

(AEROSOL)

Safety Data Sheet

Section 1: Identification

Product Identifier and Other Means of Identification

Product Name: 4050A

Other Means of Identification: Safety Wash[™] II Electronics Cleaner

Related Part # 4050A-450G

Recommended Use and Restriction on Use

Use: Cleaner for electronics that is safe for most plastics

Uses Advised Against: Not available

Details of Manufacturer or Importer

Manufacturer MG Chemicals 1210 Corporate Drive Burlington, Ontario L7L 5R6 CANADA

***** +1-800-340-0772

 Fax
 +1-800-340-0773

 E-MAIL Support@mgchemicals.com WEB

E-маіL (Competent Person): <u>sds@mgchemicals.com</u>

Emergency Phone Number

For hazardous material incidents ONLY (leaks, spills, fires, exposures or accidents) USA or CANADA— Call Verisk 3E at **+1-866-519-4752** or **+1-760-476-3962** (Service access code: 335388)

For emergencies involving the transport of dangerous goods; 24/7 service CANADA—Call CANUTEC collect at **+1-613-996-6666** or ***666** on cellular phones

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Section 2: Hazard(s) Identification

Classification of Hazardous Chemical

GHS Categories

| Criteria | - | Category | Signal Word | Pictograms |
|----------------------------------|-----------------|----------|----------------|-------------|
| Aspiration Hazard | | 1 | Danger | Health |
| Reproductive Toxicity | | 2 | Warning | Health |
| Flammable Aerosol | | 2 | Warning | Flame |
| Eye Irritation | | 2 | Warning | Exclamation |
| Skin Irritation | | 2 | Warning | Exclamation |
| Specific Target Organ Toxicity | Single Exposure | 3 | Warning | Exclamation |
| Hazardous to Aquatic Environment | Chronic | 2 | none | Environment |

Note: The degree of severity is ranked within each hazard class from 1 (Highest Severity) to up to 5 (Lowest Severity), which is opposite to HMIS and NFPA conventions. Severity category rankings do not allow comparisons between classes.

Label Elements

| Signal Word | DANGER |
|-------------|-------------------------|
| Pictograms | Hazard Statements |
| | H223: Flammable aerosol |

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| Pictograms | Hazard Statements |
|--|---|
| | H304: May be fatal if swallowed and enters airways |
| | H361: Suspected of damaging fertility or the unborn child |
| | H319: Causes serious eye irritation |
| | H315: Causes skin irritation |
| $\mathbf{\dot{\mathbf{v}}}$ | H336: May cause dizziness or drowsiness |
| ¥2 | H411: Toxic to aquatic life with long lasting effects |
| | |
| Prevention | Precautionary Statements |
| Prevention P102 | Precautionary Statements Keep out of reach of children. |
| | - |
| P102 P201, P202 | Keep out of reach of children. Obtain special instructions before use. Do not handle until all safety |
| P102 P201, P202 P210 | Keep out of reach of children.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 |
| P102 P201, P202 | Keep out of reach of children. 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. |
| P102 P201, P202 P210 P211 | Keep out of reach of children. 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. |
| P102 P201, P202 P210 P211 P251 | Keep out of reach of children. 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 mist, vapors or spray. Use only outdoors or in a well-ventilated area. |
| P102 P201, P202 P210 P211 P251 P261, P271 | Keep out of reach of children. 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 mist, vapors or spray. Use only outdoors or in a well-ventilated area. Wear protective gloves, eye protection, face protection, and protective |

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| Continued | |
|-----------------------|--|
| Response | Precautionary Statements |
| P308 + P313 | IF exposed or concerned: Get medical advice or attention. |
| P301 + P310, P331 | IF SWALLOWED: Immediately call a POISON CENTER or doctor. Do NOT induce vomiting. |
| P304 + P340, P312 | IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTRE or doctor if you feel unwell. |
| P305 + P351 + P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P337 + P313 | If eye irritation persists: Get medical attention. |
| P302 + P352 | IF ON SKIN: Wash with plenty of water. |
| P332 + P313 | If skin irritation occurs: Get medical advice or attention. |
| P362 + P364 | Take off contaminated clothing and wash it before reuse. |
| P391 | Collect spillage. |
| Storage | Precautionary Statements |
| P410 + P412 | Protect from sunlight. Do not expose to temperatures exceeding 50 °C [122 °F]. |
| P403 | Store in a well-ventilated place. |
| P405 | Store locked up. |
| Disposal | Precautionary Statements |
| P501 | Dispose of contents in accordance to local, regional, national and international regulations. |

