SAFETY DATA SHEET

1. Identification

Product identifier: WILD CHERRY METERED AIR FRESHENER

Other means of identification
SDS number: RE1000003934

Recommended restrictions
Product use: Air Freshener
Restrictions on use: Not known.

Canadian Importer
Advantage Maintenance Products Ltd.
105 Scott Ave
Paris, ON N3L 3E7
(519) 442-7881

Manufacturer/Importer/Distributor Information

Manufacturer

Company Name:	CLAIRE MANUFACTURING COMPANY
Address:	1000 Integram Dr Pacific, MO 63069
Telephone:	1-630-543-7600
Fax:	

Emergency telephone number: 1-866-836-8855

2. Hazard(s) identification

Hazard Classification

Physical Hazards

Flammable aerosol	Category 1

Health Hazards

Serious Eye Damage/Eye Irritation	Category 2A
Specific Target Organ Toxicity - Single Exposure	Category 3[1.]

Target Organs
1.Narcotic effect.

Environmental Hazards

Acute hazards to the aquatic environment	Category 2

Label Elements

Hazard Symbol:

Signal Word: Danger

Hazard Statement: Extremely flammable aerosol.
Causes serious eye irritation.
May cause drowsiness or dizziness.
Toxic to aquatic life.

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. Avoid breathing dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Wear eye protection/face protection.

Response: IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Storage: Store in a well-ventilated place. Keep container tightly closed. Store locked up. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122°F.

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.

Other hazards which do not result in GHS classification: None.

3. Composition/information on ingredients

Mixtures

Chemical Identity	Common name and synonyms	CAS number	Content in percent (%)*
2-Propanone		67-64-1	45 - 70%
Propane		74-98-6	7 - 13%
Butane		106-97-8	7 - 13%
Benzaldehyde		100-52-7	1 - 5%
Ethanone, 1-phenyl-		98-86-2	0.1 - 1%
Acetic acid, pentyl ester		628-63-7	0.1 - 1%
2H-1-Benzopyran-2-one		91-64-5	0.1 - 1%
Acetic acid, phenylmethyl ester		140-11-4	0.1 - 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: Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention.

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. 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. 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: Absorb spill with vermiculite or other inert material, then place in a container for chemical waste.

Notification Procedures: Prevent entry into waterways, sewer, basements or confined areas. Stop the flow of material, if this is without risk. 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.

7. Handling and storage

Precautions for safe handling: Avoid contact with eyes. Wash hands thoroughly after 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.

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. Aerosol Level 3

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

Chemical Identity	Type	Exposure Limit Values	Source
2-Propanone	STEL	750 ppm 1,800 mg/m3	Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2) (07 2009)
2-Propanone	STEL	500 ppm	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
2-Propanone	TWA	250 ppm	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (08 2017)
	STEL	500 ppm	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (08 2017)
	TWA	250 ppm	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
2-Propanone	TWA	250 ppm	Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act) (03 2015)
2-Propanone	8 HR ACL	500 ppm	Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21) (05 2009)
	STEL	500 ppm	Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act) (03 2015)
2-Propanone	STEL	1,000 ppm 2,380 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)
	TWA	500 ppm 1,200 mg/m3	Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2) (07 2009)
	TWA	500 ppm 1,190 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)
	15 MIN ACL	750 ppm	Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21) (05 2009)
2-Propanone	TWA	250 ppm	US. ACGIH Threshold Limit Values (03 2015)
	STEL	500 ppm	US. ACGIH Threshold Limit Values (03 2015)
Propane	TWA	1,000 ppm	Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2) (07 2009)
Propane	8 HR ACL	1,000 ppm	Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21) (05 2009)
Propane	TWA	1,000 ppm 1,800 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)
Propane	TWA	1,000 ppm	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
	15 MIN ACL	1,250 ppm	Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21) (05 2009)

