

SAFETY DATA SHEET

1. Identification

Product identifier: 22104 Doktor Doom Multipurpose Insect Control II PCP Act # 30368

Other means of identification

SDS number: RE1000015941

Recommended restrictions

Product Use: Pesticide

Restrictions on use: Not known.

Manufacturer/Importer/Distributor Information

Manufacturer

Company Name: Ultrason Industries,
Address: 10755 69th Ave, NW
Edmonton, AB T6H 2C9
Telephone: 1-800-452-0023
Fax:

Emergency telephone number: 1-866-836-8855

2. Hazard(s) identification

Hazard Classification

Physical Hazards

Flammable aerosol Category 1

Gases Under Pressure - Compressed gas

Environmental Hazards

Acute hazards to the aquatic environment Category 2

Chronic hazards to the aquatic environment Category 2

Label Elements

Hazard Symbol:



Signal Word:

Danger

Hazard Statement:

Extremely flammable aerosol. Toxic to aquatic life with long lasting effects.
Pressurized container: may burst if heated. Contains gas under pressure; may explode if heated.

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 release to the environment.
Response:	Collect spillage.
Storage:	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 (%)*
Propane, 2-methyl-		75-28-5	10 - 30%
Distillates (petroleum), hydrotreated light		64742-47-8	5 - 10%
Propane		74-98-6	1 - 5%
1,3-Benzodioxole, 5-[[2-(2-butoxyethoxy)ethoxy]methyl]-6-propyl-		51-03-6	0.5 - 1.5%
Pyrethrins		8003-34-7	0.1 - 1%
Morpholine		110-91-8	0 - 0.1%
Ethanol, 2-methoxy-		109-86-4	0 - 0.1%
1,2-Ethanediamine		107-15-3	0 - 0.1%
Morpholine, 4-ethyl-		100-74-3	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.

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.

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 1

8. Exposure controls/personal protection**Control Parameters****Occupational Exposure Limits**

Chemical Identity	Type	Exposure Limit Values	Source
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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)
Distillates (petroleum), hydrotreated light - Vapor. - as total hydrocarbons	8 HR ACL	200 mg/m3	Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21) (05 2009)
	15 MIN ACL	250 mg/m3	Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21) (05 2009)
Distillates (petroleum), hydrotreated light	TWA	525 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (12 2007)
Distillates (petroleum), hydrotreated light - Non-aerosol. - as total hydrocarbon vapor	TWA	200 mg/m3	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Distillates (petroleum), hydrotreated light - Vapor. - as total hydrocarbon vapor	TWA	200 mg/m3	Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2) (07 2009)
Distillates (petroleum), hydrotreated light - Non-aerosol. - as total hydrocarbon vapor	TWA	200 mg/m3	Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act) (03 2011)
Distillates (petroleum), hydrotreated light - Non-aerosol. - as total hydrocarbon vapor	TWA	200 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
	TWA	200 mg/m3	Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act) (03 2011)
	TWA	200 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
Distillates (petroleum), hydrotreated light - Non-aerosol. - as total hydrocarbon vapor	TWA	200 mg/m3	US. ACGIH Threshold Limit Values (2008)
	TWA	200 mg/m3	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)
Pyrethrins	TWA	5 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (12 2007)
Pyrethrins	15 MIN ACL	10 mg/m3	Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21) (05 2009)
Pyrethrins	TWA	5 mg/m3	Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2) (10 2006)
Pyrethrins	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)
Pyrethrins	TWA	5 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)
	8 HR ACL	5 mg/m3	Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21) (05 2009)

Pyrethrins	TWA	5 mg/m ³	Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act) (03 2011)
Pyrethrins	TWA	5 mg/m ³	US. ACGIH Threshold Limit Values (2008)
Morpholine	TWA	20 ppm	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Morpholine	TWA	20 ppm	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (06 2015)
Morpholine	TWA	20 ppm 71 mg/m ³	Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2) (10 2006)
Morpholine	15 MIN ACL	30 ppm	Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21) (05 2009)
Morpholine	TWA	20 ppm 71 mg/m ³	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)
	8 HR ACL	20 ppm	Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21) (05 2009)
Morpholine	TWA	20 ppm	Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act) (03 2011)
Morpholine	TWA	20 ppm	US. ACGIH Threshold Limit Values (2008)
Ethanol, 2-methoxy-	TWA	0.1 ppm	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Ethanol, 2-methoxy-	TWA	0.1 ppm 0.3 mg/m ³	Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2) (07 2009)
Ethanol, 2-methoxy-	8 HR ACL	5 ppm	Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21) (05 2009)
Ethanol, 2-methoxy-	TWA	0.1 ppm	Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act) (03 2011)
Ethanol, 2-methoxy-	TWA	5 ppm 16 mg/m ³	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)
Ethanol, 2-methoxy-	TWA	0.1 ppm	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (12 2007)
	15 MIN ACL	8 ppm	Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21) (05 2009)
Ethanol, 2-methoxy-	TWA	0.1 ppm	US. ACGIH Threshold Limit Values (2008)
1,2-Ethanediamine	TWA	10 ppm 25 mg/m ³	Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2) (10 2006)
1,2-Ethanediamine	TWA	10 ppm	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
1,2-Ethanediamine	15 MIN ACL	15 ppm	Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21) (05 2009)
1,2-Ethanediamine	TWA	10 ppm 25 mg/m ³	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)
	8 HR ACL	10 ppm	Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21) (05 2009)