Hazards Not Otherwise Classified

| Other Criteria | Hazard Statements/Precautionary Statement | Signal Word | Pictograms |
|----------------|---|----------------|------------|
| Defats skin | Repeated exposure may cause skin dryness or cracking. | None | None |



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| Section 3: Composition/Information on Ingredients | | |
|---|---|-----------|
| CAS # | Chemical Name | %(weight) |
| 811-97-2 | 1,1,1,2-tetrafluoroethane ^{a)} | 35% |
| 67-63-0 | propan-2-ol ^{b)} | 26% |
| 107-83-5 | methyl-2-pentane | 10-30% |
| 96-14-0 | methyl-3-pentane | 5-10% |
| 79-29-8 | dimethyl-2,3-butane | 5-10% |
| 75-83-2 | dimethyl-2,2-butane | 3-7% |
| 64-17-5 | ethanol ^{c)} | 6% |
| 109-66-0 | pentane | 1-5% |
| 110-54-3 | n-hexane | 1-5% |
| 141-78-6 | ethyl acetate | 0.1% |

a) Commonly referred to as HFC-134a

b) Commonly known as isopropyl alcohol (IPA)

c) Denatured alcohol

Section 4: First-Aid Measures

| Exposure Condition | GHS Code/Symptoms/Precautionary Statements | |
|--------------------|---|--|
| IF SWALLOWED | P301 + P330, P331, P308 + P313 | |
| Immediate Symptoms | nausea, vomiting, abdominal pain, headaches, dizziness, drowsiness, | |
| Response | Immediately call a POISON CENTRE or doctor. Rinse mouth. Do NOT induce vomiting. | |
| | IF exposed or concerned: Get medical advice or attention. | |
| IF INHALED | P304 + P340, P312, P308 + P313 | |
| Immediate Symptoms | cough, shortness of breath, dizziness, drowsiness, headaches | |
| Response | Remove person to fresh air (out of the contaminated zone) and keep comfortable for breathing. | |
| | If feeling unwell: Call a POISON CENTRE or doctor. | |
| | IF exposed or concerned: Get medical advice or attention. | |

Section continued on the next page

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| Continued | | |
|--------------------|---|--|
| IF IN EYES | P305 + P351 + P338, P337 + P313 | |
| Immediate Symptoms | redness, irritation, pain | |
| Response | Rinse cautiously with water for 20 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. | |
| | If eye irritation persists: Get medical attention. | |
| IF ON SKIN | P302 + P352, P332 + P313, P308 + P313, P362 + P364 | |
| Immediate Symptoms | dry skin, redness, irritation | |
| Response | esponse IF ON SKIN: Wash with plenty of water or shower. | |
| | If skin irritation occurs: Get medical advice or attention. | |
| | IF exposed or concerned: Get medical advice or attention. | |
| | Take off contaminated clothing and wash it before reuse. | |
| | | |

Section 5: Fire-Fighting Measures

| Extinguishing Media | In case of fire: Use dry chemical, carbon dioxide, or chemical foam to extinguish. |
|----------------------------|---|
| | Use water spray to cool containers. |
| Specific Hazards | Aerosols containers may erupt with force at temperatures above 50 °C [122 °F]. |
| | Produces irritating and toxic fumes in fires or in contact with hot surfaces. |
| | The vapors are heavier than air and may accumulate in low-lying areas. Vapors may travel long distances and ignite at an ignition source, which can cause a flashback or an explosion |
| Combustion Products | Produces carbon oxides (CO,CO $_2$), halogenated compounds, and hydrogen fluoride (HF). |
| Fire-Fighter | Wear self-contained breathing apparatus and full fire-fighting turn-out gear. |

