

SAFETY DATA SHEET

1. Identification

Product identifier: MOTOMASTER IGNITION PROTECTOR - 38-3806-8

Other means of identification

SDS number: RE1000018405

Recommended restrictions

Product use: Coating

Restrictions on use: Not known.

Manufacturer/Importer/Distributor Information

Manufacturer

Company Name: CANADIAN TIRE CORPORATION
Address: PO Box 770
Toronto, ON M4P 2V8
Telephone: 416-544-7661
Fax:

Emergency telephone number: 1-866-836-8855

2. Hazard(s) identification

Hazard Classification

Physical Hazards

Flammable aerosol	Category 1
Gases under pressure	Liquefied gas

Health Hazards

Skin Corrosion/Irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2A
Toxic to reproduction	Category 1B
Specific Target Organ Toxicity - Single Exposure	Category 3 ¹
Specific Target Organ Toxicity - Repeated Exposure	Category 2

Target Organs

1.Narcotic effect.

Environmental Hazards

Acute hazards to the aquatic environment	Category 2
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Label Elements

Hazard Symbol:



Signal Word:	Danger
Hazard Statement:	Extremely flammable aerosol. Causes skin irritation. Causes serious eye irritation. May damage fertility or the unborn child. May cause drowsiness or dizziness. May cause damage to organs through prolonged or repeated exposure. Toxic to aquatic life. Contains gas under pressure; may explode if heated.
Precautionary Statements	
Prevention:	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. 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 protective gloves/protective clothing/eye protection/face protection.
Response:	IF ON SKIN: Wash with plenty of water. If skin irritation occurs: Get medical advice/attention. Specific treatment (see on this label). Take off contaminated clothing and wash it before reuse. 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. IF exposed or concerned: 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	10 - 30%
Benzene, methyl-		108-88-3	10 - 30%
Propane		74-98-6	10 - 30%
2-Propanol, 1-methoxy-, 2-acetate		108-65-6	7 - 13%
Propane, 2-methyl-		75-28-5	5 - 10%
Acetic acid, butyl ester		123-86-4	1 - 5%
2-Propanol, 1-methoxy-		107-98-2	1 - 5%
2-Pentanone, 4-hydroxy-4-methyl-		123-42-2	1 - 5%
1,2-Benzenedicarboxylic acid, 1-butyl 2-(phenylmethyl) ester		85-68-7	0.5 - 1.5%

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

4. First-aid measures

Ingestion:	Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.
Inhalation:	Move to fresh air.
Skin Contact:	Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash contaminated clothing before reuse. Get medical attention.
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.
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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.
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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.
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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. See Section 8 of the SDS for Personal Protective Equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep unauthorized personnel away.
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. Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Use personal protective equipment as required. Avoid contact with skin.
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 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)
Benzene, methyl-	TWA	50 ppm 188 mg/m3	Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2) (10 2006)
Benzene, methyl-	TWA	20 ppm	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Benzene, methyl-	8 HR ACL	50 ppm	Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21) (05 2009)

	15 MIN ACL	60 ppm	Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21) (05 2009)
Benzene, methyl-	TWA	20 ppm	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
Benzene, methyl-	TWA	50 ppm 188 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)
Benzene, methyl-	TWA	20 ppm	Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act) (03 2011)
Benzene, methyl-	TWA	20 ppm	US. ACGIH Threshold Limit Values (2008)
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)
2-Propanol, 1-methoxy-, 2-acetate	STEL	75 ppm	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
	TWA	50 ppm	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
2-Propanol, 1-methoxy-, 2-acetate	TWA	50 ppm 270 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (12 2007)
Propane, 2-methyl-	STEL	1,000 ppm	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (08 2017)
Propane, 2-methyl-	8 HR ACL	1,000 ppm	Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21) (05 2009)
	15 MIN ACL	1,250 ppm	Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21) (05 2009)
Propane, 2-methyl-	STEL	1,000 ppm	Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act) (03 2018)
Propane, 2-methyl-	STEL	1,000 ppm	US. ACGIH Threshold Limit Values (03 2018)
Acetic acid, butyl ester	STEL	200 ppm 950 mg/m3	Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2) (10 2006)
Acetic acid, butyl ester	STEL	150 ppm	Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act) (03 2016)
	TWA	150 ppm 713 mg/m3	Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2) (10 2006)
Acetic acid, butyl ester	TWA	20 ppm	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Acetic acid, butyl ester	8 HR ACL	150 ppm	Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21) (05 2009)
	15 MIN ACL	200 ppm	Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21) (05 2009)
Acetic acid, butyl ester	STEL	200 ppm	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
	TWA	150 ppm	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
Acetic acid, butyl ester	TWA	150 ppm 713 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)
	TWA	50 ppm	Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act) (03 2016)
	STEL	200 ppm 950 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)
Acetic acid, butyl ester	TWA	50 ppm	US. ACGIH Threshold Limit Values (03 2016)
	STEL	150 ppm	US. ACGIH Threshold Limit Values (03 2016)
2-Propanol, 1-methoxy-	STEL	75 ppm	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as

