

Safety Data Sheet

acc. to OSHA HCS

Revision date: 05/01/2025

1 Identification

· Product identifier

· **Product Name:** Haloalkanes Standard (1X1 mL)

· **Part no. :** DWM-540-1

· Restrictions

After June 16, 2025, this chemical substance (as defined in TSCA section 3(2)) may not be distributed in commerce or processed in greater than trace quantities for the following purposes: Incorporation into formulation, mixture or reaction products in petrochemical-derived manufacturing except in the manufacture of vinyl chloride; Industrial and commercial use as an industrial processing aid in the manufacture of petrochemicals-derived products except in the manufacture of vinyl chloride; Industrial and commercial use in the manufacture of other basic chemicals (including manufacturing of chlorinated compounds used in solvents, adhesives, asphalt, and paints and coatings), except for use in the elimination of nitrogen trichloride in the production of chlorine and caustic soda and the recovery of chlorine in tail gas from the production of chlorine; Industrial and commercial use in metal recovery; Industrial and commercial use as an additive; and beginning December 18, 2025, industrial and commercial specialty uses by the U.S. Department of Defense.

· **Application of the substance / the mixture** Reagents and Standards for Analytical Chemical Laboratory Use

· Details of the supplier of the safety data sheet

· **Manufacturer/Supplier:**

Agilent Technologies, Inc.
5301 Stevens Creek Blvd.
Santa Clara, CA 95051 USA

· **Information department:**

Telephone: 800-227-9770
e-mail: pdl-msds_author@agilent.com

· **Emergency telephone number:** CHEMTREC®: 1-800-424-9300

2 Hazard(s) identification

· Classification of the substance or mixture



GHS02 Flame

Flammable Liquids 2

H225 Highly flammable liquid and vapor.



GHS06 Skull and crossbones

Acute Toxicity - Inhalation 3

H331 Toxic if inhaled.



GHS08 Health hazard

Specific Target Organ Toxicity - Single Exposure 1 H370 Causes damage to the central nervous system and the visual organs.

· Label elements

· **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

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· Hazard pictograms


GHS02 GHS06 GHS08

· Signal word Danger
· Hazard-determining components of labeling:

methanol

· Hazard statements

H225 Highly flammable liquid and vapor.

H331 Toxic if inhaled.

H370 Causes damage to the central nervous system and the visual organs.

· Precautionary statements

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P260 Do not breathe vapours.

P241 Use explosion-proof electrical/ventilating/lighting/equipment.

P280 Wear protective gloves / protective clothing.

P240 Ground/bond container and receiving equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

P264 Wash thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P271 Use only outdoors or in a well-ventilated area.

P307+P311 IF exposed: Call a POISON CENTER or doctor/physician.

P321 Specific treatment (see on this label).

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P370+P378 In case of fire: Use CO2, powder or water spray to extinguish.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P403+P235 Store in a well-ventilated place. Keep cool.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· Classification system:
· NFPA ratings (scale 0 - 4)


Health = 1

Fire = 3

Reactivity = 0

· HMIS-ratings (scale 0 - 4)


Health = *1

Fire = 3

Reactivity = 0

· Other hazards
· Results of PBT and vPvB assessment
· PBT: Not applicable.

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· **vPvB:** Not applicable.

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3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
- **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:**

67-56-1	methanol	99.1145%
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4 First-aid measures

- **Description of first aid measures**
- **General information:**
Immediately remove any clothing soiled by the product.
Remove breathing apparatus only after contaminated clothing have been completely removed.
In case of irregular breathing or respiratory arrest provide artificial respiration.
- **After inhalation:**
Supply fresh air or oxygen; call for doctor.
In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:** If symptoms persist consult doctor.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **Special hazards arising from the substance or mixture**
During heating or in case of fire poisonous gases are produced.
- **Advice for firefighters**
- **Protective equipment:** Mouth respiratory protective device.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Mount respiratory protective device.
Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to section 13.
Ensure adequate ventilation.