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| Section 6: Accidental Release Measures | | |
|--|---|--|
| Personal Protection | See personal protection recommendations in Section 8. | |
| Precautions for Response | Avoid breathing the fumes, mist or vapors. Remove or keep away all sources of extreme heat or open flames. | |
| Environmental Precautions | Avoid releasing to the environment. Prevent spill from entering drains and waterways. | |
| Containment Methods | Not applicable | |
| Cleaning Methods | Collect liquid in a sealable, solvent-resistant container. Sprinkle inert absorbent compound onto spill, then sweep into the container. Wash spill area with soap and water to remove the last traces of residue. | |
| | Recommendation: Use a grounded stainless steel or carbon steel container or a solvent resistant plastic container. | |
| Disposal Methods | Dispose of spill waste according to Section 13. | |

Section 7: Handling and Storage

| Prevention | Keep out of reach of children. |
|------------|--|
| | 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 vapors, mist or spray. Use only outdoors or in a well-ventilated area. |
| | Wear protective gloves, eye protection, face protection, and protective clothing. |
| | Avoid release to the environment. |
| Handling | Wash hands thoroughly after handling. |
| | Take off contaminated clothing and wash it before reuse. |
| | Collect spillage. |
| Storage | Protect from sunlight. Do not expose to temperatures exceeding 50 °C [122 °F]. |
| | Store in a well-ventilated place. |
| | Store locked up. |
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Section 8: Exposure Controls/Personal Protection

Substances with Occupational Exposure Limit Values

| Chemical Name Country Long Term Short Term | | | Short Torm |
|--|-----------------|-------------------------|---------------------------|
| chemical Name | country | Exposure Limits | Exposure Limits |
| | | (PEL) | (STEL) |
| 1,1,1,2-tetrafluoroethane | MG Chemicals a) | 1 000 ppm | Not established |
| | ACGIH | Not established | Not established |
| | U.S.A. OSHA PEL | Not established | Not established |
| | Canada | Not established | Not established |
| propan-2-ol | ACGIH | 200 ppm (TWA) | 400 ppm |
| | U.S.A. OSHA PEL | 400 ppm | Not established |
| | Canada AB | 200 ppm | 400 ppm |
| | Canada BC | 200 ppm | 400 ppm |
| | Canada ON | 200 ppm | 400 ppm |
| | Canada QC | 400 ppm | 500 ppm |
| methyl-2-pentane | ACGIH | 500 ppm | Not established |
| | U.S.A. OSHA PEL | (500 ppm) ^{b)} | (1 000 ppm) ^{b)} |
| | Canada AB | 500 ppm | 1 000 ppm |
| | Canada BC | 200 ppm | Not established |
| | Canada ON | 500 ppm | 1 000 ppm |
| | Canada QC | 500 ppm | 1 000 ppm |
| ethanol | ACGIH | 1 000 ppm | Not established |
| | U.S.A. OSHA PEL | 1 000 ppm | Not established |
| | Canada AB | 1 000 ppm | Not established |
| | Canada BC | Not established | 1 000 ppm |
| | Canada ON | Not established | 1 000 ppm |
| | Canada QC | 1 000 ppm | Not established |
| methyl-3-pentane | ACGIH | 500 ppm | Not established |
| | U.S.A. OSHA PEL | (500 ppm) ^{b)} | (1 000 ppm) ^{b)} |
| | Canada AB | 500 ppm | 1 000 ppm |
| | Canada BC | 200 ppm | Not established |
| | Canada ON | 500 ppm | 1 000 ppm |
| | Canada QC | 500 ppm | 1 000 ppm |
| dimethyl-2,3-butane | ACGIH | 500 ppm | Not established |
| - | U.S.A. OSHA PEL | (500 ppm) ^{b)} | (1 000 ppm) ^{b)} |
| | Canada AB | 500 ppm | 1 000 ppm |
| | Canada BC | 200 ppm | Not established |
| | Canada ON | 500 ppm | 1 000 ppm |
| | Canada QC | 500 ppm | 1 000 ppm |