Butane	STEL	1,000 ppm	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (08 2017)
Butane	TWA	600 ppm	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (06 2017)
Butane	TWA	1,000 ppm	Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2) (07 2009)
Butane	8 HR ACL	1,000 ppm	Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21) (05 2009)
Butane	STEL	1,000 ppm	Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act) (03 2018)
	15 MIN ACL	1,250 ppm	Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21) (05 2009)
	STEL	750 ppm	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (06 2017)
Butane	TWA	800 ppm 1,900 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)
Butane	STEL	1,000 ppm	US. ACGIH Threshold Limit Values (03 2018)
Benzaldehyde	STEL	4 ppm 17 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (12 2007)
Ethanone, 1-phenyl-	8 HR ACL	10 ppm	Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21) (05 2009)
	15 MIN ACL	15 ppm	Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21) (05 2009)
Ethanone, 1-phenyl-	TWA	10 ppm	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Ethanone, 1-phenyl-	TWA	10 ppm 49 mg/m3	Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2) (10 2006)
Ethanone, 1-phenyl-	TWA	10 ppm	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (12 2007)
Ethanone, 1-phenyl-	TWA	10 ppm	Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act) (03 2011)
Ethanone, 1-phenyl-	TWA	10 ppm 49 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)
Ethanone, 1-phenyl-	TWA	10 ppm	US. ACGIH Threshold Limit Values (2008)
Acetic acid, pentyl ester	TWA	50 ppm	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
	STEL	100 ppm	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Acetic acid, pentyl ester	STEL	100 ppm 532 mg/m3	Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2) (07 2009)
Acetic acid, pentyl ester	15 MIN ACL	100 ppm	Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21) (05 2009)
Acetic acid, pentyl ester	TWA	50 ppm	Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act) (03 2011)
	STEL	100 ppm	Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act) (03 2011)
Acetic acid, pentyl ester	STEL	100 ppm 532 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)
	TWA	50 ppm 266 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)
Acetic acid, pentyl ester	TWA	50 ppm	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)

	TWA	50 ppm 266 mg/m3	Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2) (07 2009)
	8 HR ACL	50 ppm	Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21) (05 2009)
	STEL	100 ppm	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
Acetic acid, pentyl ester	TWA	50 ppm	US. ACGIH Threshold Limit Values (2008)
	STEL	100 ppm	US. ACGIH Threshold Limit Values (2008)
Acetic acid, phenylmethyl ester	TWA	10 ppm 61 mg/m3	Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2) (10 2006)
Acetic acid, phenylmethyl ester	TWA	10 ppm	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Acetic acid, phenylmethyl ester	TWA	10 ppm	Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act) (03 2011)
Acetic acid, phenylmethyl ester	TWA	10 ppm	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (12 2007)
Acetic acid, phenylmethyl ester	8 HR ACL	10 ppm	Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21) (05 2009)
	15 MIN ACL	20 ppm	Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21) (05 2009)
Acetic acid, phenylmethyl ester	TWA	10 ppm	US. ACGIH Threshold Limit Values (2008)

Appropriate Engineering Controls No data available.

Individual protection measures, such as personal protective equipment

General information: Provide easy access to water supply and eye wash facilities. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Eye/face protection: Wear safety glasses with side shields (or goggles).

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: Avoid contact with eyes. Observe good industrial hygiene practices. When using do not smoke.

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:	-104.44 °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:	3,102.6408 - 4,481.5922 hPa (20 °C)
Vapor density:	No data available.
Density:	No data available.
Relative density:	No data available.
Solubility(ies)	
Solubility in water:	No data available.
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	No data available.
Auto-ignition temperature:	No data available.
Decomposition temperature:	No data available.
Viscosity:	No data available.

10. Stability and reactivity

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

11. Toxicological information

Information on likely routes of exposure

Inhalation:	No data available.
Skin Contact:	No data available.
Eye contact:	No data available.

Ingestion: No data available.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation: No data available.

Skin Contact: No data available.

Eye contact: No data available.