1,2-Ethanediamine	TWA	10 ppm	Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act) (03 2011)
1,2-Ethanediamine	TWA	10 ppm	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
1,2-Ethanediamine	TWA	10 ppm	US. ACGIH Threshold Limit Values (2008)
Morpholine, 4-ethyl-	TWA	5 ppm 24 mg/m3	Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2) (10 2006)
Morpholine, 4-ethyl-	8 HR ACL	5 ppm	Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21) (05 2009)
Morpholine, 4-ethyl-	TWA	5 ppm	Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act) (03 2011)
Morpholine, 4-ethyl-	TWA	5 ppm	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Morpholine, 4-ethyl-	TWA	5 ppm	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
Morpholine, 4-ethyl-	TWA	5 ppm 24 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)
	15 MIN ACL	8 ppm	Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21) (05 2009)
Morpholine, 4-ethyl-	TWA	5 ppm	US. ACGIH Threshold Limit Values (2008)

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.

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:	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:	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:** Not classified for acute toxicity based on available data.**Specified substance(s):**Distillates (petroleum),
hydrotreated light LD 50 (Rat): > 5,000 mg/kg1,3-Benzodioxole, 5-[[2-
(2-
butoxyethoxy)ethoxy]met
hyl]-6-propyl- LD 50 (Rat): 5,630 mg/kg

Pyrethrins LD 50 (Rat): 500 - 1,000 mg/kg

Morpholine LD 50 (Rat): 1,900 mg/kg

Ethanol, 2-methoxy- LD 50 (Rat): 2,257 mg/kg

1,2-Ethanediamine LD 50 (Rat): 841 mg/kg

Morpholine, 4-ethyl- LD 50: < 2,000 mg/kg

Dermal**Product:** Not classified for acute toxicity based on available data.**Specified substance(s):**Distillates (petroleum),
hydrotreated light LD 50 (Rabbit): > 2,000 mg/kg1,3-Benzodioxole, 5-[[2-
(2-
butoxyethoxy)ethoxy]met
hyl]-6-propyl- LD 50: > 2,000 mg/kg

Morpholine LD 50 (Rabbit): 500 mg/kg

Ethanol, 2-methoxy- LD 50 (Rabbit): 3,930 mg/kg

1,2-Ethanediamine LD 50 (Rabbit): 560 mg/kg

Morpholine, 4-ethyl- LD 50: < 2,000 mg/kg

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

Specified substance(s):

Distillates (petroleum), hydrotreated light	LC 50: > 5 mg/l LC 50: > 20 mg/l
Propane	LC 50 (Mouse): 1,237 mg/l
1,3-Benzodioxole, 5-[[2-(2-butoxyethoxy)ethoxy]methyl]-6-propyl-	LC 50 (Rat): > 5.9 mg/l
Morpholine	LC 0 (Rat): 24 mg/l
Ethanol, 2-methoxy-	LC 50: < 17.8 mg/l
1,2-Ethanediamine	LC 50 (Rat): 7.35 mg/l
Morpholine, 4-ethyl-	LC 50: > 5 mg/l LC 50: > 20 mg/l

Repeated dose toxicity**Product:** No data available.**Specified substance(s):**

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
Distillates (petroleum), hydrotreated light	NOAEL (Rat(Female, Male), Inhalation): >= 24 mg/m3 Inhalation Experimental result, Key study NOAEL (Rat(Female), Oral, 70 - 147 d): 750 mg/kg 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
1,3-Benzodioxole, 5-[[2-(2-butoxyethoxy)ethoxy]methyl]-6-propyl-	NOAEL (Dog(Female, Male), Oral, 1 yr): 600 ppm(m) Oral Experimental result, Key study LOAEL (Rat(Female, Male), Oral, 28 - 31 d): 250 mg/kg Oral Experimental result, Supporting study NOAEL (Rat(Female, Male), Oral, 28 - 31 d): 125 mg/kg Oral Experimental result, Supporting study NOAEL (Rabbit(Female, Male), Dermal): > 1,000 mg/kg Dermal Experimental result, Key study LOAEL (Rat(Female, Male), Inhalation): >= 512 mg/m3 Inhalation Experimental result, Key study
Morpholine	NOAEL (Rat(Female, Male), Inhalation): 36 ppm(m) Inhalation Experimental result, Key study LOAEL (Rat(Female), Oral, 56 d): 500 mg/kg Oral Experimental result, Key study
Ethanol, 2-methoxy-	LOAEL (Rat(Male), Oral, 90 d): 71 mg/kg Oral Experimental result, Key study NOAEL (Rabbit(Female, Male), Inhalation, 13 Weeks): 100 ppm(m) Inhalation Experimental result, Key study LOAEL (Rat(Female), Inhalation, 13 Weeks): 100 ppm(m) Inhalation