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· Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

· Protective Action Criteria for Chemicals
· PAC-1:

67-56-1	methanol	530 ppm
56-23-5	carbon tetrachloride	1.2 ppm
67-66-3	trichloromethane	2 ppm
71-55-6	1,1,1-trichloroethane	230 ppm
74-83-9	bromomethane	19 ppm
74-87-3	chloromethane	150 ppm
74-95-3	dibromomethane	3 ppm
74-97-5	bromochloromethane	600 ppm
75-00-3	chloroethane	300 ppm
75-01-4	vinyl chloride	250 ppm
75-09-2	dichloromethane	200 ppm
75-25-2	bromoform	1.5 ppm
75-27-4	bromodichloromethane	1.3 mg/m ³
75-34-3	1,1-dichloroethane	300 ppm
75-35-4	1,1-dichloroethylene	45 ppm
75-69-4	trichlorofluoromethane	91 ppm
75-71-8	dichlorodifluoromethane	3,000 ppm
78-87-5	1,2-dichloropropane	30 ppm
79-00-5	1,1,2-trichloroethane	30 ppm
79-01-6	trichloroethylene	130 ppm
79-34-5	1,1,2,2-tetrachloroethane	3 ppm
87-68-3	hexachlorobuta-1,3-diene	1 ppm
96-12-8	1,2-dibromo-3-chloropropane	0.003 ppm
96-18-4	1,2,3-trichloropropane	0.015 ppm
106-93-4	1,2-dibromoethane	17 ppm
107-06-2	1,2-dichloroethane	50 ppm
124-48-1	dibromochloromethane	1.1 mg/m ³
127-18-4	tetrachloroethylene	35 ppm
142-28-9	1,3-dichloropropane	5.4 ppm
156-59-2	cis-dichloroethylene	140 ppm

· PAC-2:

67-56-1	methanol	2,100 ppm
56-23-5	carbon tetrachloride	13 ppm
67-66-3	trichloromethane	64 ppm
71-55-6	1,1,1-trichloroethane	600 ppm
74-83-9	bromomethane	210 ppm

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74-87-3	chloromethane	910 ppm
74-95-3	dibromomethane	230 mg/m ³
74-97-5	bromochloromethane	830 ppm
75-00-3	chloroethane	5100* ppm
75-01-4	vinyl chloride	1,200 ppm
75-09-2	dichloromethane	560 ppm
75-25-2	bromoform	6.8 ppm
75-27-4	bromodichloromethane	14 mg/m ³
75-34-3	1,1-dichloroethane	670 ppm
75-35-4	1,1-dichloroethylene	500 ppm
75-69-4	trichlorofluoromethane	1,000 ppm
75-71-8	dichlorodifluoromethane	10,000 ppm
78-87-5	1,2-dichloropropane	220 ppm
79-00-5	1,1,2-trichloroethane	180 ppm
79-01-6	trichloroethylene	450 ppm
79-34-5	1,1,2,2-tetrachloroethane	120 ppm
87-68-3	hexachlorobuta-1,3-diene	3 ppm
96-12-8	1,2-dibromo-3-chloropropane	2.2 ppm
96-18-4	1,2,3-trichloropropane	170 ppm
106-93-4	1,2-dibromoethane	24 ppm
107-06-2	1,2-dichloroethane	200 ppm
124-48-1	dibromochloromethane	12 mg/m ³
127-18-4	tetrachloroethylene	230 ppm
142-28-9	1,3-dichloropropane	270 mg/m ³
156-59-2	cis-dichloroethylene	500 ppm

PAC-3:

67-56-1	methanol	7200* ppm
56-23-5	carbon tetrachloride	340 ppm
67-66-3	trichloromethane	3,200 ppm
71-55-6	1,1,1-trichloroethane	4,200 ppm
74-83-9	bromomethane	740 ppm
74-87-3	chloromethane	3,000 ppm
74-95-3	dibromomethane	1400 mg/m ³
74-97-5	bromochloromethane	5,000 ppm
75-00-3	chloroethane	20000** ppm
75-01-4	vinyl chloride	4800* ppm
75-09-2	dichloromethane	6,900 ppm
75-25-2	bromoform	41 ppm
75-27-4	bromodichloromethane	85 mg/m ³
75-34-3	1,1-dichloroethane	4,000 ppm
75-35-4	1,1-dichloroethylene	1,000 ppm

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75-69-4	trichlorofluoromethane	10,000 ppm
75-71-8	dichlorodifluoromethane	50,000 ppm
78-87-5	1,2-dichloropropane	2,000 ppm
79-00-5	1,1,2-trichloroethane	500 ppm
79-01-6	trichloroethylene	3,800 ppm
79-34-5	1,1,2,2-tetrachloroethane	150 ppm
87-68-3	hexachlorobuta-1,3-diene	10 ppm
96-12-8	1,2-dibromo-3-chloropropane	4.3 ppm
96-18-4	1,2,3-trichloropropane	1,000 ppm
106-93-4	1,2-dibromoethane	46 ppm
107-06-2	1,2-dichloroethane	300 ppm
124-48-1	dibromochloromethane	73 mg/m ³
127-18-4	tetrachloroethylene	1,200 ppm
142-28-9	1,3-dichloropropane	1600 mg/m ³
156-59-2	cis-dichloroethylene	850 ppm

7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.
Prevent formation of aerosols.
- **Information about protection against explosions and fires:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
Keep respiratory protective device available.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store in a cool location.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
Keep receptacle tightly sealed.
Store in cool, dry conditions in well sealed receptacles.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see section 7.

