

# SAFETY DATA SHEET



## HPLC Flushing Solvent

### Section 1. Identification

**GHS 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

**Methylene chloride**  
75-09-2

After February 3, 2025, this chemical substance (as defined in TSCA section 3(2))/product cannot be distributed in commerce to retailers. After January 28, 2026, this chemical substance (as defined in TSCA section 3(2))/product is and can only be distributed in commerce or processed with a concentration of methylene chloride equal to or greater than 0.1% by weight for the following purposes: (1) Processing as a reactant; (2) Processing for incorporation into a formulation, mixture, or reaction product; (3) Processing for repackaging; (4) Processing for recycling; (5) Industrial or commercial use as a laboratory chemical; (6) Industrial or commercial use as a bonding agent for solvent welding; (7) Industrial and commercial use as a paint and coating remover from safety critical, corrosion-sensitive components of aircraft and spacecraft; (8) Industrial and commercial use as a processing aid; (9) Industrial and commercial use for plastic and rubber products manufacturing; (10) Industrial and commercial use as a solvent that becomes part of a formulation or mixture, where that formulation or mixture will be used inside a manufacturing process, and the solvent (methylene chloride) will be reclaimed; (11) Industrial and commercial use in the refinishing for wooden furniture, decorative pieces, and architectural fixtures of artistic, cultural or historic value until May 8, 2029; (12) Industrial and commercial use in adhesives and sealants in aircraft, space vehicle, and turbine applications for structural and safety critical non-structural applications until May 8, 2029; (13) Disposal; and (14) Export.

**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. Hazards identification

**OSHA/HCS status** : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

#### 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

## Section 2. Hazards identification

### 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

#### 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.

### Other hazards

#### Hazards not otherwise classified

: None known.

#### Hazards identified when used

: No known significant effects or critical hazards.

## Section 3. Composition/information on ingredients

### Substance/mixture

: Mixture

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

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

## Section 3. Composition/information on ingredients

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.
- 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

## Section 4. First aid measures

**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 or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. 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".

## Section 6. Accidental release measures

**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>NIOSH REL (United States, 10/2020)</b>            TWA 10 hours: 400 ppm.            TWA 10 hours: 980 mg/m<sup>3</sup>.            STEL 15 minutes: 500 ppm.            STEL 15 minutes: 1225 mg/m<sup>3</sup>.</p> <p><b>CAL OSHA PEL (United States, 1/2025)</b>            STEL 15 minutes: 1225 mg/m<sup>3</sup>.            STEL 15 minutes: 500 ppm.            TWA 8 hours: 980 mg/m<sup>3</sup>.</p>

## Section 8. Exposure controls/personal protection

Acetonitrile

TWA 8 hours: 400 ppm.  
**OSHA PEL (United States, 5/2018)**  
 TWA 8 hours: 400 ppm.  
 TWA 8 hours: 980 mg/m<sup>3</sup>.  
**OSHA PEL 1989 (United States, 3/1989)**  
 TWA 8 hours: 400 ppm.  
 TWA 8 hours: 980 mg/m<sup>3</sup>.  
 STEL 15 minutes: 500 ppm.  
 STEL 15 minutes: 1225 mg/m<sup>3</sup>.  
**ACGIH TLV (United States, 1/2024) A4.**  
 TWA 8 hours: 200 ppm.  
 STEL 15 minutes: 400 ppm.

**NIOSH REL (United States, 10/2020)**

TWA 10 hours: 20 ppm.  
 TWA 10 hours: 34 mg/m<sup>3</sup>.

**CAL OSHA PEL (United States, 1/2025)**

Absorbed through skin.  
 STEL 15 minutes: 105 mg/m<sup>3</sup>.  
 STEL 15 minutes: 60 ppm.  
 TWA 8 hours: 70 mg/m<sup>3</sup>.  
 TWA 8 hours: 40 ppm.

**OSHA PEL (United States, 5/2018)**

TWA 8 hours: 40 ppm.  
 TWA 8 hours: 70 mg/m<sup>3</sup>.