			amended) (07 2007)
2-Propanol, 1-methoxy-	TWA	100 ppm 369 mg/m3	Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2) (10 2006)
2-Propanol, 1-methoxy-	STEL	100 ppm	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (06 2015)
2-Propanol, 1-methoxy-	TWA	50 ppm	Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act) (03 2013)
2-Propanol, 1-methoxy-	8 HR ACL	100 ppm	Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21) (05 2009)
	15 MIN ACL	150 ppm	Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21) (05 2009)
	STEL	100 ppm	Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act) (03 2013)
	STEL	150 ppm 553 mg/m3	Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2) (10 2006)
	TWA	50 ppm	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
	TWA	50 ppm	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (06 2015)
2-Propanol, 1-methoxy-	STEL	150 ppm 553 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)
	TWA	100 ppm 369 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)
2-Propanol, 1-methoxy-	STEL	100 ppm	US. ACGIH Threshold Limit Values (02 2013)
	TWA	50 ppm	US. ACGIH Threshold Limit Values (02 2013)
2-Pentanone, 4-hydroxy-4-methyl-	8 HR ACL	50 ppm	Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21) (05 2009)
2-Pentanone, 4-hydroxy-4-methyl-	TWA	50 ppm 238 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)
2-Pentanone, 4-hydroxy-4-methyl-	TWA	50 ppm 238 mg/m3	Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2) (10 2006)
2-Pentanone, 4-hydroxy-4-methyl-	TWA	50 ppm	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
2-Pentanone, 4-hydroxy-4-methyl-	TWA	50 ppm	Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act) (03 2011)
2-Pentanone, 4-hydroxy-4-methyl-	TWA	50 ppm	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (06 2015)
	15 MIN ACL	60 ppm	Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21) (05 2009)
2-Pentanone, 4-hydroxy-4-methyl-	TWA	50 ppm	US. ACGIH Threshold Limit Values (2008)
2-Propenoic acid, 2-methyl-, butyl 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)
1,2-Benzenedicarboxylic acid, 1,2-dibutyl ester	TWA	5 mg/m3	Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2) (10 2006)
1,2-Benzenedicarboxylic acid, 1,2-dibutyl ester	TWA	5 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (12 2007)
1,2-Benzenedicarboxylic acid, 1,2-dibutyl ester	TWA	5 mg/m3	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
1,2-Benzenedicarboxylic acid, 1,2-dibutyl ester	15 MIN ACL	10 mg/m3	Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21) (05 2009)
	8 HR ACL	5 mg/m3	Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21) (05 2009)
1,2-Benzenedicarboxylic acid, 1,2-dibutyl ester	TWA	5 mg/m3	Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act) (03 2011)
1,2-Benzenedicarboxylic acid, 1,2-dibutyl ester	TWA	5 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)
1,2-Benzenedicarboxylic acid, 1,2-dibutyl ester	TWA	5 mg/m3	US. ACGIH Threshold Limit Values (2008)
2-Propenoic acid, 2-methyl-, methyl 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)
2-Propenoic acid, 2-methyl-, methyl ester	TWA	50 ppm	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (12 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)
	STEL	100 ppm	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (12 2007)
2-Propenoic acid, 2-methyl-, methyl ester	STEL	100 ppm 410 mg/m3	Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2) (07 2009)
2-Propenoic acid, 2-methyl-, methyl ester	STEL	100 ppm	Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act) (03 2011)
2-Propenoic acid, 2-methyl-, methyl ester	8 HR ACL	50 ppm	Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21) (05 2009)
	TWA	50 ppm	Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act) (03 2011)
2-Propenoic acid, 2-methyl-, methyl ester	TWA	50 ppm 205 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)
	TWA	50 ppm 205 mg/m3	Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2) (07 2009)
	15 MIN ACL	100 ppm	Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21) (05 2009)
2-Propenoic acid, 2-methyl-, methyl ester	TWA	50 ppm	US. ACGIH Threshold Limit Values (2008)
	STEL	100 ppm	US. ACGIH Threshold Limit Values (2008)
1-Propanol, 2-methoxy-	TWA	20 ppm	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
	STEL	40 ppm	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)

