

# SAFETY DATA SHEET

## HPLC Flushing Solvent

### Section 1. Identification

**Product identifier** : HPLC Flushing Solvent

**Part no.** : G1969-85026

**Relevant identified uses of the substance or mixture and uses advised against**

**Identified uses** : Reagents and Standards for Analytical Chemistry Laboratory Use  
500 ml

**Supplier/Manufacturer** : Agilent Technologies, Inc.  
5301 Stevens Creek Blvd  
Santa Clara, CA 95051, USA  
800-227-9770

**Emergency telephone number (with hours of operation)** : CHEMTREC®: 1-800-424-9300

### Section 2. Hazard identification

**Classification of the substance or mixture**

H225	FLAMMABLE LIQUIDS - Category 2
H302	ACUTE TOXICITY (oral) - Category 4
H315	SKIN IRRITATION - Category 2
H319	EYE IRRITATION - Category 2A
H351	CARCINOGENICITY - Category 2
H336	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
H304	ASPIRATION HAZARD - Category 1
H411	AQUATIC HAZARD (LONG-TERM) - Category 2

**GHS label elements**

**Hazard pictograms**



**Signal word**

: Danger

**Hazard statements**

: H225 - Highly flammable liquid and vapor.  
H302 - Harmful if swallowed.  
H304 - May be fatal if swallowed and enters airways.  
H315 - Causes skin irritation.  
H319 - Causes serious eye irritation.  
H336 - May cause drowsiness or dizziness.  
H351 - Suspected of causing cancer.  
H411 - Toxic to aquatic life with long lasting effects.

**Precautionary statements**

## Section 2. Hazard identification

- Prevention**
- : P201 - Obtain special instructions before use.
  - P280 - Wear protective gloves, protective clothing and eye or face protection.
  - P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
  - P273 - Avoid release to the environment.
  - P261 - Avoid breathing vapor.
  - P270 - Do not eat, drink or smoke when using this product.
  - P264 - Wash thoroughly after handling.
- Response**
- : P391 - Collect spillage.
  - P308 + P313 - IF exposed or concerned: Get medical advice or attention.
  - P304 + P312 - IF INHALED: Call a POISON CENTER or doctor if you feel unwell.
  - P301 + P310, P331 - IF SWALLOWED: Immediately call a POISON CENTER or doctor. Do NOT induce vomiting.
  - P302 + P352 - IF ON SKIN: Wash with plenty of water.
  - P362 + P364 - Take off contaminated clothing and wash it before reuse.
  - 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 advice or attention.
- Storage**
- : P403 + P233 - Store in a well-ventilated place. Keep container tightly closed.
- Disposal**
- : P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

## Section 3. Composition/information on ingredients

**Substance/mixture** : Mixture

Ingredient name	Synonyms	% (w/w)	Identifiers	
Propan-2-ol	Isopropanol	≥30 - ≤60	CAS: 67-63-0	-
Acetonitrile	Acetonitrile	≥10 - ≤30	CAS: 75-05-8	-
Dichloromethane	Dichloromethane	≥10 - ≤30	CAS: 75-09-2	-
Cyclohexane	Cyclohexane	≥10 - ≤30	CAS: 110-82-7	-

Ranges if listed above for hazardous ingredient(s) are prescribed ranges. The actual concentration(s) or actual concentration range(s) are being withheld as a trade secret.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

## Section 4. First-aid measures

### Description of necessary first aid measures

- Eye contact**
- : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
- Inhalation**
- : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

## Section 4. First-aid measures

- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.
- Skin contact** : Causes skin irritation.
- Ingestion** : Harmful if swallowed. Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways.

#### Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:  
pain or irritation  
watering  
redness
- Inhalation** : Adverse symptoms may include the following:  
nausea or vomiting  
headache  
drowsiness/fatigue  
dizziness/vertigo  
unconsciousness
- Skin contact** : Adverse symptoms may include the following:  
irritation  
redness
- Ingestion** : Adverse symptoms may include the following:  
nausea or vomiting

### Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### Extinguishing media

- Suitable extinguishing media** : Use dry chemical, CO<sub>2</sub>, water spray (fog) or foam.
- Unsuitable extinguishing media** : Do not use water jet.

### Specific hazards arising from the chemical

- : Highly flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. This material is toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

### Hazardous thermal decomposition products

- : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide  
nitrogen oxides  
halogenated compounds  
carbonyl halides  
cyanides

### Special protective actions for fire-fighters

- : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

### Special protective equipment for fire-fighters

- : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

#### For non-emergency personnel

- :  No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor. Put on appropriate personal protective equipment.

