-dimethylethyl)- $\alpha$ -methyl- 80.7 % (28 d) Detected in water. Experimental result, Key study

Acetic acid, phenylmethyl ester 100 % (28 d) Detected in water. Experimental result, Key study

Phenol, 2,6-bis(1,1-dimethylethyl)-4-methyl- 4.5 % (28 d) Detected in water. Experimental result, Key study

Bicyclo[3.1.1]hept-2-ene, 2,6,6-trimethyl-	90 - 95 % (28 d) Detected in water. Experimental result, Supporting study
2,6-Octadienal, 3,7-dimethyl-	85 - 95 % (28 d) Detected in water. Experimental result, Key study
Benzene, 1,1'-oxybis-	76 % Detected in water. Experimental result, Key study

**BOD/COD Ratio**

**Product:** No data available.

**Bioaccumulative potential**

**Bioconcentration Factor (BCF)**

**Product:** No data available.

**Specified substance(s):**

Benzenepropanal, 4-(1,1-dimethylethyl)- $\alpha$ -methyl-	Bioconcentration Factor (BCF): 274.3 Aquatic sediment Estimated by calculation, Key study
Acetic acid, phenylmethyl ester	Bioconcentration Factor (BCF): 8 Aquatic sediment Estimated by calculation, Key study
Phenol, 2,6-bis(1,1-dimethylethyl)-4-methyl-	Cyprinus carpio, Bioconcentration Factor (BCF): 330 - 1,800 Aquatic sediment Experimental result, Key study
Bicyclo[3.1.1]hept-2-ene, 2,6,6-trimethyl-	Bioconcentration Factor (BCF): 1,845 Aquatic sediment QSAR, Key study
2,6-Octadienal, 3,7-dimethyl-	Bioconcentration Factor (BCF): 89.72 Aquatic sediment Estimated by calculation, Key study
Benzene, 1,1'-oxybis-	Oncorhynchus mykiss, Bioconcentration Factor (BCF): 200 Aquatic sediment Experimental result, Key study

**Partition Coefficient n-octanol / water (log Kow)**

**Product:** No data available.

**Specified substance(s):**

Phenol, 2,6-bis(1,1-dimethylethyl)-4-methyl-	Log Kow: 5.11 - 5.2 No Experimental result, Weight of Evidence study
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**Mobility in soil:** No data available.

**Known or predicted distribution to environmental compartments**

Benzenepropanal, 4-(1,1-dimethylethyl)- $\alpha$ -methyl-	No data available.
Acetic acid, phenylmethyl ester	No data available.
Ethane, 1,1-difluoro-	No data available.
Phenol, 2,6-bis(1,1-dimethylethyl)-4-methyl-	No data available.
Bicyclo[3.1.1]hept-2-ene, 2,6,6-trimethyl-	No data available.
2,6-Octadienal, 3,7-dimethyl-	No data available.
Benzene, 1,1'-oxybis-	No data available.

**Other adverse effects:** No data available.

### 13. Disposal considerations

**Disposal instructions:** Discharge, treatment, or disposal may be subject to national, state, or local laws.

**Contaminated Packaging:** No data available.

### 14. Transport information

#### DOT

UN Number: UN 1950  
UN Proper Shipping Name: Aerosols, flammable  
Transport Hazard Class(es)  
Class: 2.1  
Label(s): –  
Packing Group: II  
Marine Pollutant: No

Environmental Hazards: No  
Marine Pollutant: No

Special precautions for user: Not regulated.

#### IMDG

UN Number: UN 1950  
UN Proper Shipping Name: Aerosols, flammable  
Transport Hazard Class(es)  
Class: 2  
Label(s): –  
EmS No.: –  
Packing Group: –

Environmental Hazards: No  
Marine Pollutant: No

Special precautions for user: Not regulated.

#### IATA

UN Number: UN 1950  
Proper Shipping Name: Aerosols, flammable  
Transport Hazard Class(es):  
Class: 2.1  
Label(s): –  
Packing Group: –

Environmental Hazards: No  
Marine Pollutant: No

Special precautions for user: Not regulated.

### 15. Regulatory information

**US Federal Regulations**  
**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

None present or none present in regulated quantities.

**CERCLA Hazardous Substance List (40 CFR 302.4):**

<u>Chemical Identity</u>	<u>Reportable quantity</u>
Bicyclo[3.1.1]hept-2-ene, 2,6,6-trimethyl-	lbs. 100

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**Hazard categories**

Fire Hazard  
Delayed (Chronic) Health Hazard  
Flammable aerosol  
Toxic to reproduction

**SARA 302 Extremely Hazardous Substance**

None present or none present in regulated quantities.

**SARA 304 Emergency Release Notification**

<u>Chemical Identity</u>	<u>Reportable quantity</u>
Bicyclo[3.1.1]hept-2-ene, 2,6,6-trimethyl-	lbs. 100

**SARA 311/312 Hazardous Chemical**

<u>Chemical Identity</u>	<u>Threshold Planning Quantity</u>
Benzenepropanal, 4-(1,1-dimethylethyl)- $\alpha$ -methyl-	10000 lbs
Acetic acid, phenylmethyl ester	10000 lbs
Phenol, 2,6-bis(1,1-dimethylethyl)-4-methyl-	10000 lbs
Bicyclo[3.1.1]hept-2-ene, 2,6,6-trimethyl-	10000 lbs
2,6-Octadienal, 3,7-dimethyl-	10000 lbs
Benzene, 1,1'-oxybis-	10000 lbs

**SARA 313 (TRI Reporting)**

None present or none present in regulated quantities.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):**

**Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)**

**US State Regulations**

**US. California Proposition 65**

No ingredient requiring a warning under CA Prop 65.

**US. New Jersey Worker and Community Right-to-Know Act**

<u>Chemical Identity</u>
Ethane, 1,1-difluoro- 1,2-Propanediol

**US. Massachusetts RTK - Substance List**

No ingredient regulated by MA Right-to-Know Law present.

**US. Pennsylvania RTK - Hazardous Substances**

<u>Chemical Identity</u>
1,2-Propanediol

**US. Rhode Island RTK**

No ingredient regulated by RI Right-to-Know Law present.

**International regulations**

**Montreal protocol**

Ethane, 1,1-difluoro-

Group I Annex F

**Stockholm convention**

Not applicable

**Rotterdam convention**

Not applicable

**Kyoto protocol**

**Inventory Status:**

Australia AICS:	On or in compliance with the inventory
Canada DSL Inventory List:	Not in compliance with the inventory.
EINECS, ELINCS or NLP:	Not in compliance with the inventory.
Japan (ENCS) List:	Not in compliance with the inventory.
China Inv. Existing Chemical Substances:	Not in compliance with the inventory.
Korea Existing Chemicals Inv. (KECI):	Not in compliance with the inventory.
Canada NDSL Inventory:	Not in compliance with the inventory.
Philippines PICCS:	On or in compliance with the inventory
US TSCA Inventory:	On or in compliance with the inventory
New Zealand Inventory of Chemicals:	On or in compliance with the inventory
Japan ISHL Listing:	Not in compliance with the inventory.
Japan Pharmacopoeia Listing:	Not in compliance with the inventory.
Mexico INSQ:	Not in compliance with the inventory.
Ontario Inventory:	Not in compliance with the inventory.
Taiwan Chemical Substance Inventory:	On or in compliance with the inventory

**16. Other information, including date of preparation or last revision**

**Issue Date:** 04/22/2019

**Revision Information:** No data available.

**Version #:** 1.1

**Further Information:** No data available.

**Disclaimer:** This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.