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· Control parameters
· Components with limit values that require monitoring at the workplace:
67-56-1 methanol

PEL	Long-term value: 260 mg/m ³ , 200 ppm
REL	Short-term value: 325 mg/m ³ , 250 ppm Long-term value: 260 mg/m ³ , 200 ppm Skin
TLV	Short-term value: 250 ppm Long-term value: 200 ppm Skin; BEIc

· Ingredients with biological limit values:
67-56-1 methanol

BEI	15 mg/L Medium: urine Time: end of shift Parameter: Methanol (background, nonspecific)
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· Additional information: The lists that were valid during the creation were used as basis.

· Exposure controls
· Personal protective equipment:
· General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Store protective clothing separately.
Do not inhale gases / fumes / aerosols.

· Breathing equipment:

When used as intended with Agilent instruments, the use of the product under normal laboratory conditions and with standard practices does not result in significant airborne exposures and therefore respiratory protection is not needed.

Under an emergency condition where a respirator is deemed necessary, use a NIOSH or equivalent approved device/equipment with appropriate organic or acid gas cartridge.

· Protection of hands:

Although not recommended for constant contact with the chemicals or for clean-up, nitrile gloves 11-13 mil thickness are recommended for normal use. The breakthrough time is 1 hr. For cleaning a spill where there is direct contact of the chemical, butyl rubber gloves are recommended 12-15 mil thickness with breakthrough times exceeding 4 hrs. Supplier recommendations should be followed.

· Material of gloves

For normal use: nitrile rubber, 11-13 mil thickness
For direct contact with the chemical: butyl rubber, 12-15 mil thickness

· Penetration time of glove material

For normal use: nitrile rubber: 1 hour
For direct contact with the chemical: butyl rubber: >4 hours

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· Eye protection:



Tightly sealed goggles

9 Physical and chemical properties

· Information on basic physical and chemical properties

· General Information

· Appearance:

Form:	Fluid
Color:	Colorless
Odor:	Alcohol-like
Odor threshold:	Not determined.

· pH-value: Not determined.

· Change in condition

Melting point/Melting range:	-98 °C (-144.4 °F)
Boiling point/Boiling range:	64 °C (147.2 °F)

· Flash point: 9 °C (48.2 °F)

· Flammability (solid, gaseous): Highly flammable.

· Auto igniting: 455 °C (851 °F)

· Decomposition temperature: Not determined.

· Ignition temperature: Product is not selfigniting.

· Danger of explosion: Product is not explosive. However, formation of explosive air/vapor mixtures are possible.

· Explosion limits:

Lower:	5.5 Vol %
Upper:	44 Vol %

· Vapor pressure at 20 °C (68 °F): 100 hPa (75 mm Hg)

· Density at 20 °C (68 °F): 0.8 g/cm³ (6.676 lbs/gal)

· Relative density: Not determined.

· Vapor density: Not determined.

· Evaporation rate: Not determined.

· Solubility in / Miscibility with

Water: Not miscible or difficult to mix.

· Partition coefficient (n-octanol/water): Not determined.

· Viscosity:

Dynamic:	Not determined.
Kinematic:	Not determined.

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· **Solvent content:**
Organic solvents: 99.5 %
VOC content: 99.37 %
993.7 g/l / 8.29 lb/gal

· **Other information** No further relevant information available.

