



SAFETY DATA SHEET

1. Identification

Product identifier: CARPET SPOTTER PLUS - SW-676

Other means of identification

SDS number: RE1000009834

Recommended restrictions

Recommended use: Cleaner.

Restrictions on use: Not known.

Manufacturer/Importer/Distributor Information

Manufacturer

Company Name: Sprayway, Inc.
Address: 1000 INTEGRAM DR.
Pacific, MO 63069
Telephone: 1-630-628-3000

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

Emergency telephone number: 1-866-836-8855

2. Hazard(s) identification

Hazard Classification

Physical Hazards

Flammable aerosol Category 1

Health Hazards

Skin Corrosion/Irritation Category 2
Serious Eye Damage/Eye Irritation Category 2A

Label Elements

Hazard Symbol:



Signal Word: Danger

Hazard Statement: Extremely flammable aerosol.
Causes skin irritation.
Causes serious eye irritation.

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. Wash thoroughly after handling. Wear protective gloves/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 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: Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122°F.

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 (%)* |
|------------------------------|--------------------------|------------|-------------------------|
| Ethanol, 2-(2-butoxyethoxy)- | | 112-34-5 | 5 - 10% |
| Ethanol, 2-butoxy- | | 111-76-2 | 5 - 10% |
| Butane | | 106-97-8 | 1 - 5% |
| Propane | | 74-98-6 | 1 - 5% |
| Morpholine | | 110-91-8 | 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: 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.

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. 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: Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so.

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. Pressurized container: Do not pierce or burn, even after use. 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. Aerosol Level 1

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

| Chemical Identity | Type | Exposure Limit Values | Source |
|--|------|-----------------------|---|
| Ethanol, 2-(2-butoxyethoxy)- - Inhalable fraction and vapor. | TWA | 10 ppm | Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act), as amended (03 2013) |
| Ethanol, 2-(2-butoxyethoxy)- - Inhalable fraction and vapor. | TWA | 10 ppm | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (06 2015) |
| Ethanol, 2-(2-butoxyethoxy)- - Inhalable fraction and vapor. | TWA | 10 ppm | US. ACGIH Threshold Limit Values, as amended (03 2013) |
| Ethanol, 2-butoxy- | TWA | 20 ppm | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |



| | | | | |
|--------------------|---------------|-----------|-------------|---|
| Ethanol, 2-butoxy- | TWA | 20 ppm | 97 mg/m3 | Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2), as amended (10 2006) |
| Ethanol, 2-butoxy- | 15 MIN ACL | 30 ppm | | Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21), as amended (05 2009) |
| Ethanol, 2-butoxy- | TWA | 20 ppm | | Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act), as amended (03 2011) |
| Ethanol, 2-butoxy- | TWA | 20 ppm | | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (11 2010) |
| | 8 HR ACL | 20 ppm | | Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21), as amended (05 2009) |
| Ethanol, 2-butoxy- | TWA | 20 ppm | 97 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment), as amended (09 2017) |
| Ethanol, 2-butoxy- | TWA | 20 ppm | | US. ACGIH Threshold Limit Values, as amended (2008) |
| Butane | STEL | 1,000 ppm | | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (08 2017) |
| Butane | STEL | 750 ppm | | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (06 2017) |
| | 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 | 800 ppm | 1,900 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment), as amended (12 2008) |
| Butane | TWA | 1,000 ppm | | Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2), as amended (07 2009) |
| Butane | 8 HR ACL | 1,000 ppm | | Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21), as amended (05 2009) |
| Butane | STEL | 1,000 ppm | | Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act), as amended (03 2018) |
| | 15 MIN ACL | 1,250 ppm | | Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21), as amended (05 2009) |
| Butane | STEL | 1,000 ppm | | US. ACGIH Threshold Limit Values, as amended (03 2018) |
| Propane | TWA | 1,000 ppm | | Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2), as amended (07 2009) |
| Propane | 8 HR ACL | 1,000 ppm | | Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21), as amended (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), as amended (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), as amended (05 2009) |
| 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), as amended (06 2015) |
| Morpholine | TWA | 20 ppm | 71 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment), as amended (12 2008) |
| Morpholine | TWA | 20 ppm | 71 mg/m3 | Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2), as amended (10 2006) |