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Engineering Controls

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Compliment

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| Chemical Name | Country | Long Term Exposure Limits (PEL) | Short Term Exposure Limits (STEL) |
|---------------------|-----------------|---------------------------------------|---|
| dimethyl-2,2-butane | ACGIH | 500 ppm | Not established |
| • | U.S.A. OSHA PEL | (500 ppm) ^{b)} | (1 000 ppm) ^{b)} |
| | Canada AB | 500 ppm | 1 000 ppm |
| | Canada BC | 200 ppm | Not established |
| | Canada ON | 500 ppm | 1 000 ppm |
| | Canada QC | 500 ppm | 1 000 ppm |
| n-hexane | ACGIH | 50 ppm | Not established |
| | U.S.A. OSHA PEL | 50 ppm (Skin) | Not established |
| | Canada AB | 50 ppm | Not established |
| | Canada BC | 20 ppm (Skin) | Not established |
| | Canada ON | 50 ppm (Skin) | Not established |
| | Canada QC | 50 ppm | Not established |
| ethyl acetate | ACGIH | 400 | Not established |
| | U.S.A. OSHA PEL | 400 | Not established |
| | Canada AB | 400 | Not established |
| | Canada BC | 150 | Not established |
| | Canada ON | Not established | Not established |
| | Canada QC | 400 | Not established |

Note: Ingredients are listed in descending weight contribution order (from greatest to least). The ACGIH¹, OSHA (Table Z-1), and Canadian provinces exposure limits were consulted. Limits from the suppliers' SDS were also consulted. Short term exposure limits (STEL) are for 15 min and long term permissible exposure limits (PEL) for 8 h.

a) MG Chemicals recommended limit corresponding to prevalent international threshold values

b) Value vacated (retracted) under court order, but still in effect in some states

| Skin—significant exposure through skin route | |
|--|--|
| | |
| | |

| Ventilation | Keep airborne concentrations below the occupational exposure limits (OEL). |
|--------------------|--|
| Personal Protectiv | e Equipment |
| Eye protection | Wear appropriate protective eyeglasses or chemical safety goggles. |
| | RECOMMENDATION: Ensure that glasses have side shields for lateral protection. |
| | Section continued on the next page |
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| ® |
|-----------|
| Chemicals |
| |

| ington, | Untario, Canada | |
|---------|-----------------|--|
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|------------------------|--|
| Skin Protection | For likely contacts, use of protective butyl rubber or other chemically resistant gloves. |
| | For incidental contacts, use nitrile or other chemically resistant gloves. |
| Respiratory Protection | For over-exposures up to 10 x OEL of mist, vapors, or spray, wear respirator such as a half-mask respirator with organic vapor cartridges. |
| | Above 10 x OEL, use a positive-pressure, air-supplied respirator or a self-contained breathing apparatus. |
| | RECOMMENDATION: Consult your local safety supply store to ensure that your respirator has a NIOSH (U.S.) approved filter cartridges appropriate for the ingredients listed in Section 3. The respirator should be fitted to the employee by a professional. Ensure vapor cartridges are stored in sealed plastic bags when not being used. |

General Hygiene Considerations

Wash hands thoroughly with water and soap after handling.

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| Section 9: Physical and Chemical Properties | | | |
|---|---------------------|--|----------------------|
| Physical State | Liquid | Lower Flammability Limit ^{b)} | 1% |
| Appearance | Colorless | Upper Flammability Limit ^{b)} | 8% |
| Odor | Mild | Vapor Pressure @20 °C ^{b)} | 13 kPa [100 mmHg] |
| Odor Threshold | Not available | Vapor Density | ≥1.6 |
| рН | Not available | Relative Density @25 °C | 0.77 |
| Freezing/Melting Point | Not available | Solubility in Water | Miscible |
| Initial Boiling Point | ≥52 °C [≥125 °F] | Partition Coefficient n-octanol/water | Not available |
| Flash Point ^{a)} | -29 °C [-20 °F] | Auto-ignition Temperature ^{c)} | 363 °C [685 °F] |
| Evaporation Rate | Not available | Decomposition Temperature | Not available |
| Flammability | Flammable | Viscosity @25 °C | Not available |