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

· **Information on toxicological effects**

· **Acute toxicity:**

· **LD/LC50 values that are relevant for classification:**
ATE (Acute Toxicity Estimate)

Inhalative	LC50/4 h	3.03 mg/L
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67-56-1 methanol

Oral	LD50	5,628 mg/kg (rat)
Dermal	LD50	15,800 mg/kg (rabbit)

· **Primary irritant effect:**

· **on the skin:** No irritant effect.
· **on the eye:** No irritating effect.
· **Sensitization:** No sensitizing effects known.
· **Additional toxicological information:**

The product shows the following dangers according to internally approved calculation methods for preparations:
Toxic

· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**

56-23-5	carbon tetrachloride	2B
67-66-3	trichloromethane	2B
71-55-6	1,1,1-trichloroethane	2A
74-83-9	bromomethane	3
74-87-3	chloromethane	3
75-00-3	chloroethane	3
75-01-4	vinyl chloride	1
75-09-2	dichloromethane	2A

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75-25-2	bromoform	3
75-27-4	bromodichloromethane	2B
75-35-4	1,1-dichloroethylene	2B
78-87-5	1,2-dichloropropane	1
79-00-5	1,1,2-trichloroethane	3
79-01-6	trichloroethylene	1
79-34-5	1,1,2,2-tetrachloroethane	2B
87-68-3	hexachlorobuta-1,3-diene	3
96-12-8	1,2-dibromo-3-chloropropane	2B
96-18-4	1,2,3-trichloropropane	2A
106-93-4	1,2-dibromoethane	2A
107-06-2	1,2-dichloroethane	2B
124-48-1	dibromochloromethane	3
127-18-4	tetrachloroethylene	2A
630-20-6	1,1,1,2-tetrachloroethane	2B

· NTP (National Toxicology Program)

56-23-5	carbon tetrachloride	R
67-66-3	trichloromethane	R
75-01-4	vinyl chloride	K
75-09-2	dichloromethane	R
75-27-4	bromodichloromethane	R
79-01-6	trichloroethylene	K
96-12-8	1,2-dibromo-3-chloropropane	R
96-18-4	1,2,3-trichloropropane	R
106-93-4	1,2-dibromoethane	R
107-06-2	1,2-dichloroethane	R
127-18-4	tetrachloroethylene	R

· OSHA-Ca (Occupational Safety & Health Administration)

75-01-4	vinyl chloride
75-09-2	dichloromethane
96-12-8	1,2-dibromo-3-chloropropane

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
- Water hazard class 3 (Self-assessment): extremely hazardous for water

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Do not allow product to reach ground water, water course or sewage system, even in small quantities.
Danger to drinking water if even extremely small quantities leak into the ground.

Results of PBT and vPvB assessment

- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- **Not Regulated, De minimis Quantities** -
- **UN-Number**
· **DOT, IMDG, IATA** UN1230
- **UN proper shipping name**
· **DOT** Methanol solution
· **IMDG, IATA** METHANOL solution
- **Transport hazard class(es)**
· **DOT**

- **Class** 3 Flammable liquids
· **Label** 3, 6.1
- **IMDG**

- **Class** 3 Flammable liquids
· **Label** 3/6.1
- **IATA**

- **Class** 3 Flammable liquids

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· Label	3 (6.1)
· Packing group	
· DOT, IMDG, IATA	II
· Environmental hazards:	Not applicable.
· Special precautions for user	Warning: Flammable liquids
· Hazard identification number (Kemler code):	336
· EMS Number:	F-E,S-D
· Stowage Category	B
· Stowage Code	SW2 Clear of living quarters.
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	
· DOT	
· Quantity limitations	On passenger aircraft/rail: 1 L On cargo aircraft only: 60 L
· IMDG	
· Limited quantities (LQ)	1L
· Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· UN "Model Regulation":	UN 1230 METHANOL SOLUTION, 3 (6.1), II

15 Regulatory information

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

· Section 355 (extremely hazardous substances):	
67-66-3	trichloromethane
74-83-9	bromomethane
75-34-3	1,1-dichloroethane
· Section 313 (Specific toxic chemical listings):	
67-56-1	methanol
56-23-5	carbon tetrachloride
67-66-3	trichloromethane
71-55-6	1,1,1-trichloroethane
74-83-9	bromomethane
74-87-3	chloromethane
74-95-3	dibromomethane
75-00-3	chloroethane
75-01-4	vinyl chloride
75-09-2	dichloromethane
75-25-2	bromoform

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75-27-4	bromodichloromethane
75-34-3	1,1-dichloroethane
75-35-4	1,1-dichloroethylene
75-69-4	trichlorofluoromethane
75-71-8	dichlorodifluoromethane
78-87-5	1,2-dichloropropane
79-00-5	1,1,2-trichloroethane
79-01-6	trichloroethylene
79-34-5	1,1,2,2-tetrachloroethane
87-68-3	hexachlorobuta-1,3-diene
96-12-8	1,2-dibromo-3-chloropropane
96-18-4	1,2,3-trichloropropane
106-93-4	1,2-dibromoethane
107-06-2	1,2-dichloroethane
127-18-4	tetrachloroethylene
630-20-6	1,1,1,2-tetrachloroethane
10061-02-6	trans-1,3-dichloropropene