Ingestion: No data available.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral

Product: ATEmix: 21,267.11 mg/kg

Dermal

Product: ATEmix: 141,600.1 mg/kg

Inhalation

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

Specified substance(s):

2-Propanone	LC 50 (Rat): 50.1 mg/l
Propane	LC 50 (Mouse): 1,237 mg/l
Butane	LC 50 (Mouse): 1,237 mg/l
Benzaldehyde	LC 50 (Rat): > 1 - < 5 mg/l
2H-1-Benzopyran-2-one	LC 50: > 5 mg/l LC 50: > 20 mg/l
Acetic acid, phenylmethyl ester	LC Lo (Rat): > 0.766 mg/l

Repeated dose toxicity

Product: No data available.

Specified substance(s):

2-Propanone	NOAEL (Rat(Male), Oral, 13 Weeks): 10,000 ppm(m) Oral Experimental result, Key study
Propane	NOAEL (Rat(Female, Male), Inhalation, >= 28 d): 4,000 ppm(m) Inhalation Experimental result, Key study LOAEL (Rat(Female, Male), Inhalation, >= 28 d): 12,000 ppm(m) Inhalation Experimental result, Key study
Butane	NOAEL (Rat(Female, Male), Inhalation, >= 28 d): 4,000 ppm(m) Inhalation Experimental result, Key study LOAEL (Rat(Female, Male), Inhalation, >= 28 d): 12,000 ppm(m) Inhalation Experimental result, Key study
Benzaldehyde	LOAEL (Rat(Female, Male), Inhalation, 14 d): 500 ppm(m) Inhalation Experimental result, Key study
Ethanone, 1-phenyl-	NOAEL (Rat(Female, Male), Oral, 17 Weeks): 10,000 ppm(m) Oral Experimental result, Supporting study NOAEL (Rat(Female, Male), Oral): 225 mg/kg Oral Experimental result, Key

	study LOAEL (Rat(Female), Oral): 750 mg/kg Oral Experimental result, Key study LOAEL (Rat(Male), Oral): 750 mg/kg Oral Experimental result, Key study
2H-1-Benzopyran-2-one	NOAEL (Rat(Male), Inhalation, 104 - 110 Weeks): 42 mg/kg Inhalation Experimental result, Key study NOAEL : 50 mg/kg Oral Experimental result, Key study NOAEL (Rat(Male), Dermal, 104 - 110 Weeks): 42 mg/kg Dermal Experimental result, Key study
Acetic acid, phenylmethyl ester	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

Skin Corrosion/Irritation

Product: No data available.

Specified substance(s):

2-Propanone	in vivo (Rabbit): Not irritant Experimental result, Supporting study
Benzaldehyde	in vivo (Rabbit): no conclusion can be drawn due to limited data Experimental result, Weight of Evidence study
Ethanone, 1-phenyl-	in vivo (Rabbit): Not irritant Experimental result, Key study in vivo (Rabbit): Not irritant Experimental result, Key study in vivo (Rabbit): Not irritant Experimental result, Supporting study
2H-1-Benzopyran-2-one	in vivo (Rabbit): Not irritant Experimental result, Key study
Acetic acid, phenylmethyl ester	in vivo (Rabbit): Not irritant Experimental result, Key study

Serious Eye Damage/Eye Irritation

Product: No data available.

Specified substance(s):

2-Propanone	Irritating. Rabbit, 24 hrs: Minimum grade of severe eye irritant
Ethanone, 1-phenyl-	Rabbit, 24 - 72 hrs: Not irritating Rabbit, 48 hrs: Not irritating

Respiratory or Skin Sensitization

Product: No data available.

Specified substance(s):

2-Propanone	Skin sensitization:, in vivo (Guinea pig): Non sensitising
Benzaldehyde	Skin sensitization:, in vivo (Guinea pig): Non sensitising
Acetic acid, phenylmethyl ester	Skin sensitization:, in vivo (Guinea pig): 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**ACGIH Carcinogen List:**
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.