**OSHA PEL 1989 (United States, 3/1989)**

TWA 8 hours: 40 ppm.  
 TWA 8 hours: 70 mg/m<sup>3</sup>.  
 STEL 15 minutes: 60 ppm.  
 STEL 15 minutes: 105 mg/m<sup>3</sup>.

**ACGIH TLV (United States, 1/2024) A4.**

Absorbed through skin.  
 TWA 8 hours: 20 ppm.

**NIOSH REL (United States, 10/2020) NIA.**

**OSHA PEL Z2 (United States, 2/2013)**

STEL 15 minutes: 125 ppm.  
 TWA 8 hours: 25 ppm.

**CAL OSHA PEL (United States, 1/2025)**

STEL 15 minutes: 435 mg/m<sup>3</sup>.  
 STEL 15 minutes: 125 ppm.  
 TWA 8 hours: 87 mg/m<sup>3</sup>.  
 TWA 8 hours: 25 ppm.

**OSHA PEL 1989 (United States, 3/1989)**

OCP.  
 STEL 15 minutes: 125 ppm.  
 TWA 8 hours: 25 ppm.

**ACGIH TLV (United States, 1/2024) A3.**

TWA 8 hours: 50 ppm.  
 TWA 8 hours: 174 mg/m<sup>3</sup>.

Dichloromethane

**NIOSH REL (United States, 10/2020)**

TWA 10 hours: 300 ppm.  
 TWA 10 hours: 1050 mg/m<sup>3</sup>.

**CAL OSHA PEL (United States, 1/2025)**

TWA 8 hours: 1050 mg/m<sup>3</sup>.  
 TWA 8 hours: 300 ppm.

**OSHA PEL (United States, 5/2018)**

TWA 8 hours: 300 ppm.  
 TWA 8 hours: 1050 mg/m<sup>3</sup>.

**OSHA PEL 1989 (United States, 3/1989)**

Cyclohexane

## Section 8. Exposure controls/personal protection

TWA 8 hours: 300 ppm.  
TWA 8 hours: 1050 mg/m<sup>3</sup>.  
**ACGIH TLV (United States, 1/2024)**  
TWA 8 hours: 100 ppm.

### Biological exposure indices

<b>Ingredient name</b>	<b>Exposure indices</b>
Propan-2-ol	<b>ACGIH BEI (United States, 1/2024)</b> BEI: 40 mg/l, acetone [in urine]. Sampling time: end of shift at end of workweek.
Dichloromethane	<b>ACGIH BEI (United States, 1/2024)</b> BEI: 0.3 mg/l [Semi-quantitative: The determinant is an indicator of exposure to the chemical, but the quantitative interpretation of the measurement is ambiguous. These determinants should be used as a screening test if a quantitative test is not practical or as a confirmatory test if the quantitative test is not specific and the origin of the determinant is in question.], dichloromethane [in urine]. Sampling time: end of shift.
Cyclohexane	<b>ACGIH BEI (United States, 1/2024)</b> BEI: 50 mg/g creatinine, 1,2-cyclohexanediol [in urine]. Sampling time: end of shift at end of workweek.

**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.

### 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.

## Section 8. Exposure controls/personal protection

- 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)
- Boiling point or 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** : Not applicable.
- Lower and upper explosion limit/flammability limit** : Lower: 2%  
Upper: 13%
- Vapor pressure** : 4.4 kPa (33 mm Hg)
- Relative vapor density** : 2.07 [Air = 1]
- Relative density** : Not available.
- Solubility(ies)** :
- | Media | Result  |
|-------|---------|
| 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

<b>Reactivity</b>	: No specific test data related to reactivity available for this product or its ingredients.
<b>Chemical stability</b>	: The product is stable.
<b>Possibility of hazardous reactions</b>	: Under normal conditions of storage and use, hazardous reactions will not occur.
<b>Conditions to avoid</b>	: 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.
<b>Incompatible materials</b>	: Reactive or incompatible with the following materials: oxidizing materials Reactive or incompatible with the following materials: reducing materials, metals, acids and alkalis.
<b>Hazardous decomposition products</b>	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

Product/ingredient name	Result
Propan-2-ol	Rabbit - Dermal - LD50 12800 mg/kg Rat - Oral - LD50 5000 mg/kg
Acetonitrile	Rat - Oral - LD50 2460 mg/kg Rat - Inhalation - LC50 Vapor 17100 ppm [4 hours]
Dichloromethane	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]
<b>Conclusion/Summary [Product]</b>	: Not available.