| | | | | |
|---------------------------|---------------|---------|-----------|---|
| Morpholine | 8 HR ACL | 20 ppm | | Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21), as amended (05 2009) |
| | 15 MIN ACL | 30 ppm | | Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21), as amended (05 2009) |
| Morpholine | TWA | 20 ppm | | Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act), as amended (03 2011) |
| Morpholine | TWA | 20 ppm | | US. ACGIH Threshold Limit Values, as amended (2008) |
| Sodium hydroxide (Na(OH)) | CEILING | | 2 mg/m3 | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| Sodium hydroxide (Na(OH)) | CEILING | | 2 mg/m3 | Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2), as amended (10 2006) |
| Sodium hydroxide (Na(OH)) | CEV | | 2 mg/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (12 2007) |
| Sodium hydroxide (Na(OH)) | Ceiling | | 2 mg/m3 | Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21), as amended (05 2009) |
| Sodium hydroxide (Na(OH)) | CEILING | | 2 mg/m3 | Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act), as amended (03 2011) |
| Sodium hydroxide (Na(OH)) | CEILING | | 2 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment), as amended (09 2017) |
| Sodium hydroxide (Na(OH)) | Ceiling | | 2 mg/m3 | US. ACGIH Threshold Limit Values, as amended (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/m3 | Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2), as amended (07 2009) |
| Ethanol, 2-methoxy- | 8 HR ACL | 5 ppm | | Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21), as amended (05 2009) |
| Ethanol, 2-methoxy- | TWA | 0.1 ppm | | Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act), as amended (03 2011) |
| Ethanol, 2-methoxy- | TWA | 5 ppm | 16 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment), as amended (09 2017) |
| Ethanol, 2-methoxy- | TWA | 0.1 ppm | | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (12 2007) |
| | 15 MIN ACL | 8 ppm | | Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21), as amended (05 2009) |
| Ethanol, 2-methoxy- | TWA | 0.1 ppm | | US. ACGIH Threshold Limit Values, as amended (2008) |
| 1,2-Ethanediamine | TWA | 10 ppm | 25 mg/m3 | Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2), as amended (10 2006) |
| 1,2-Ethanediamine | 15 MIN ACL | 15 ppm | | Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21), as amended (05 2009) |
| 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) |
| | 8 HR ACL | 10 ppm | | Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21), as amended (05 2009) |
| 1,2-Ethanediamine | TWA | 10 ppm | | Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act), as amended (03 2011) |
| 1,2-Ethanediamine | TWA | 10 ppm | | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (11 2010) |
| 1,2-Ethanediamine | TWA | 10 ppm | 25 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment), as amended (09 2017) |
| 1,2-Ethanediamine | TWA | 10 ppm | | US. ACGIH Threshold Limit Values, as amended (2008) |



| | | | |
|----------------------|---------------|----------------|---|
| 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), as amended (11 2010) |
| Morpholine, 4-ethyl- | 15 MIN ACL | 8 ppm | Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21), as amended (05 2009) |
| Morpholine, 4-ethyl- | TWA | 5 ppm 24 mg/m3 | Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2), as amended (10 2006) |
| | 8 HR ACL | 5 ppm | Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21), as amended (05 2009) |
| Morpholine, 4-ethyl- | TWA | 5 ppm | Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act), as amended (03 2011) |
| Morpholine, 4-ethyl- | TWA | 5 ppm 24 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment), as amended (09 2017) |
| Morpholine, 4-ethyl- | TWA | 5 ppm | US. ACGIH Threshold Limit Values, as amended (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.

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. 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: | 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: | 3,447 - 4,136 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: 20,189.64 mg/kg

Dermal

Product: ATEmix: 7,539.59 mg/kg

Inhalation

Product: ATEmix: 231.27 mg/l
ATEmix : 48.82 mg/l

Repeated dose toxicity

Product: No data available.

Specified substance(s):

| | |
|------------------------------|--|
| Ethanol, 2-(2-butoxyethoxy)- | NOAEL (Rat(Female, Male), Inhalation, 90 - 120 d): 14 ppm(m) Inhalation Experimental result, Key study NOAEL (Rat(Female, Male), Oral, 90 d): 250 mg/kg Oral Experimental result, Key study NOAEL (Rat(Female, Male), Dermal, 13 Weeks): > 2,000 mg/kg Dermal Experimental result, Key study |
| Ethanol, 2-butoxy- | NOAEL (Rat(Female), Inhalation, 2 yr): < 31 ppm(m) Inhalation Experimental result, Key study NOAEL (Rat(Female), Oral, 90 d): < 82 mg/kg Oral Experimental result, Key study NOAEL (Rabbit(Female, Male), Dermal, 90 d): > 150 mg/kg Dermal Experimental result, Key study |
| Butane | LOAEL (Rat(Female, Male), Inhalation, >= 28 d): 12,000 ppm(m) Inhalation Experimental result, Key study NOAEL (Rat(Female, Male), Inhalation, >= 28 d): 4,000 ppm(m) 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 |
| 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 |

Skin Corrosion/Irritation

Product: No data available.

Specified substance(s):

| | |
|------------------------------|--|
| Ethanol, 2-(2-butoxyethoxy)- | in vivo (Rabbit): Not irritant Experimental result, Supporting study |
| Ethanol, 2-butoxy- | in vivo (Rabbit): Irritating Experimental result, Key study |
| Morpholine | in vivo (Rabbit): Corrosive Experimental result, Key study |

Serious Eye Damage/Eye Irritation

Product: No data available.



Specified substance(s):

Ethanol, 2-(2-butoxyethoxy)- Rabbit, 24 - 72 hrs: Highly irritating
Ethanol, 2-butoxy- Rabbit, 24 - 72 hrs: Irritating

Respiratory or Skin Sensitization

Product: No data available.