Specific Target Organ Toxicity - Single Exposure
Product: No data available.
Specified substance(s):
2-Propanone Inhalation - vapor: Narcotic effect. - Category 3 with narcotic effects.

Specific Target Organ Toxicity - Repeated Exposure
Product: No data available.
Specified substance(s):
No data available.

Target Organs
Specific Target Organ Toxicity - Single Exposure: Narcotic effect.

Aspiration Hazard
Product: No data available.

Other effects: No data available.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish
Product: No data available.

Specified substance(s):
2-Propanone LC 50 (Oncorhynchus mykiss, 96 h): 5,540 mg/l Experimental result, Key study

Propane	LC 50 (Various, 96 h): 147.54 mg/l QSAR QSAR, Key study
Butane	LC 50 (Various, 96 h): 147.54 mg/l QSAR QSAR, Key study
Benzaldehyde	LC 50 (96 h): 12.4 mg/l Experimental result, Key study
Ethanone, 1-phenyl-	LC 50 (Fathead minnow (Pimephales promelas), 48 h): 164 mg/l Mortality LC 50 (Fathead minnow (Pimephales promelas), 72 h): 158 mg/l Mortality LC 50 (Fathead minnow (Pimephales promelas), 96 h): 162 mg/l Mortality LC 50 (Fathead minnow (Pimephales promelas), 1 h): > 200 mg/l Mortality LC 50 (Fathead minnow (Pimephales promelas), 24 h): 164 mg/l Mortality
Acetic acid, pentyl ester	LC 50 (Western mosquitofish (Gambusia affinis), 96 h): 65 mg/l Mortality
2H-1-Benzopyran-2-one	LC 50 (Guppy (Poecilia reticulata), 96 h): 32 - 100 mg/l Mortality
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

Aquatic Invertebrates

Product:	No data available.

Specified substance(s):

2-Propanone	LC 50 (Daphnia pulex, 48 h): 8,800 mg/l Experimental result, Key study
Butane	LC 50 (Daphnia sp., 48 h): 69.43 mg/l QSAR QSAR, Key study
Benzaldehyde	EC 50 (Daphnia magna, 24 h): 50 mg/l Experimental result, Key study
Ethanone, 1-phenyl-	LC 50 (Daphnia magna, 48 h): 528 mg/l Experimental result, Key study LC 50 (Daphnia magna, 48 h): 162 mg/l Experimental result, Not specified
Acetic acid, pentyl ester	LC 50 (Water flea (Daphnia magna), 24 h): 210 mg/l Mortality
2H-1-Benzopyran-2-one	LC 50 (Water flea (Daphnia magna), 48 h): 10 - 18 mg/l Mortality
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

Chronic hazards to the aquatic environment:

Fish

Product:	No data available.

Specified substance(s):

2H-1-Benzopyran-2-one	NOAEL : 0.191 mg/l QSAR QSAR, Key study

Aquatic Invertebrates

Product:	No data available.

Specified substance(s):

2-Propanone	LOAEL (Daphnia magna): 2,212 mg/l Experimental result, Key study NOAEL (Daphnia magna): 2,212 mg/l Experimental result, Key study
2H-1-Benzopyran-2-one	NOAEL (Daphnia sp.): 0.5 mg/l QSAR QSAR, Key study

Toxicity to Aquatic Plants

Product:	No data available.

Persistence and Degradability

Biodegradation

Product:	No data available.