#### Skin corrosion/irritation

Product/ingredient name	Result
Propan-2-ol	Rabbit - Skin - Mild irritant -
Dichloromethane	Rabbit - Skin - Moderate irritant Duration of treatment/exposure: 24 hours
<b>Conclusion/Summary [Product]</b>	: Not available.

#### Ingredient name

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

#### Serious eye damage/eye irritation

#### Result

## Section 11. Toxicological information

Propan-2-ol	Rabbit - Eyes - Moderate irritant	Duration of treatment/ exposure: 24 hours
Acetonitrile	Rabbit - Eyes - Moderate irritant Rabbit - Eyes - Moderate irritant	- Duration of treatment/ exposure: 24 hours
Dichloromethane	Rabbit - Eyes - Moderate irritant	-
Cyclohexane	Rabbit - Eyes - Severe irritant	-

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

### Respiratory corrosion/irritation

**Product/ingredient name**

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

**Ingredient name**

Acetonitrile

**Conclusion/Summary**

May cause respiratory irritation.

### Respiratory or skin sensitization

**Skin**

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

**Respiratory**

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

### Germ cell mutagenicity

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

### Carcinogenicity

Not available.

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

#### Classification

Product/ingredient name	OSHA	IARC	NTP
Propan-2-ol	-	3	-
Dichloromethane	+	2A	Reasonably anticipated to be a human carcinogen.

### Reproductive toxicity

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

### Specific target organ toxicity (single exposure)

**Product/ingredient name**                      **Result**

## Section 11. Toxicological information

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.
<b>Ingestion</b>	: 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

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

## Section 11. Toxicological information

**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

**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] Acute - LC50 - Fresh water 4200 mg/l [96 hours]
Acetonitrile	Acute - LC50 - Fresh water 3600 mg/l [48 hours] Acute - IC50 - Fresh water 3685 mg/l [96 hours] Chronic - NOEC - Fresh water 160 mg/l [21 days] Chronic - NOEC - Fresh water 1000 mg/l [96 hours]
Dichloromethane	Acute - LC50 - Fresh water 1000 mg/l [96 hours] Acute - LC50 - Marine water 108.5 mg/l [48 hours] Acute - EC50 242 mg/l [72 hours] Acute - EC50 - Fresh water 99 mg/l [96 hours] Chronic - NOEC - Fresh water 56 mg/l [96 hours]
Cyclohexane	Acute - LC50 - Fresh water 4530 µg/l [96 hours]

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

Ingredient name	Conclusion/Summary
Dichloromethane	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.

### RCRA Toxic hazardous waste "U" List

Ingredient	CAS #	Status	Reference number
Acetonitrile (I,T)	75-05-8	Listed	U003
Methylene chloride	75-09-2	Listed	U080
Cyclohexane (I)	110-82-7	Listed	U056

## Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	IMDG	IATA
UN number	UN1993	UN1993	UN1993	UN1993	UN1993
UN proper shipping name	Flammable liquids, n.o.s. (Propan-2-ol, Acetonitrile)	FLAMMABLE LIQUID, N.O.S. (Propan-2-ol, Acetonitrile)	LÍQUIDO INFLAMABLE, N. E.P. (Propan-2-ol, Acetonitrile)	FLAMMABLE LIQUID, N.O.S. (Propan-2-ol, Acetonitrile)	Flammable liquid, n. o.s. (Propan-2-ol, Acetonitrile)
Transport hazard class(es)	3 	3  	3 	3  	3 
Packing group	II	II	II	II	II
Environmental hazards	No.	Yes.	Yes. The environmentally hazardous substance mark is not required.	Yes.	Yes. The environmentally hazardous substance mark is not required.