1,2-Ethanediamine	Experimental result, Supporting study NOAEL (Rat(Female, Male), Inhalation, 6 Weeks): 59 ppm(m) Inhalation Experimental result, Key study LOAEL (Rat(Female, Male), Oral, 3 Months): 114 mg/kg Oral Experimental result, Key study
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Skin Corrosion/Irritation

Product: No data available.

Specified substance(s):

Distillates (petroleum), hydrotreated light in vivo (Rabbit): Not irritant Experimental result, Key study

Morpholine in vivo (Rabbit): Corrosive Experimental result, Key study

Ethanol, 2-methoxy- in vivo (Rabbit): Not irritant Experimental result, Key study

1,2-Ethanediamine in vivo (Rabbit): Corrosive Experimental result, Key study

Morpholine, 4-ethyl- Assessment (Various): Corrosive Expert judgment

Serious Eye Damage/Eye Irritation

Product: No data available.

Specified substance(s):

Distillates (petroleum), hydrotreated light Rabbit, 24 - 72 hrs: Not irritating

1,2-Ethanediamine Rabbit, 24 - 72 hrs: Corrosive

Morpholine, 4-ethyl- Corrosive

Respiratory or Skin Sensitization

Product: No data available.

Specified substance(s):

Distillates (petroleum), hydrotreated light Skin sensitization:, in vivo (Guinea pig): Non sensitising

1,3-Benzodioxole, 5-[[2-(2-butoxyethoxy)ethoxy]methyl]-6-propyl- Skin sensitization:, in vivo (Guinea pig): Non sensitising

Morpholine Skin sensitization:, in vivo (Guinea pig): Non sensitising

Ethanol, 2-methoxy- Skin sensitization:, in vivo (Guinea pig): Non sensitising

1,2-Ethanediamine May cause sensitization by inhalation and skin contact.

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):**

Ethanol, 2-methoxy- May cause adverse reproductive effects - such as infertility based on animal data.

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):**

Distillates (petroleum), hydrotreated light 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):**Distillates (petroleum), hydrotreated light LC 50 (Rainbow trout, donaldson trout (Oncorhynchus mykiss), 96 h): 2.9 mg/l Mortality
NOAEL (Oncorhynchus mykiss, 96 h): 2 mg/l Experimental result, Key study

Propane LC 50 (Various, 96 h): 147.54 mg/l QSAR QSAR, Key study

1,3-Benzodioxole, 5-[[2- LC 50 (Oncorhynchus mykiss, 96 h): 6.12 mg/l Experimental result, Key

(2-butoxyethoxy)ethoxy]methyl]-6-propyl-	study NOAEL (96 h): 0.625 mg/l Experimental result, Key study
Pyrethrins	LC 50 (Rainbow trout,donaldson trout (Oncorhynchus mykiss), 96 h): 0.013 - 0.0306 mg/l Mortality LC 50 (Rainbow trout,donaldson trout (Oncorhynchus mykiss), 96 h): 0.02 - 0.03 mg/l Mortality
Morpholine	LC 50 (Oncorhynchus mykiss, 96 h): 180 mg/l Experimental result, Key study
Ethanol, 2-methoxy-	LC 50 (Rainbow trout,donaldson trout (Oncorhynchus mykiss), 96 h): 14,000 - 18,000 mg/l Mortality
1,2-Ethanediamine	LC 50 (Poecilia reticulata, 96 h): 640 mg/l Experimental result, Key study
Aquatic Invertebrates	
Product:	No data available.
Specified substance(s):	
Distillates (petroleum), hydrotreated light	EC 50 (Daphnia magna, 24 h): 4.6 mg/l Experimental result, Key study NOAEL (Daphnia magna, 48 h): 0.3 mg/l Experimental result, Key study EC 50 (Daphnia magna, 48 h): 1.4 mg/l Experimental result, Key study
1,3-Benzodioxole, 5-[[2-(2-butoxyethoxy)ethoxy]methyl]-6-propyl-	EC 50 (Daphnia magna, 48 h): 510 µg/l Experimental result, Key study
Pyrethrins	EC 50 (Water flea (Daphnia), 48 h): 0.018 - 0.032 mg/l Intoxication
Morpholine	EC 50 (Daphnia magna, 48 h): 45 mg/l Experimental result, Key study
Ethanol, 2-methoxy-	EC 50 (Daphnia magna, 48 h): 27,000 mg/l Experimental result, Key study
1,2-Ethanediamine	EC 50 (Daphnia magna, 48 h): 16.7 mg/l Experimental result, Key study

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

Product: NOEC : Estimated < 1 mg/l

Aquatic Invertebrates

Product: No data available.