Specified substance(s):

2-Propanone	90.9 % (28 d) Detected in water. Experimental result, Key study
Propane	100 % (385.5 h) Detected in water. Experimental result, Key study 50 % (3.19 d) Detected in water. QSAR, Weight of Evidence study
Butane	100 % (385.5 h) Detected in water. Experimental result, Key study 50 % (3.19 d) Detected in water. QSAR, Weight of Evidence study
Benzaldehyde	>= 95 % Detected in water. Experimental result, Key study
Ethanone, 1-phenyl-	> 30 % (14 d) Detected in water. Experimental result, Not specified 94 % (6 d) Detected in water. Experimental result, Supporting study 64.7 % (14 d) Detected in water. Experimental result, Key study 50 % (6 d) Sediment Experimental result, Key study 40 - 82 % (20 d) Sediment Experimental result, Key study
2H-1-Benzopyran-2-one	90 % Detected in water. Experimental result, Key study
Acetic acid, phenylmethyl ester	100 % (28 d) 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):

2-Propanone	Haddock, adult, Bioconcentration Factor (BCF): 0.69 Aquatic sediment Experimental result, Not specified
Ethanone, 1-phenyl-	Various, Bioconcentration Factor (BCF): 0.47 Aquatic sediment Estimated by calculation, Key study
2H-1-Benzopyran-2-one	Green algae (Chlorella fusca vacuolata), Bioconcentration Factor (BCF): 42 (Static)
Acetic acid, phenylmethyl ester	Bioconcentration Factor (BCF): 8 Aquatic sediment Estimated by calculation, Key study

Partition Coefficient n-octanol / water (log Kow)

Product:	No data available.

Specified substance(s):

Ethanone, 1-phenyl-	Log Kow: 1.58 - 1.8 No Experimental result, Supporting study Log Kow: 1.58 - 1.73 No Experimental result, Supporting study Log Kow: 1.63 - 1.65 No Experimental result, Key study

Mobility in soil: No data available.

Known or predicted distribution to environmental compartments

2-Propanone	No data available.
Propane	No data available.
Butane	No data available.
Benzaldehyde	No data available.
Ethanone, 1-phenyl-	No data available.
Acetic acid, pentyl ester	No data available.
2H-1-Benzopyran-2-one	No data available.
Acetic acid, phenylmethyl ester	No data available.

Other adverse effects: Toxic to aquatic organisms.

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

TDG

UN Number:	UN 1950
UN Proper Shipping Name:	Aerosols, flammable
Transport Hazard Class(es)	
Class:	2.1
Label(s):	–
EmS No.:	
Packing Group:	–
Environmental Hazards:	Yes
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.:	F-D, S-U
Packing Group:	–
Environmental Hazards:	Yes
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:	Yes
Marine Pollutant	No
Special precautions for user:	Not regulated.
Cargo aircraft only:	Allowed.

15. Regulatory information

Canada Federal Regulations

List of Toxic Substances (CEPA, Schedule 1)

Not Regulated

Export Control List (CEPA 1999, Schedule 3)

Not Regulated

National Pollutant Release Inventory (NPRI)

Canada. National Pollutant Release Inventory (NPRI) Substances, Part 5, VOCs with Additional Reporting Requirements

NPRI PT5	PropaneButane

Canada. National Pollutant Release Inventory (NPRI) (Schedule 1, Parts 1-4)

NPRI	Not Regulated

Greenhouse Gases

Not Regulated

Controlled Drugs and Substances Act

CA CDSI	Not Regulated
CA CDSII	Not Regulated
CA CDSIII	Not Regulated
CA CDSIV	Not Regulated
CA CDSV	Not Regulated
CA CDSVII	Not Regulated
CA CDSVIII	Not Regulated

Precursor Control Regulations

Chemical Identity

2-Propanone

International regulations

Montreal protocol

Not applicable

Stockholm convention

Not applicable

Rotterdam convention

Not applicable

Kyoto protocol

Not applicable

Inventory Status:

Australia AICS:	Not in compliance with the inventory.
Canada DSL Inventory List:	On or 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:	Not in compliance with the inventory.
US TSCA Inventory:	On or in compliance with the inventory
New Zealand Inventory of Chemicals:	Not 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:	Not in compliance with the inventory.

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

Issue Date:	07/18/2019
Revision Date:	No data available.
Version #:	1.0
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.