### Additional information

#### DOT Classification

- : **Reportable quantity** 6329.1 lbs / 2873.4 kg. Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements.
- Limited quantity** Yes.
- Packaging instruction** Exceptions: 150. Non-bulk: 202. Bulk: 242.
- Quantity limitation** Passenger aircraft/rail: 5 L. Cargo aircraft: 60 L.
- Special provisions** IB2, T7, TP1, TP8, TP28

#### TDG Classification

- : Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.18-2.19 (Class 3), 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** 5
- Special provisions** 16, 150

#### Mexico Classification

- : **Special provisions** 274

#### IMDG

- : The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.
- Emergency schedules** F-E, \_S-E\_
- Special provisions** 274

#### IATA

- : The environmentally hazardous substance mark may appear if required by other transportation regulations.
- Quantity limitation** Passenger and Cargo Aircraft: 5 L. Packaging instructions: 353. 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.

#### Transport in bulk according to IMO instruments

- : Not available.

## Section 15. Regulatory information

### Safety, health and environmental regulations/legislation specific for the substance or mixture

#### U.S. Federal regulations

#### : TSCA Section 3

After February 3, 2025, this chemical substance (as defined in TSCA section 3(2))/product cannot be distributed in commerce to retailers. After January 28, 2026, this chemical substance (as defined in TSCA section 3(2))/product is and can only be distributed in commerce or processed with a concentration of methylene chloride equal to or greater than 0.1% by weight for the following purposes: (1) Processing as a reactant; (2) Processing for incorporation into a formulation, mixture, or reaction product; (3) Processing for repackaging; (4) Processing for recycling; (5) Industrial or commercial use as a laboratory chemical; (6) Industrial or commercial use as a bonding agent for solvent welding; (7) Industrial and commercial use as a paint and coating remover from safety critical, corrosion sensitive components of aircraft and spacecraft; (8) Industrial and commercial use as a processing aid; (9) Industrial and commercial use for plastic and rubber products manufacturing; (10) Industrial and commercial use as a solvent that becomes part of a formulation or mixture, where that formulation or mixture will be used inside a manufacturing process, and the solvent (methylene chloride) will be reclaimed; (11) Industrial and commercial use in the refinishing for wooden furniture, decorative pieces, and architectural fixtures of artistic, cultural or historic value until May 8, 2029; (12) Industrial and commercial use in adhesives and sealants in aircraft, space vehicle, and turbine applications for structural and safety critical non-structural applications until May 8, 2029; (13) Disposal; and (14) Export.

#### TSCA 6 final risk management: Dichloromethane

**Methylene chloride** 75-09-2 After February 3, 2025, this chemical substance (as defined in TSCA section 3(2))/product cannot be distributed in commerce to retailers. After January 28, 2026, this chemical substance (as defined in TSCA section 3(2))/product is and can only be distributed in commerce or processed with a concentration of methylene chloride equal to or greater than 0.1% by weight for the following purposes: (1) Processing as a reactant; (2) Processing for incorporation into a formulation, mixture, or reaction product; (3) Processing for repackaging; (4) Processing for recycling; (5) Industrial or commercial use as a laboratory chemical; (6) Industrial or commercial use as a bonding agent for solvent welding; (7) Industrial and commercial use as a paint and coating remover from safety critical, corrosion-sensitive components of aircraft and spacecraft; (8) Industrial and commercial use as a processing aid; (9) Industrial and commercial use for plastic and rubber products manufacturing; (10) Industrial and commercial use as a solvent that becomes part of a formulation or mixture, where that formulation or mixture will be used inside a manufacturing process, and the solvent (methylene chloride) will be reclaimed; (11) Industrial and commercial use in the refinishing for wooden furniture, decorative pieces, and architectural fixtures of artistic, cultural or historic value until May 8, 2029; (12) Industrial and commercial use in adhesives and sealants in aircraft, space vehicle, and turbine applications for structural and safety critical non-structural applications until May 8, 2029; (13) Disposal; and (14) Export.