· **TSCA (Toxic Substances Control Act):**

After June 16, 2025, this chemical substance (as defined in TSCA section 3(2)) may not be distributed in commerce or processed in greater than trace quantities for the following purposes: Incorporation into formulation, mixture or reaction products in petrochemical-derived manufacturing except in the manufacture of vinyl chloride; Industrial and commercial use as an industrial processing aid in the manufacture of petrochemicals-derived products except in the manufacture of vinyl chloride; Industrial and commercial use in the manufacture of other basic chemicals (including manufacturing of chlorinated compounds used in solvents, adhesives, asphalt, and paints and coatings), except for use in the elimination of nitrogen trichloride in the production of chlorine and caustic soda and the recovery of chlorine in tail gas from the production of chlorine; Industrial and commercial use in metal recovery; Industrial and commercial use as an additive; and beginning December 18, 2025, industrial and commercial specialty uses by the U.S. Department of Defense.

67-56-1	methanol	ACTIVE
56-23-5	carbon tetrachloride	ACTIVE
67-66-3	trichloromethane	ACTIVE
71-55-6	1,1,1-trichloroethane	ACTIVE
74-83-9	bromomethane	ACTIVE
74-87-3	chloromethane	ACTIVE
74-95-3	dibromomethane	ACTIVE
74-97-5	bromochloromethane	ACTIVE
75-00-3	chloroethane	ACTIVE
75-01-4	vinyl chloride	ACTIVE
75-09-2	dichloromethane	ACTIVE
75-25-2	bromoform	ACTIVE
75-27-4	bromodichloromethane	ACTIVE
75-34-3	1,1-dichloroethane	ACTIVE
75-35-4	1,1-dichloroethylene	ACTIVE

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75-69-4	trichlorofluoromethane	ACTIVE
75-71-8	dichlorodifluoromethane	ACTIVE
78-87-5	1,2-dichloropropane	ACTIVE
79-00-5	1,1,2-trichloroethane	ACTIVE
79-01-6	trichloroethylene	ACTIVE
79-34-5	1,1,2,2-tetrachloroethane	ACTIVE
87-68-3	hexachlorobuta-1,3-diene	ACTIVE
96-12-8	1,2-dibromo-3-chloropropane	ACTIVE
96-18-4	1,2,3-trichloropropane	ACTIVE
106-93-4	1,2-dibromoethane	ACTIVE
107-06-2	1,2-dichloroethane	ACTIVE
124-48-1	dibromochloromethane	ACTIVE
127-18-4	tetrachloroethylene	ACTIVE
142-28-9	1,3-dichloropropane	ACTIVE
156-59-2	cis-dichloroethylene	ACTIVE

· Hazardous Air Pollutants

67-56-1	methanol
56-23-5	carbon tetrachloride
67-66-3	trichloromethane
71-55-6	1,1,1-trichloroethane
74-83-9	bromomethane
74-87-3	chloromethane
75-00-3	chloroethane
75-01-4	vinyl chloride
75-09-2	dichloromethane
75-25-2	bromoform
75-34-3	1,1-dichloroethane
75-35-4	1,1-dichloroethylene
78-87-5	1,2-dichloropropane
79-00-5	1,1,2-trichloroethane
79-01-6	trichloroethylene
79-34-5	1,1,2,2-tetrachloroethane
87-68-3	hexachlorobuta-1,3-diene
96-12-8	1,2-dibromo-3-chloropropane
106-93-4	1,2-dibromoethane
107-06-2	1,2-dichloroethane
127-18-4	tetrachloroethylene

· Proposition 65
· Chemicals known to cause cancer:

56-23-5	carbon tetrachloride
67-66-3	trichloromethane

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71-55-6	1,1,1-trichloroethane
75-00-3	chloroethane
75-01-4	vinyl chloride
75-09-2	dichloromethane
75-25-2	bromoform
75-27-4	bromodichloromethane
75-34-3	1,1-dichloroethane
75-35-4	1,1-dichloroethylene
78-87-5	1,2-dichloropropane
79-00-5	1,1,2-trichloroethane
79-01-6	trichloroethylene
79-34-5	1,1,2,2-tetrachloroethane
87-68-3	hexachlorobuta-1,3-diene
96-12-8	1,2-dibromo-3-chloropropane
96-18-4	1,2,3-trichloropropane
106-93-4	1,2-dibromoethane
107-06-2	1,2-dichloroethane
127-18-4	tetrachloroethylene
630-20-6	1,1,1,2-tetrachloroethane