a) Closed cup value for mixture of hexane isomers

b) Calculated using Raoult's Law and Le Chatelier Principle

c) Auto-ignition value based on ethanol literature value

Section 10: Stability and Reactivity

| Reactivity | Not available |
|---------------------------|--|
| Chemical Stability | Chemically stable at normal temperatures and pressures |
| Conditions to Avoid | Avoid temperatures above 50 °C [122 °F], open flames, and incompatible substances. |
| Incompatibilities | Avoid strong oxidizing agents, strong acids, strong bases, powdered aluminum at \ge 49 °C [\ge 120 °F] |
| Polymerization | Will not occur |
| Decomposition | Will not decompose under normal conditions. For thermal decomposition, see combustion products in Section 5. |



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Section 11: Toxicological Information

Summary of Effects and Symptoms by Routes of Exposure

Eyes Causes redness, serious eye irritation, or pain.

Skin Causes skin redness, irritation, and dry skin.

- **Inhalation** May cause nose, throat and lung irritation. Overexposure may lead to dizziness or drowsiness.
- **Ingestion** Aspiration of the liquid into the lungs can caus chemical pneumonia. See inhalation symptoms.
- **Chronic** Prolonged or repeated exposure may cause skin dryness, cracking, as well as defatting the skin.

Ingestion or inhalation mist or vapors during pregnancy may increase the chances fetal death and developmental defects.

Acute Toxicity (Lethal Exposure Concentrations)

| Chemical Name | LD50 | LD50 | LC50 |
|---------------------------|-------------|--------------|------------------------|
| | oral | dermal | inhalation |
| 1,1,1,2-tetrafluoroethane | Not | Not | 1 500 g/m ³ |
| | available | available | 4 h Rat |
| propan-2-ol | 3 600 mg/kg | 12 800 mg/kg | 16 000 ppm |
| | Rat | Rabbit | 8 h Rat |
| methyl-2-pentane | Not | Not | 3 125 ppm |
| | available | available | 4 h Rat ^{a)} |
| ethanol | 7 060 mg/kg | Not | 117 mg/L |
| | Rat | available | 4 h Rat |
| methyl-3-pentane | Not | Not | Not |
| | available | available | available |
| dimethyl-2,3-butane | Not | Not | Not |
| | available | available | available |
| dimethyl-2,2-butane | Not | Not | Not |
| | available | available | available |

Section continued on the next page

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| Continued | | | |
|---------------|--------------|---------------|---------------------|
| Chemical Name | LD50 | LD50 | LC50 |
| | oral | dermal | inhalation |
| pentane | >2 000 mg/kg | Not | <20 000 ppm |
| | Rat | available | 4 h Rat (vapor) |
| n-hexane | 15 480 mg/kg | 2 000 mg/kg | 48 000 ppm |
| | Rat | Rabbit | 4 h Rat |
| ethyl acetate | 5 620 mg/kg | >20 000 µL/kg | 45 g/m ³ |
| | Rat | Rabbit | 2 h Mouse |

Note: Toxicity data from the ECHA database were consulted. The data from supplier SDS were also consulted.