#### For emergency responders

- : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

### Environmental precautions

- : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

### Methods and materials for containment and cleaning up

#### Methods for cleaning up

- : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

## Section 7. Handling and storage

### Precautions for safe handling

**Protective measures** : Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not swallow. Avoid breathing vapor or mist. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

**Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

**Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

## Section 8. Exposure controls/personal protection

### Control parameters

### Occupational exposure limits

Ingredient name	Exposure limits
Propan-2-ol	<p><b>CA Saskatchewan Provincial (Canada, 4/2021)</b>            STEL 15 minutes: 400 ppm.            TWA 8 hours: 200 ppm.</p> <p><b>CA British Columbia Provincial (Canada, 8/2025)</b>            TWA 8 hours: 200 ppm.            STEL 15 minutes: 400 ppm.</p> <p><b>CA Ontario Provincial (Canada, 6/2019)</b>            TWA 8 hours: 200 ppm.            STEL 15 minutes: 400 ppm.</p> <p><b>CA Quebec Provincial (Canada, 2/2024)</b>            TWAEV 8 hours: 200 ppm.            STEV 15 minutes: 400 ppm.</p> <p><b>CA Alberta Provincial (Canada, 3/2023)</b>            OEL 15 minutes: 984 mg/m<sup>3</sup>.            OEL 8 hours: 200 ppm.            OEL 15 minutes: 400 ppm.            OEL 8 hours: 492 mg/m<sup>3</sup>.</p>
Acetonitrile	<p><b>CA Saskatchewan Provincial (Canada, 4/2021)</b> Absorbed through skin.</p>

## Section 8. Exposure controls/personal protection

Dichloromethane	<p>STEL 15 minutes: 30 ppm. TWA 8 hours: 20 ppm. <b>CA British Columbia Provincial (Canada, 8/2025)</b> Absorbed through skin. TWA 8 hours: 20 ppm. <b>CA Ontario Provincial (Canada, 6/2019)</b> Absorbed through skin. TWA 8 hours: 20 ppm. <b>CA Quebec Provincial (Canada, 2/2024)</b> Absorbed through skin. TWAEV 8 hours: 20 ppm. <b>CA Alberta Provincial (Canada, 3/2023)</b> OEL 8 hours: 34 mg/m<sup>3</sup>. OEL 8 hours: 20 ppm.</p> <p><b>CA Saskatchewan Provincial (Canada, 4/2021)</b> STEL 15 minutes: 63 ppm. TWA 8 hours: 50 ppm. <b>CA British Columbia Provincial (Canada, 8/2025)</b> Carc 2A. TWA 8 hours: 25 ppm. <b>CA Ontario Provincial (Canada, 6/2019)</b> TWA 8 hours: 50 ppm. <b>CA Quebec Provincial (Canada, 2/2024)</b> C2. TWAEV 8 hours: 50 ppm. TWAEV 8 hours: 174 mg/m<sup>3</sup>. <b>CA Alberta Provincial (Canada, 3/2023)</b> OEL 8 hours: 174 mg/m<sup>3</sup>. OEL 8 hours: 50 ppm.</p>
Cyclohexane	<p><b>CA Saskatchewan Provincial (Canada, 4/2021)</b> STEL 15 minutes: 150 ppm. TWA 8 hours: 100 ppm. <b>CA British Columbia Provincial (Canada, 8/2025)</b> TWA 8 hours: 100 ppm. <b>CA Ontario Provincial (Canada, 6/2019)</b> TWA 8 hours: 100 ppm. <b>CA Quebec Provincial (Canada, 2/2024)</b> TWAEV 8 hours: 100 ppm. <b>CA Alberta Provincial (Canada, 3/2023)</b> OEL 8 hours: 344 mg/m<sup>3</sup>. OEL 8 hours: 100 ppm.</p>

### Biological exposure indices

No exposure indices known.