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:

74-87-3	chloromethane
79-01-6	trichloroethylene
96-12-8	1,2-dibromo-3-chloropropane
106-93-4	1,2-dibromoethane

· Chemicals known to cause developmental toxicity:

67-56-1	methanol
67-66-3	trichloromethane
74-83-9	bromomethane
74-87-3	chloromethane
79-01-6	trichloroethylene
106-93-4	1,2-dibromoethane

· Carcinogenic categories
· EPA (Environmental Protection Agency)

56-23-5	carbon tetrachloride	L
67-66-3	trichloromethane	B2, L, NL
71-55-6	1,1,1-trichloroethane	II
74-83-9	bromomethane	D
74-87-3	chloromethane	D, CBD
74-97-5	bromochloromethane	D

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75-01-4	vinyl chloride	A, K/L
75-09-2	dichloromethane	L
75-25-2	bromoform	B2
75-27-4	bromodichloromethane	B2
75-34-3	1,1-dichloroethane	C
75-35-4	1,1-dichloroethylene	C, S (inh.), I (oral)
79-00-5	1,1,2-trichloroethane	C
79-01-6	trichloroethylene	CaH
79-34-5	1,1,2,2-tetrachloroethane	L
87-68-3	hexachlorobuta-1,3-diene	C
96-18-4	1,2,3-trichloropropane	L
106-93-4	1,2-dibromoethane	L
107-06-2	1,2-dichloroethane	B2
124-48-1	dibromochloromethane	C
127-18-4	tetrachloroethylene	L
156-59-2	cis-dichloroethylene	II
156-60-5	trans-dichloroethylene	II
630-20-6	1,1,1,2-tetrachloroethane	C

· TLV (Threshold Limit Value)

56-23-5	carbon tetrachloride	A2
67-66-3	trichloromethane	A3
71-55-6	1,1,1-trichloroethane	A4
74-83-9	bromomethane	A4
74-87-3	chloromethane	A4
75-00-3	chloroethane	A3
75-01-4	vinyl chloride	A1
75-09-2	dichloromethane	A3
75-25-2	bromoform	A3
75-34-3	1,1-dichloroethane	A4
75-35-4	1,1-dichloroethylene	A4
75-69-4	trichlorofluoromethane	A4
75-71-8	dichlorodifluoromethane	A4
78-87-5	1,2-dichloropropane	A4
79-00-5	1,1,2-trichloroethane	A3
79-01-6	trichloroethylene	A2
79-34-5	1,1,2,2-tetrachloroethane	A3
87-68-3	hexachlorobuta-1,3-diene	A3
96-18-4	1,2,3-trichloropropane	A3
106-93-4	1,2-dibromoethane	A3
107-06-2	1,2-dichloroethane	A4
127-18-4	tetrachloroethylene	A3

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· NIOSH-Ca (National Institute for Occupational Safety and Health)	
56-23-5	carbon tetrachloride
67-66-3	trichloromethane
74-83-9	bromomethane
74-87-3	chloromethane
75-01-4	vinyl chloride
75-09-2	dichloromethane
75-35-4	1,1-dichloroethylene
78-87-5	1,2-dichloropropane
79-00-5	1,1,2-trichloroethane
79-01-6	trichloroethylene
79-34-5	1,1,2,2-tetrachloroethane
87-68-3	hexachlorobuta-1,3-diene
96-12-8	1,2-dibromo-3-chloropropane
96-18-4	1,2,3-trichloropropane
106-93-4	1,2-dibromoethane
107-06-2	1,2-dichloroethane
127-18-4	tetrachloroethylene

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

The information contained in this document is based on Agilent's state of knowledge at the time of preparation. No warranty as to its accurateness, completeness or suitability for a particular purpose is expressed or implied.

· **Department issuing SDS:** Document Control / Regulatory

· **Contact:** pdl-acg-regulatory-cq@agilent.com

· **Date of preparation / last revision** 05/01/2025 / 4

· **Abbreviations and acronyms:**

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

BEI: Biological Exposure Limit

Flammable Liquids 2: Flammable liquids – Category 2

Acute Toxicity - Inhalation 3: Acute toxicity – Category 3

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Specific Target Organ Toxicity - Single Exposure 1: Specific target organ toxicity (single exposure) – Category 1

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· *** Data compared to the previous version altered.**

US