Specified substance(s):

Distillates (petroleum), hydrotreated light
NOAEL (Daphnia magna): 1.2 mg/l Experimental result, Key study
EC 50 (Daphnia magna): 0.81 mg/l Experimental result, Key study

1,3-Benzodioxole, 5-[[2-(2-butoxyethoxy)ethoxy]methyl]-6-propyl-
LOAEL (Daphnia magna): 47 µg/l Experimental result, Key study
NOAEL (Daphnia magna): 30 µg/l Experimental result, Key study

Morpholine
EC 50 (Daphnia magna): 12 mg/l Experimental result, Key study
NOAEL (Daphnia magna): 5 mg/l Experimental result, Key study

Ethanol, 2-methoxy-
NOAEL (Daphnia magna): > 500 mg/l Experimental result, Key study

1,2-Ethanediamine
NOAEL (Daphnia magna): 0.16 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):

Propane, 2-methyl-	100 % Detected in water. QSAR, Weight of Evidence study
Distillates (petroleum), hydrotreated light	61 % Detected in water. Experimental result, Supporting 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
1,3-Benzodioxole, 5-[[2-(2-butoxyethoxy)ethoxy]methyl]-6-propyl-	24 - 48 % (28 d) Detected in water. Experimental result, Supporting study
Morpholine	> 90 % (24 h) Sediment Experimental result, Key study 80 - 94 % (24 h) Sediment Experimental result, Key study 34.1 % Detected in water. Experimental result, Key study > 99 % (24 h) Sediment Experimental result, Key study
Ethanol, 2-methoxy-	82 % (14 d) Detected in water. Experimental result, Supporting study 74 % Detected in water. Experimental result, Key study
1,2-Ethanediamine	88 % 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):

1,3-Benzodioxole, 5-[[2-(2-butoxyethoxy)ethoxy]methyl]-6-propyl-	Bioconcentration Factor (BCF): 39.06 Aquatic sediment QSAR, Key study
Morpholine	Cyprinus carpio, Bioconcentration Factor (BCF): < 2.8 Aquatic sediment Experimental result, Key study

Partition Coefficient n-octanol / water (log Kow)

Product: No data available.

Specified substance(s):

1,3-Benzodioxole, 5-[[2-(2-butoxyethoxy)ethoxy]methyl]-6-propyl-	Log Kow: 4.8 - 5 20 - 25 °C
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Mobility in soil: No data available.

Known or predicted distribution to environmental compartments

Propane, 2-methyl-Distillates (petroleum), hydrotreated light	No data available.
Propane	No data available.
1,3-Benzodioxole, 5-[[2-(2-butoxyethoxy)ethoxy]methyl]-6-propyl-	No data available.
Pyrethrins	No data available.
Morpholine	No data available.
Ethanol, 2-methoxy-	No data available.
1,2-Ethanediamine	No data available.
Morpholine, 4-ethyl-	No data available.

Other adverse effects: Toxic to aquatic life with long lasting effects.

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	No
Marine Pollutant	Yes
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	No
Marine Pollutant	Yes
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	Yes
Special precautions for user:	Not regulated.

15. Regulatory information

Canada Federal Regulations List of Toxic Substances (CEPA, Schedule 1)

Chemical Identity
Ethanol, 2-methoxy-

Export Control List (CEPA 1999, Schedule 3)

Chemical Identity
Ethanol, 2-methoxy-

National Pollutant Release Inventory (NPRI)

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

NPRI PT5	Propane, 2-methyl-Distillates (petroleum), hydrotreated lightPropane
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Canada. National Pollutant Release Inventory (NPRI) (Schedule 1, Parts 1-4)

NPRI	Not Regulated
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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

Not Regulated

International regulations

Montreal protocol

Not applicable

Stockholm convention

Not applicable

Rotterdam convention

Not applicable

Kyoto protocol

Not applicable

Inventory Status:

Australia AICS:	On or 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:	Not 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
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Issue Date: 07-May-2019

Revision Date: 03-July-2019

Version #: 2.0

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.