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: Wear chemical-resistant gloves, footwear, and protective clothing appropriate for the risk of exposure. Contact health and safety professional or manufacturer for specific information.

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. Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Wash contaminated clothing before reuse. Avoid contact with skin. Wash hands before breaks and immediately after handling the product.

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: Estimated 85.79 °C

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 (%): Estimated 9.5 %(V)

Flammability limit - lower (%): Estimated 1.8 %(V)

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

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

Vapor pressure: No data available.

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: Estimated 445.91 °C

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: Not classified for acute toxicity based on available data.

Specified substance(s):

2-Propanone	LD 50 (Rat): 5,800 mg/kg
Benzene, methyl-	LD 50 (Rat): 5,580 mg/kg
2-Propanol, 1-methoxy-, 2-acetate	LD 50 (Rat): 5,155 mg/kg
Acetic acid, butyl ester	LD 50 (Rat): 14,130 mg/kg
2-Propanol, 1-methoxy-	LD 50 (Rat): 3,739 mg/kg
2-Pentanone, 4-hydroxy- 4-methyl-	LD 50 (Rat): 3,002 mg/kg
1,2-Benzenedicarboxylic acid, 1-butyl 2- (phenylmethyl) ester	LD 50 (Rat): 2,330 mg/kg

Dermal

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

Specified substance(s):

2-Propanone	LD 50 (Rabbit): > 7,426 mg/kg
Benzene, methyl-	LD 50 (Rabbit): > 5,000 mg/kg
2-Propanol, 1-methoxy-, 2-acetate	LD 50 (Rabbit): > 5,000 mg/kg
Acetic acid, butyl ester	LD 50 (Rabbit): > 5,000 mg/kg
2-Propanol, 1-methoxy-	LD 50 (Rat): > 2,000 mg/kg
1,2-Benzenedicarboxylic acid, 1-butyl 2- (phenylmethyl) ester	LD 50 (Rabbit): > 10,000 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 LC 50: > 5 mg/l
Benzene, methyl-	LC 50 (Rat): 28.1 mg/l LC 50: > 100 mg/l
Propane	LC 50: > 100 mg/l LC 50: > 100 mg/l
2-Propanol, 1-methoxy-, 2-acetate	LC 50: > 20 mg/l LC 50: > 5 mg/l
Acetic acid, butyl ester	LC 50 (Rat): > 23.4 mg/l LC 50 (Rat): > 21 mg/l
2-Pentanone, 4-hydroxy- 4-methyl-	LC 0 (Rat): >= 7.6 mg/l LC 50: > 20 mg/l LC 50: > 5 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
Benzene, methyl-	LOAEL (Rat(Female, Male), Oral, 13 Weeks): 1,250 mg/kg (Target Organ(s): Liver, Kidney) Oral Experimental result, Key study NOAEL (Rat(Female, Male), Inhalation): 625 ppm(m) Inhalation Experimental result, Key study NOAEL (Rat(Female, Male), Inhalation - vapor): 2,355 mg/l Inhalation 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
2-Propanol, 1-methoxy-, 2-acetate	NOAEL (Rat(Female, Male), Oral, 41 - 45 d): >= 1,000 mg/kg Oral Experimental result, Key study
Propane, 2-methyl-	NOAEL (Rat(Female, Male), Inhalation, >= 42 d): 16,000 ppm(m) Inhalation Experimental result, Key study NOAEL (Rat(Female, Male), Inhalation): 21,394 mg/m3 Inhalation Experimental result, Key study
Acetic acid, butyl ester	NOAEL (Rat(Female, Male), Inhalation, 13 Weeks): 500 ppm(m) Inhalation Experimental result, Key study
2-Propanol, 1-methoxy-	LOAEL (Rat(Male), Oral, 35 d): 2,757 mg/kg Oral Experimental result, Key study NOAEL (Rat(Female, Male), Inhalation, 2 yr): 300 ppm(m) Inhalation Experimental result, Key study NOAEL (Rat(Female, Male), Inhalation, 13 Weeks): 1,000 ppm(m) Inhalation Experimental result, Key study NOAEL (Rabbit(Female, Male), Dermal, 3 Months): 4,600 mg/kg Dermal Experimental result, Supporting study
2-Pentanone, 4-hydroxy- 4-methyl-	NOAEL (Rat(Female, Male), Inhalation): >= 4,685 mg/m3 Inhalation Experimental result, Key study NOAEL (Rat(Female, Male), Oral, 41 - 45 d): 100 mg/kg Oral Experimental result, Key study
1,2-Benzenedicarboxylic acid, 1-butyl 2- (phenylmethyl) ester	NOAEL (Rat(Female, Male), Inhalation): 0.218 mg/l Inhalation Experimental result, Key study NOAEL (Rat(Male), Oral, 104 - 105 Weeks): 240 mg/kg Oral Experimental result, Key study