### Appropriate engineering controls

: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

### Environmental exposure controls

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

## Section 8. Exposure controls/personal protection

### Individual protection measures

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.
- Skin protection**
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

## Section 9. Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

### Appearance

- Physical state** : Liquid. [Clear.]
- Color** : Colorless.
- Odor** : Alcohol-like.
- Odor threshold** : Not available.
- pH** : Not available.
- Melting point/freezing point** : -88.5°C (-127.3°F)
- Initial boiling point and boiling range** : 82.4°C (180.3°F)
- Flash point** : Closed cup: -20°C (-4°F)
- Evaporation rate** : Not available.
- Flammability (solid, gas)** : Not applicable.
- Upper/lower flammability or explosive limits** : Lower: 2%  
Upper: 13%
- Vapor pressure** : 4.4 kPa (33 mm Hg)
- Vapor density** : 2.07 [Air = 1]

## Section 9. Physical and chemical properties

**Relative density** : Not available.

<b>Solubility</b>	<b>Media</b>	<b>Result</b>
	water	Soluble

**Miscible with water** : Yes.

**Partition coefficient: n-octanol/water** : Not applicable.

**Auto-ignition temperature** : 456°C (852.8°F)

**Decomposition temperature** : Not available.

**Viscosity** : Dynamic (room temperature): Not available.  
Kinematic (room temperature): Not available.  
Kinematic (40°C (104°F)): Not available.

### Particle characteristics

**Median particle size** : Not applicable.

## Section 10. Stability and reactivity

**Reactivity** : No specific test data related to reactivity available for this product or its ingredients.

**Chemical stability** : The product is stable.

**Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.

**Conditions to avoid** : Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.

**Incompatible materials** : Reactive or incompatible with the following materials:  
oxidizing materials  
Reactive or incompatible with the following materials: reducing materials, metals, acids and alkalis.

**Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

<b>Product/ingredient name</b>	<b>Result</b>
Propan-2-ol	Rabbit - Dermal - LD50 12800 mg/kg
Acetonitrile	Rat - Oral - LD50 5000 mg/kg
	Rat - Oral - LD50 2460 mg/kg
Dichloromethane	Rat - Inhalation - LC50 Vapor 17100 ppm [4 hours]
	Rat - Inhalation - LC50 Vapor 76000 mg/m <sup>3</sup> [4 hours]
Cyclohexane	Rat - Oral - LD50 6240 mg/kg
	Rabbit - Dermal - LD50 >5500 mg/kg
	Rat - Male, Female - Inhalation - LC50 Vapor >32880 mg/m <sup>3</sup> [4 hours]

**Conclusion/Summary [Product]** : Not available.

#### Skin corrosion/irritation

## Section 11. Toxicological information

Product/ingredient name	Result	
Propan-2-ol	Rabbit - Skin - Mild irritant	Amount/concentration applied: 500 mg
Dichloromethane	Rabbit - Skin - Moderate irritant	Duration of treatment/exposure: 24 hours Amount/concentration applied: 100 mg

**Conclusion/Summary [Product]** : Not available.

Ingredient name	Conclusion/Summary
Propan-2-ol	Repeated exposure may cause skin dryness or cracking.

### Serious eye damage/eye irritation

Product/ingredient name	Result	
Propan-2-ol	Rabbit - Eyes - Moderate irritant	Duration of treatment/exposure: 24 hours Amount/concentration applied: 100 mg
	Rabbit - Eyes - Moderate irritant	Amount/concentration applied: 10 mg
Acetonitrile	Rabbit - Eyes - Moderate irritant	Duration of treatment/exposure: 24 hours Amount/concentration applied: 100 uL
Dichloromethane	Rabbit - Eyes - Moderate irritant	Amount/concentration applied: 162 mg
Cyclohexane	Rabbit - Eyes - Severe irritant	Amount/concentration applied: 0.1 MI

**Conclusion/Summary [Product]** : Not available.

### Respiratory corrosion/irritation

**Conclusion/Summary [Product]** : Not available.

Ingredient name	Conclusion/Summary
Acetonitrile	May cause respiratory irritation.

### Respiratory corrosion/irritation

Not available.

**Conclusion/Summary [Product]** : Not available.

Ingredient name	Conclusion/Summary
acetonitrile	May cause respiratory irritation.

### Respiratory or skin sensitization

#### Skin

**Conclusion/Summary [Product]** : Not available.

#### Respiratory

## Section 11. Toxicological information

**Conclusion/Summary [Product]** : Not available.

### Germ cell mutagenicity

**Conclusion/Summary [Product]** : Not available.

### Carcinogenicity

**Conclusion/Summary [Product]** : Not available.

### Classification

Product/ingredient name	IARC	NTP	ACGIH
Propan-2-ol	3	-	A4
Acetonitrile	-	-	A4
Dichloromethane	2A	Reasonably anticipated to be a human carcinogen.	A3

### Reproductive toxicity

**Conclusion/Summary [Product]** : Not available.

### Specific target organ toxicity (single exposure)

Product/ingredient name	Result
Propan-2-ol	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
Dichloromethane	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
Cyclohexane	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3

### Specific target organ toxicity (repeated exposure)

Not available.