| Other Toxicological Effects | |
|--|---|
| Skin corrosion/irritation | Causes skin irritation. |
| Serious eye damage/irritation | Propan-2-ol, ethanol, and ethyl acetate are known serious eye irritants. |
| Sensitization (allergic reactions) | Based on available data, the classification criteria are not met. |
| Carcinogenicity (risk of cancer) | Except for ethanol, none of the ingredients are classified or listed as a carcinogen by IARC, ACGIH, CA Prop 65, or NTP. |
| | Evidence of carcinogenicity of ethanol relates to excessive alcoholic beverage consumption, and doesn't relate to exposure risks when used in the workplace or as a non-comestible consumer product. |
| | Ethanol [CAS# 64-17-5] |
| | IARC Group 1: Possibly carcinogenic to humans in the form of alcoholic beverages (not ethanol) |
| | ACGIH A4: Not classified as a human carcinogen |
| | CA Prop 65: Listed as a carcinogen when consumed as a beverage |
| | NTP: When in alcoholic beverage consumption, it is listed as a known carcinogen |
| Mutagenicity (risk of heritable genetic effects) | Based on available data, the classification criteria are not met. |
| | |
| Section continued on the next page | |
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|---|---|
| Reproductive Toxicity (risk to sex functions) | Evidence of reproductive toxicity of ethanol is insufficient and relates to excessive consumption of alcoholic beverages. It does not the risks of exposure when used in the workplace or as a non-edible product. |
| | By inhalation, no effects on fertility or development are observed at exposure levels of up to 16 000 ppm. |
| | Ethanol [CAS# 64-17-5] |
| | CA Prop. 65 (California Proposition 65) : Listed as toxic for reproduction when consumed as a drink. |
| Teratogenicity (risk of fetus malformation) | The n-hexane component was found to harm fetus in animal studies. |
| | An excessive consumption of ethanol was found to be harmful to the fetus. |
| STOT-single exposure | The hexane isomers, propan-2-ol, and ethyl acetate cause central nervous systems effects leading to dizziness or drowsiness. |
| STOT-repeated exposure | Based on available data, the classification criteria are not met. |
| Aspiration hazard | Mixture is a class 1 aspiration hazard. It contains up to 30% class 1 aspiration hazard components and has a mixture viscosity of <20.5 mm ² /s at 40 °C. |

Section 12: Ecological Information

Ecological classifications are based on the IMDG/GHS criteria in conjunction with ecotoxicological data from our suppliers, the European Chemical Agency database (<u>http://echa.europa.eu</u>), and other reliable sources.

Isoalkanes are chronic category 2 aquatic toxicant based on similar mixtures of isoalkanes C6-C7 with <5% n-hexane that have a LC50 96 h of 11.4 mg/L for Oncorhynchus mykiss (rainbow trout), and an EL50 48 h of 3.0 mg/L Daphnia magna (water flea).

Mixtures of isoalkanes C6-C7 with <5% n-hexane suggest a EC50 >2 mg/L for fish using a QSAR model. For Daphnia magna (water flea) a NOELR 21 days of 1 mg/L and an EL50 of 1.6 mg/L.

Ethyl acetate is an acute category 3 environmental toxicant liquid (biodegradable, with minimal LC50 of 220 mg/L for Pimephales promelas (fathead minnow).

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Based on available data, propan-2-ol and ethanol do not meet the environmental toxicant classification with LC50 and EC50 >100 mg/L.

- The 2-propanol component is not classifiable as an environmental toxicant with a a minimal LC50 96 h of 9 640 mg/L for Pimephales promelas (fathead minnow); an EC50 24 h of 5 102 mg/L Daphnia magna (water flea); and an EC50 72 h of >2 000 mg/L Desmodesmus subspicatus (green algae).
- Ethanol is not classifiable as an environmental toxicant with a minimal LC50 96 h of 12 000 mg/L for Oncorhynchus mykiss (rainbow trout) and EC50 96 h of 5 770 mg/L for Pimephales promelas (fathead minnow); and LC50 48 h of 5 012 mg/L for Cerodaphnia sp.

Acute Ecotoxicity

See chronic ecotoxicity

Chronic Ecotoxicity

Category 2

Toxic to aquatic life with long lasting effects

Biodegradability and Persistance

Not available

Bioaccumulation Potential

Not available

Other Effects

Regulated Volatile Organic Compounds (VOC) content according to the US (EPA) and Canadian (CEPA) authorities.

Regulated Volatile Organic Compound (VOC) content = 65% (501 g/L)

Section 13: Disposal Information

Dispose of contents in accordance with all local, regional, national, and international regulations.

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Section 14: Transport Information

Ground

Refer to TDG (Canadian Transportation of Dangerous Goods regulations) and **USA DOT 49 CFR** (Parts 100 to 185) **Regulations.**

Limited Quantity



UN number: UN1950 Shipping Name: AEROSOLS, flammable Class: 2.1 Packing Group: Not applicable Marine Pollutant: Yes

Air

Refer to ICAO-IATA Dangerous Goods Regulations.

Limited Quantity



UN number: UN1950 Shipping Name: AEROSOLS, flammable Class: 2.1 Packing Group: Not applicable Marine Pollutant: Yes

Sea

 Refer to IMDG regulations.