Skin Corrosion/Irritation

Product: No data available.

Specified substance(s):

2-Propanone	in vivo (Rabbit): Not irritant	Experimental result, Supporting study
Benzene, methyl-	in vivo (Rabbit): Irritating	Experimental result, Key study
2-Propanol, 1-methoxy-, 2-acetate	in vivo (Rabbit): Not irritant	Experimental result, Key study
Acetic acid, butyl ester	in vivo (Rabbit): Not irritant	Experimental result, Key study
2-Propanol, 1-methoxy-	in vivo (Rabbit): Not irritant	Experimental result, Key study
2-Pentanone, 4-hydroxy-4-methyl-	in vivo (Rabbit): Not irritant	Experimental result, Key study
1,2-Benzenedicarboxylic acid, 1-butyl 2-(phenylmethyl) ester	in vivo (Rabbit): Not irritant in vivo (Human): Not irritant	Experimental result, Key study 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
Benzene, methyl-	Rabbit, 24 - 72 hrs: Not irritating
2-Propanol, 1-methoxy-, 2-acetate	Rabbit, 24 - 72 hrs: Not irritating
Acetic acid, butyl ester	Rabbit, 24 - 72 hrs: Not irritating
2-Propanol, 1-methoxy-	Rabbit, 24 - 72 hrs: Not irritating
2-Pentanone, 4-hydroxy-4-methyl-	Rabbit, 24 - 72 hrs: Irritating
1,2-Benzenedicarboxylic acid, 1-butyl 2-(phenylmethyl) ester	Rabbit, 24 - 72 hrs: Not irritating

Respiratory or Skin Sensitization

Product: No data available.

Specified substance(s):

2-Propanone	Skin sensitization:, in vivo (Guinea pig): Non sensitising
Benzene, methyl-	Skin sensitization:, in vivo (Guinea pig): Non sensitising
2-Propanol, 1-methoxy-, 2-acetate	Skin sensitization:, in vivo (Guinea pig): Non sensitising
Acetic acid, butyl ester	Skin sensitization:, in vivo (Guinea pig): Non sensitising
2-Propanol, 1-methoxy-	Skin sensitization:, in vivo (Guinea pig): Non sensitising
2-Pentanone, 4-hydroxy-4-methyl-	Skin sensitization:, in vivo (Guinea pig): Non sensitising
1,2-Benzenedicarboxylic acid, 1-butyl 2-(phenylmethyl) ester	Skin sensitization:, in vivo (Human): Non sensitising Skin sensitization:, in vivo (Guinea pig): 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

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.

Specified substance(s):

Benzene, methyl- 1,2-Benzenedicarboxylic acid, 1-butyl 2- (phenylmethyl) ester	Suspected of damaging fertility or the unborn child. May cause birth defects.
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Specific Target Organ Toxicity - Single Exposure

Product: No data available.