Specified substance(s):

Ethanol, 2-(2-butoxyethoxy)- Skin sensitization:, in vivo (Guinea pig): Non sensitising
Ethanol, 2-butoxy- Skin sensitization:, in vivo (Guinea pig): Non sensitising
Morpholine 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.

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.

Other effects: No data available.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish

Product: No data available.

Specified substance(s):

Ethanol, 2-(2-butoxyethoxy)- LC 50 (Pimephales promelas, 96 h): 2,400 mg/l Experimental result, Supporting study



| | |
|--------------------|--|
| Ethanol, 2-butoxy- | LC 50 (Oncorhynchus mykiss, 96 h): 1,474 mg/l Experimental result, Key study |
| Butane | LC 50 (Various, 96 h): 147.54 mg/l QSAR QSAR, Key study |
| Propane | LC 50 (Various, 96 h): 147.54 mg/l QSAR QSAR, Key study |
| Morpholine | LC 50 (Oncorhynchus mykiss, 96 h): 180 mg/l Experimental result, Key study |

Aquatic Invertebrates

Product: No data available.

Specified substance(s):

| | |
|------------------------------|---|
| Ethanol, 2-(2-butoxyethoxy)- | LC 50 (Daphnia magna, 48 h): +/- 1,743 mg/l QSAR QSAR, Supporting study |
| Ethanol, 2-butoxy- | EC 50 (Daphnia magna, 48 h): 1,550 mg/l Experimental result, Key study |
| Butane | LC 50 (Daphnia sp., 48 h): 69.43 mg/l QSAR QSAR, Key study |
| Morpholine | EC 50 (Daphnia magna, 48 h): 45 mg/l Experimental result, Key study |

Chronic hazards to the aquatic environment:

Fish

Product: No data available.

Specified substance(s):

Ethanol, 2-butoxy- NOAEL (Danio rerio): > 100 mg/l Experimental result, Key study

Aquatic Invertebrates

Product: No data available.

Specified substance(s):

Ethanol, 2-butoxy- EC 10 (Daphnia magna): 134 mg/l Experimental result, Key study
EC 50 (Daphnia magna): 297 mg/l Experimental result, Key study

Morpholine NOAEL (Daphnia magna): 5 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):

Ethanol, 2-(2-butoxyethoxy)- 85 % (28 d) Detected in water. Experimental result, Key study

Ethanol, 2-butoxy- 90.4 % Detected in water. Experimental result, Key study

Butane 100 % (385.5 h) 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

Morpholine > 90 % (24 h) Sediment Experimental result, Key study
80 - 94 % (24 h) Sediment Experimental result, Key study



BOD/COD Ratio

Product: No data available.

Bioaccumulative potential

Bioconcentration Factor (BCF)

Product: No data available.

Specified substance(s):

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.

Mobility in soil: No data available.

Known or predicted distribution to environmental compartments

| | |
|------------------------------|--------------------|
| Ethanol, 2-(2-butoxyethoxy)- | No data available. |
| Ethanol, 2-butoxy- | No data available. |
| Butane | No data available. |
| Propane | No data available. |
| Morpholine | No data available. |

Other adverse effects: No data available.

13. Disposal considerations

Disposal instructions: Wash before disposal. Dispose to controlled facilities.

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 | No |
| Special precautions for user: | Not regulated. |

IMDG

| | |
|-------------------------------|---------------------|
| 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 | No |
| Special precautions for user: | Not regulated. |



IATA

| | |
|-------------------------------|---------------------|
| UN Number: | UN 1950 |
| Proper Shipping Name: | Aerosols, flammable |
| Transport Hazard Class(es): | |
| Class: | 2.1 |
| Label(s): | – |
| Packing Group: | – |
| Environmental Hazards: | No |
| Marine Pollutant | No |
| Special precautions for user: | Not regulated. |

15. Regulatory information

Canada Federal Regulations

List of Toxic Substances (CEPA, Schedule 1)

Chemical Identity

Ethanol, 2-butoxy-
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 | Ethanol, 2-butoxy- Butane Propane |
|----------|---|

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

| | |
|------|--------------------|
| NPRI | Ethanol, 2-butoxy- |
|------|--------------------|

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 |
| EINECS, ELINCS or NLP: | Not in compliance with the inventory. |
| Japan (ENCS) List: | Not in compliance with the inventory. |
| China Inv. Existing Chemical Substances: | On or in compliance with the inventory |
| Korea Existing Chemicals Inv. (KECI): | Not in compliance with the inventory. |
| Canada NDSL Inventory: | Not in compliance with the inventory. |
| Philippines PICCS: | On or in compliance with the inventory |
| 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: | On or in compliance with the inventory |
| Ontario Inventory: | Not in compliance with the inventory. |
| Taiwan Chemical Substance Inventory: | On or in compliance with the inventory |
| Canada DSL Inventory List: | On or in compliance with the inventory |
| US TSCA Inventory: | On or in compliance with the inventory |

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

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|-----------------------------|---|
| Issue Date: | 06/23/2021 |
| Revision Date: | No data available. |
| Version #: | 1.1 |
| Further Information: | No data available. |
| Disclaimer: | This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment. |