### Aspiration hazard

Product/ingredient name	Result
HPLC Flushing Solvent	ASPIRATION HAZARD - Category 1
Cyclohexane	ASPIRATION HAZARD - Category 1

**Information on the likely routes of exposure** : Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.

### Potential acute health effects

<b>Eye contact</b>	: Causes serious eye irritation.
<b>Inhalation</b>	: Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.
<b>Skin contact</b>	: Causes skin irritation.

## Section 11. Toxicological information

**Ingestion** : Harmful if swallowed. Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways.

### Symptoms related to the physical, chemical and toxicological characteristics

**Eye contact** : Adverse symptoms may include the following:  
pain or irritation  
watering  
redness

**Inhalation** : Adverse symptoms may include the following:  
nausea or vomiting  
headache  
drowsiness/fatigue  
dizziness/vertigo  
unconsciousness

**Skin contact** : Adverse symptoms may include the following:  
irritation  
redness

**Ingestion** : Adverse symptoms may include the following:  
nausea or vomiting

### Delayed and immediate effects and also chronic effects from short and long term exposure

#### Short term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

#### Long term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

### Potential chronic health effects

**Conclusion/Summary [Product]** : Not available.

**General** : No known significant effects or critical hazards.

**Carcinogenicity** : Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.

**Mutagenicity** : No known significant effects or critical hazards.

**Reproductive toxicity** : No known significant effects or critical hazards.

### Numerical measures of toxicity

#### Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
HPLC Flushing Solvent	1780.6	3958.1	N/A	47.0	N/A
Propan-2-ol	5000	12800	N/A	72.2	N/A
Acetonitrile	500	1100	N/A	11	N/A
Dichloromethane	N/A	N/A	N/A	76	N/A
Cyclohexane	6240	N/A	N/A	N/A	N/A

## Section 11. Toxicological information

**Other information** : Adverse symptoms may include the following: central nervous system depression, headache, nausea or vomiting, dizziness/vertigo, drowsiness/fatigue, carboxyhemoglobinemia

## Section 12. Ecological information

### Toxicity

Product/ingredient name	Result		
Propan-2-ol	Acute - LC50 - Marine water	1400 mg/l [48 hours]	Crustaceans - Common shrimp, sand shrimp - <i>Crangon crangon</i>
	Acute - LC50 - Fresh water	4200 mg/l [96 hours]	Fish - Harlequinfish, red rasbora - <i>Rasbora heteromorpha</i>
Acetonitrile	Acute - LC50 - Fresh water	3600 mg/l [48 hours]	Daphnia - Water flea - <i>Daphnia magna</i>
	Acute - IC50 - Fresh water	3685 mg/l [96 hours]	Aquatic plants - Duckweed - <i>Lemna minor</i>
	Chronic - NOEC - Fresh water	160 mg/l [21 days]	Daphnia - Water flea - <i>Daphnia magna</i>
	Chronic - NOEC - Fresh water	1000 mg/l [96 hours]	Aquatic plants - Duckweed - <i>Lemna minor</i>
Dichloromethane	Acute - LC50 - Fresh water	1000 mg/l [96 hours]	Fish - Fathead minnow - <i>Pimephales promelas</i>
	Acute - LC50 - Marine water	108.5 mg/l [48 hours]	Crustaceans - Daggerblade grass shrimp - <i>Palaemon pugio</i> - Juvenile (Fledgling, Hatchling, Weanling)
	Acute - EC50	242 mg/l [72 hours]	Algae - Green algae - <i>Chlamydomonas reinhardtii</i> - Exponential growth phase
	Acute - EC50 - Fresh water	99 mg/l [96 hours]	Fish - Fathead minnow - <i>Pimephales promelas</i> - Adult
Cyclohexane	Chronic - NOEC - Fresh water	56 mg/l [96 hours]	Algae - Green algae - <i>Raphidocelis subcapitata</i>
	Acute - LC50 - Fresh water	4530 µg/l [96 hours]	Fish - Fathead minnow - <i>Pimephales promelas</i>