Specified substance(s):

2-Propanone	Inhalation - vapor: Narcotic effect. - Category 3 with narcotic effects.
Benzene, methyl-	Inhalation - vapor: Narcotic effect. - Category 3 with narcotic effects.
Acetic acid, butyl ester	Inhalation - vapor Inhalation - dust and mist Inhalation - gas: Narcotic effect., Nervous System - Category 3 with narcotic effects.

Specific Target Organ Toxicity - Repeated Exposure

Product: No data available.

Specified substance(s):

Benzene, methyl-	Category 2
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Target Organs

Specific Target Organ Toxicity - Single Exposure: Narcotic effect.

Aspiration Hazard

Product: No data available.

Specified substance(s):

Benzene, methyl-	May be fatal if swallowed and enters airways.
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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
Benzene, methyl-	LC 50 (Oncorhynchus kisutch, 96 h): 5.5 mg/l Experimental result, Key study

Propane	LC 50 (Various, 96 h): 147.54 mg/l QSAR QSAR, Key study
2-Propanol, 1-methoxy-, 2-acetate	LC 50 (Oncorhynchus mykiss, 96 h): 100 - 180 mg/l Experimental result, Key study
Acetic acid, butyl ester	LC 50 (Pimephales promelas, 96 h): 18 mg/l Experimental result, Key study
2-Propanol, 1-methoxy-	LC 50 (Pimephales promelas, 96 h): 20,800 mg/l Experimental result, Key study
2-Pentanone, 4-hydroxy-4-methyl-	LC 50 (Oryzias latipes, 96 h): > 100 mg/l Experimental result, Key study
1,2-Benzenedicarboxylic acid, 1-butyl 2-(phenylmethyl) ester	LC 50 (96 h): estimated 0.5 mg/l LC 50 (Oncorhynchus mykiss, 96 h): 3.3 mg/l Experimental result, Supporting 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
Benzene, methyl-	LC 50 (Water flea (Daphnia magna), 48 h): 54.6 - 174.7 mg/l Mortality LC 50 (Ceriodaphnia dubia, 2 d): 3.78 mg/l Experimental result, Key study
2-Propanol, 1-methoxy-, 2-acetate	EC 50 (Daphnia magna, 48 h): > 500 mg/l Experimental result, Key study
Acetic acid, butyl ester	EC 50 (Daphnia sp., 48 h): 44 mg/l Experimental result, Key study
2-Propanol, 1-methoxy-	EC 50 (Daphnia magna, 48 h): >= 1,000 mg/l Experimental result, Supporting study
2-Pentanone, 4-hydroxy-4-methyl-	NOAEL (Daphnia magna, 48 h): 1,000 mg/l Experimental result, Key study EC 50 (Daphnia magna, 48 h): > 1,000 mg/l Experimental result, Key study
1,2-Benzenedicarboxylic acid, 1-butyl 2-(phenylmethyl) ester	EC 50 (48 h): estimated 0.5 mg/l EC 50 (Water flea (Daphnia magna), 48 h): 1.8 mg/l Intoxication

Chronic hazards to the aquatic environment:

Fish	
Product:	No data available.
Specified substance(s):	
Benzene, methyl-	NOAEL (Oncorhynchus kisutch): 1.39 mg/l Experimental result, Key study LOAEL (Oncorhynchus kisutch): 2.77 mg/l Experimental result, Key study
2-Propanol, 1-methoxy-, 2-acetate	NOAEL (Oryzias latipes): 47.5 mg/l Experimental result, Key study LC 50 (Oryzias latipes): 63.5 mg/l Experimental result, Key study
1,2-Benzenedicarboxylic acid, 1-butyl 2-(phenylmethyl) ester	NOAEL (Oncorhynchus mykiss): 0.2 mg/l Experimental result, Key study LOAEL (Pimephales promelas): 18.1 µg/l Experimental result, 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