 Limited Quantity

 VN number: UN1950

 Shipping Name: AEROSOLS, flammable

 Class: 2.1

 Packing Group: Not applicable

 Marine Pollutant: Yes

Note: Shipper must be appropriately <u>trained and certified</u> before involvement with the transport of dangerous goods.

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Section 15: Regulatory Information

Canada

Domestic Substance List (DSL) / Non-Domestic Substance Lists (NDSL)

All hazardous ingredients are listed on the DSL.

Hazardous Products Act (R.S.C., 1985, c. H-3)

The safety data sheet and label comply with the Hazardous Product Act and WHMIS 2015.

USA

Other Classifications

HMIS® RATING

| HEALTH: | * | 2 |
|----------------------|---|---|
| FLAMMABILITY: | | 3 |
| PHYSICAL HAZARD: | | 0 |
| PERSONAL PROTECTION: | | |

NFPA® 704 CODES



Approximate HMIS and NFPA Risk Ratings Legend: 0 (Low or none); 1 (Slight); 2 (Moderate); 3 (Serious); 4 (Severe)

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CAA (Clean Air Act, USA)

This product does not contain any class 1 ozone depleting substances.

This product does not contain any class 2 ozone depleting substances.

This product does not contain substances that are listed as hazardous air pollutants.

EPCRA (Emergency Planning and Right to Know Act, USA, 40 CFR 372.45)

This product contains up to 26% propan-2-ol (CAS# 67-63-0) which is subject to the reporting requirements of section 313 Title III of the SARA of 1986 and 40 CFR part 372.

This product contain \leq 5% n-hexane (CAS# 110-54-3; reportable quantity = 5 000 lb), which is subject to the reporting requirements in section 313 Title III of the SARA of 1986 and 40 CFR part 372.

This product contains 0.1% ethyl acetate (CAS# 141-78-6), which is subject to the CERCLA reporting requirements at a the threshold 5 000 lb (2 268 kg).

TSCA (Toxic Substances Control Act of 1976, USA)

All substances are TSCA listed.

California Proposition 65 (Chemicals known to cause cancer or reproductive toxicity, USA).

This product contains ethanol, which is listed as reproductively toxic and carcinogen when in an alcoholic beverage. This is not applicable to this product.

This product contains n-hexane, which is listed as reproductively toxic.

Europe

RoHS (Restriction of Hazardous Substances Directive)

This product does not contain any lead, cadmium, mercury, hexavalent chromium, PBB's, PBDE's, DEHP, BBP, DBP, or DIBP and complies with European RoHS regulations.

WEEE (Waste Electrical and Electronic Equipment Directive)

This product is not a piece of electrical or electronics equipment, and is therefore not governed by this regulation.



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Section 16: Other Information

| SDS Prepared by | MG Chemicals Regulatory Department |
|---------------------|---|
| Date of Review | 05 January 2024 |
| Supersedes | 14 July 2023 |
| Reason for Changes: | Changes to classification information, section 2. |

Reference

1) ACGIH 2023 TLVs and BEIs: Based on the documentation of the threshold limit values for chemical substances and physical agents & biological exposure indices, American Conference of Governmental of Industrial Hygienist Cincinnati, OH (2023).

Abbreviations

- ACGIH American Conference of Governmental Industrial Hygienists (USA)
- EC50 Half maximal effective concentration
- EL50 Half maximal effective loading
- IARC International Agency for Research on Cancer
- NOELR No observable effect loading ratio
- NTP National Toxicology Program
- GHS Globally Harmonized System of Classification of Labeling of Chemicals
- LC50 Lethal Concentration 50%
- LCLo Lowest published lethal concentration
- LD50 Lethal Dose 50%
- OEL Occupational Exposure Limit
- PEL Permissible Exposure Limit
- SDS Safety Data Sheet
- STEL Short-Term Exposure Limit
- TCLo Lowest published toxic concentration
- TWA Time Weighted Average
- VOC Volatile Organic Content

Section continued on the next page

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Technical Queries Contact us regarding any questions, improvement suggestions, or problems with this product. Application notes, instructions, and FAQs are located at <u>www.mgchemicals.com</u>.

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