**Clean Water Act (CWA) 307:** Acetonitrile; Dichloromethane

**Clean Water Act (CWA) 311:** Cyclohexane

#### TSCA 12(b) - Chemical export notification

Name	One time notification		Annual notification		
	4	5	5(f)	6	7
Methylene chloride	Not listed	Not listed	Not listed	Listed	Not listed

## Section 15. Regulatory information

**Clean Air Act Section 112** : Listed

**(b) Hazardous Air Pollutants (HAPs)**

**Clean Air Act Section 602 Class I Substances** : Not listed

**Clean Air Act Section 602 Class II Substances** : Not listed

**DEA List I Chemicals (Precursor Chemicals)** : Not listed

**DEA List II Chemicals (Essential Chemicals)** : Not listed

**SARA 302/304**

Composition/information on ingredients

No products were found.

**SARA 304 RQ** : Not applicable.

**SARA 311/312**

**Classification** : 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

Composition/information on ingredients

Name	%	Classification
Propan-2-ol	≥30 - ≤60	FLAMMABLE LIQUIDS - Category 2 EYE IRRITATION - Category 2A SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 HNOC - Defatting irritant
Acetonitrile	≥10 - ≤30	FLAMMABLE LIQUIDS - Category 2 ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (dermal) - Category 4 ACUTE TOXICITY (inhalation) - Category 4 EYE IRRITATION - Category 2A SKIN IRRITATION - Category 2
Dichloromethane	≥10 - ≤30	EYE IRRITATION - Category 2A SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A CARCINOGENICITY - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
Cyclohexane	≥10 - ≤30	FLAMMABLE LIQUIDS - Category 2 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 ASPIRATION HAZARD - Category 1 HNOC - Static-accumulating flammable liquid

**SARA 313**

## Section 15. Regulatory information

	Product name	CAS number	%
Form R - Reporting requirements	Acetonitrile	75-05-8	≥10 - ≤30
	Dichloromethane	75-09-2	≥10 - ≤30
	Cyclohexane	110-82-7	≥10 - ≤30
Supplier notification	Acetonitrile	75-05-8	≥10 - ≤30
	Dichloromethane	75-09-2	≥10 - ≤30
	Cyclohexane	110-82-7	≥10 - ≤30

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

### State regulations

- Massachusetts** : The following components are listed: ISOPROPYL ALCOHOL; ACETONITRILE; METHYLENE CHLORIDE; CYCLOHEXANE
- New York** : The following components are listed: Acetonitrile; Dichloromethane; Cyclohexane
- New Jersey** : The following components are listed: ISOPROPYL ALCOHOL; ACETONITRILE; METHYLENE CHLORIDE; CYCLOHEXANE
- Pennsylvania** : The following components are listed: 2-PROPANOL; ACETONITRILE; METHANE, DICHLORO-; CYCLOHEXANE

### California Prop. 65

**⚠ WARNING:** This product can expose you to dichloromethane, which is known to the State of California to cause cancer. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

Ingredient name	No significant risk level	Maximum acceptable dosage level
Dichloromethane	Yes.	-

### International regulations

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

Not listed.

#### Montreal Protocol

Not listed.

#### 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

- Australia** : All components are listed or exempted.
- Canada** : All components are listed or exempted.
- China** : All components are listed or exempted.
- Japan** : **Japan inventory (CSCL):** All components are listed or exempted.  
**Japan inventory (ISHL):** Not determined.
- New Zealand** : All components are listed or exempted.
- Philippines** : All components are listed or exempted.
- Republic of Korea** : All components are listed or exempted.
- Taiwan** : All components are listed or exempted.

## Section 15. Regulatory information

<b>Thailand</b>	: All components are listed or exempted.
<b>Turkey</b>	: All components are listed or exempted.
<b>United States</b>	: All components are active or exempted.
<b>Viet Nam</b>	: All components are listed or exempted.

## Section 16. Other information

### Procedure used to derive the classification

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

### History

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**Version** : 13

### Key to abbreviations

: ATE = Acute Toxicity Estimate  
 BCF = Bioconcentration Factor  
 DOT = Department of Transportation  
 GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
 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

📌 Indicates information that has changed from previously issued version.

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