Benzene, methyl-	LOAEL (Ceriodaphnia dubia): 2.76 mg/l Experimental result, Key study NOAEL (Ceriodaphnia dubia): 0.74 mg/l Experimental result, Key study
2-Propanol, 1-methoxy-, 2-acetate	NOAEL (Daphnia magna): >= 100 mg/l Experimental result, Key study EC 50 (Daphnia magna): > 100 mg/l Experimental result, Key study
Acetic acid, butyl ester	EC 50 (Daphnia magna): 34 mg/l Read-across from supporting substance (structural analogue or surrogate), Key study NOAEL (Daphnia magna): 23 mg/l Read-across from supporting substance (structural analogue or surrogate), Key study
2-Pentanone, 4-hydroxy- 4-methyl-	EC 50 (Daphnia magna): > 100 mg/l Experimental result, Key study NOAEL (Daphnia magna): 100 mg/l Experimental result, Key study
1,2-Benzenedicarboxylic acid, 1-butyl 2- (phenylmethyl) ester	NOAEL (Daphnia magna): 0.28 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):

2-Propanone	90.9 % (28 d) Detected in water. Experimental result, Key study
Benzene, methyl-	100 % (14 d) Detected in water. Experimental result, Weight of Evidence study 86 % Detected in water. Experimental result, Weight of Evidence 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
2-Propanol, 1-methoxy-, 2-acetate	99 % Detected in water. Experimental result, Key study
Propane, 2-methyl-	100 % Detected in water. QSAR, Weight of Evidence study
Acetic acid, butyl ester	83 % Detected in water. Experimental result, Not specified
2-Pentanone, 4-hydroxy- 4-methyl-	3 % (5 d) Detected in water. Experimental result, Not specified 100 % Detected in water. Experimental result, Key study
1,2-Benzenedicarboxylic acid, 1-butyl 2- (phenylmethyl) ester	81 % (2 Weeks) Detected in water. Experimental result, Key study 96 % (27 d) Detected in water. Experimental result, Supporting 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
Benzene, methyl-	Leuciscus idus, Bioconcentration Factor (BCF): 90 Aquatic sediment Experimental result, Key study

Acetic acid, butyl ester	Bioconcentration Factor (BCF): 15.3 Aquatic sediment Estimated by calculation, Supporting study
1,2-Benzenedicarboxylic acid, 1-butyl 2-(phenylmethyl) ester	Lepomis macrochirus, Bioconcentration Factor (BCF): 1,693.25 Aquatic sediment Experimental result, Key study

Partition Coefficient n-octanol / water (log Kow)

Product: No data available.

Mobility in soil: No data available.

Known or predicted distribution to environmental compartments

2-Propanone	No data available.
Benzene, methyl-	No data available.
Propane	No data available.
2-Propanol, 1-methoxy-, 2-acetate	No data available.
Propane, 2-methyl-	No data available.
Acetic acid, butyl ester	No data available.
2-Propanol, 1-methoxy-	No data available.
2-Pentanone, 4-hydroxy-4-methyl-	No data available.
1,2-Benzenedicarboxylic acid, 1-butyl 2-(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)

Chemical Identity

2-Propanone

1-Propanol, 2-methoxy-

Export Control List (CEPA 1999, Schedule 3)

Chemical Identity

2-Propanone

National Pollutant Release Inventory (NPRI)

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

NPRI PT5	2-Propanone
	Benzene, methyl-
	Propane
	2-Propanol, 1-methoxy-, 2-acetate
	Propane, 2-methyl-

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

NPRI	2-Propanone
	Benzene, methyl-
	1,2-Benzenedicarboxylic acid, 1-butyl 2-(phenylmethyl) ester

Greenhouse Gases

Chemical Identity

2-Propanone

Controlled Drugs and Substances Act

CA CDSI	2-Propanone
CA CDSII	2-Propanone
CA CDSIII	2-Propanone
CA CDSIV	2-Propanone
CA CDSV	2-Propanone
CA CDSVII	2-Propanone
CA CDSVIII	2-Propanone

Precursor Control Regulations

Chemical Identity

2-Propanone

Benzene, methyl-

International regulations

Montreal protocol

2-Propanone

Stockholm convention

2-Propanone

Rotterdam convention

2-Propanone

Organics

Kyoto protocol

Inventory Status:

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

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

Issue Date: 11/25/2019

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.