**Conclusion/Summary [Product]** : Not available.

**Ingredient name**  
Dichloromethane

**Conclusion/Summary**  
Harmful to aquatic organisms.

### Persistence and degradability

Product/ingredient name	Result
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## Section 12. Ecological information

Acetonitrile	OECD [Ready Biodegradability - CO <sub>2</sub> in Sealed Vessels (Headspace Test)]	70% [21 days] - Readily	-
Dichloromethane	OECD [Ready Biodegradability - Closed Bottle Test]	>70% [28 days] - Readily	Aerobic

**Conclusion/Summary [Product]** : Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Propan-2-ol	-	-	Readily
Acetonitrile	-	-	Readily
Dichloromethane	-	-	Readily
Cyclohexane	-	-	Readily

### Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
Propan-2-ol	0.05	-	Low
Acetonitrile	-0.34	3	Low
Dichloromethane	1.25	22.91	Low
Cyclohexane	3.44	167	Low

### Mobility in soil

**Soil/Water partition coefficient** : Not available.

**Other adverse effects** : No known significant effects or critical hazards.

## Section 13. Disposal considerations

**Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## Section 14. Transport information

## Section 14. Transport information

	TDG Classification	IMDG	IATA
UN number	UN1992	UN1992	UN1992
UN proper shipping name	FLAMMABLE LIQUID, TOXIC, N.O.S. (Propan-2-ol, Acetonitrile)	FLAMMABLE LIQUID, TOXIC, N.O.S. (Propan-2-ol, Acetonitrile)	Flammable liquid, toxic, n.o.s. (Propan-2-ol, Acetonitrile)
Transport hazard class(es)	3 (6.1) 	3 (6.1) 	3 (6.1) 
Packing group	II	II	II
Environmental hazards	Yes.	Yes.	Yes. The environmentally hazardous substance mark is not required.

**Proof of classification statement** : Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.18-2.19 (Class 3), 2.26-2.36 (Class 6), 2.7 (Marine pollutant mark).

### Additional information

#### TDG Classification

: Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.18-2.19 (Class 3), 2.26-2.36 (Class 6), 2.7 (Marine pollutant mark).

The marine pollutant mark is not required when transported by road or rail.

**Explosive Limit and Limited Quantity Index 1**

**Passenger Carrying Road or Rail Index 1**

**Special provisions 16**

#### IMDG

: The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.

**Emergency schedules F-E, S-D**

**Special provisions 274**

#### IATA

: The environmentally hazardous substance mark may appear if required by other transportation regulations.

**Quantity limitation** Passenger and Cargo Aircraft: 1 L. Packaging instructions: 352.

Cargo Aircraft Only: 60 L. Packaging instructions: 364. Limited Quantities -

Passenger Aircraft: 1 L. Packaging instructions: Y341.

**Special provisions A3**

**Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

## Section 15. Regulatory information

### Canadian lists

#### Canadian NPRI

: The following components are listed: isopropyl alcohol; acetonitrile; dichloromethane; cyclohexane

#### CEPA Toxic substances

: The following components are listed: dichloromethane

### International regulations

#### Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

#### Montreal Protocol

Not listed.

## Section 15. Regulatory information

### Stockholm Convention on Persistent Organic Pollutants

Not listed.

### Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

### UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

### Inventory list

**Canada** : All components are listed or exempted.

**United States** : All components are active or exempted.

## Section 16. Other information

### History

**Date of issue/Date of revision** : 05/25/2026

**Date of previous issue** : 06/26/2025

**Version** : 14

**Key to abbreviations** :

- ATE = Acute Toxicity Estimate
- BCF = Bioconcentration Factor
- DOT = Department of Transportation
- GHS = Globally Harmonized System of Classification and Labelling of Chemicals
- HPR = Hazardous Products Regulations
- IATA = International Air Transport Association
- IBC = Intermediate Bulk Container
- IMDG = International Maritime Dangerous Goods
- IMO = International Maritime Organization
- LogPow = logarithm of the octanol/water partition coefficient
- MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
- N/A = Not available
- SGG = Segregation Group
- TDG = Transportation of Dangerous Goods
- UN = United Nations

### Procedure used to derive the classification

Classification	Justification
FLAMMABLE LIQUIDS - Category 2 ACUTE TOXICITY (oral) - Category 4 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A CARCINOGENICITY - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 ASPIRATION HAZARD - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 2	On basis of test data Calculation method Calculation method Calculation method Calculation method Calculation method Expert judgment Calculation method

 Indicates information that has changed from previously issued version.

### Notice to reader

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