


**Product name:** InfinityLab LC Installation Standard Kit  
**Part no.:** 5191-4548

This product is composed of the following:

### Kit Components, Reagents


Box/Module Part number	Box/Module Name	Kit Component Part Number	Kit Component Name	Qty Units	HPR
	-	5191-4547-1	InfinityLab LC Performance Checkout Std	1	Yes
-	-	5191-4549-1	LCMS Grade Formic Acid	1	Yes

Article SDSs, if maintained, are available on [www.agilent.com](http://www.agilent.com). We recommend using the article product code when searching. SDSs are only available for a limited set of countries.

### Transport Information for the Kit:

**Dangerous Goods classification for:** 5191-4548

TDG	IMDG	IATA
 UN3316, CHEMICAL KIT, 9, II	 UN3316, CHEMICAL KIT, 9, II	 UN3316, Chemical kit, 9, II

 De minimis quantities

### Table of contents

Kit Component Name	Page
LCMS Grade Formic Acid.....	2
InfinityLab LC Performance Checkout Std.....	14

SDSs for each individual Kit component follow this cover sheet.

# SAFETY DATA SHEET

LCMS Grade Formic Acid

## Section 1. Identification

**Product identifier** : LCMS Grade Formic Acid

**Chemical name** : Formic acid

**Part no.** : 5191-4549-1

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

**Identified uses** : Reagents and Standards for Analytical Chemistry Laboratory Use  
2 x 1 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**

H226	FLAMMABLE LIQUIDS - Category 3
H302	ACUTE TOXICITY (oral) - Category 4
H331	ACUTE TOXICITY (inhalation) - Category 3
H314	SKIN CORROSION - Category 1A
H318	SERIOUS EYE DAMAGE - Category 1
	Health Hazards Not Otherwise Classified - Category 1

**GHS label elements**

**Hazard pictograms**



**Signal word** : Danger

**Hazard statements** : H226 - Flammable liquid and vapor.  
H302 - Harmful if swallowed.  
H314 - Causes severe skin burns and eye damage.  
H331 - Toxic if inhaled.  
Causes severe respiratory tract burns.  
Causes severe digestive tract burns.

**Precautionary statements**

**Prevention** : 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.  
P261 - Avoid breathing vapor.  
P270 - Do not eat, drink or smoke when using this product.  
P264 - Wash thoroughly after handling.

## Section 2. Hazard identification

- Response** : P304 + P340, P310 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor.  
 P301 + P310, P330, P331 - IF SWALLOWED: Immediately call a POISON CENTER or doctor. Rinse mouth. Do NOT induce vomiting.  
 P303 + P361 + P353, P310 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Immediately call a POISON CENTER or doctor.  
 P363 - Wash contaminated clothing before reuse.  
 P305 + P351 + P338, P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.
- Storage** : Not applicable.
- Disposal** : P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
- Supplemental label elements** : Keep container tightly closed. Do not breathe vapor or spray. Do not taste or swallow. Use only with adequate ventilation. Wash thoroughly after handling.

## Section 3. Composition/information on ingredients

**Substance/mixture** : Substance

Ingredient name	Synonyms	% (w/w)	Identifiers	
Formic acid	Formic acid	100	CAS: 64-18-6	-

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** : Get medical attention immediately. Call a poison center or physician. 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. Chemical burns must be treated promptly by a physician.
- Inhalation** : Get medical attention immediately. Call a poison center or physician. 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. 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.
- Skin contact** : Get medical attention immediately. Call a poison center or physician. Wash contaminated skin with soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.

## Section 4. First-aid measures

- 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. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. 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 damage.
- Inhalation** : Toxic if inhaled. Severely corrosive to the respiratory system.
- Skin contact** : Causes severe burns.
- Ingestion** : Severely corrosive to the digestive tract. Causes severe burns. May cause burns to mouth, throat and stomach. Harmful if swallowed.

#### Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:  
pain  
watering  
redness
- Inhalation** : Adverse symptoms may include the following:  
respiratory tract irritation  
coughing
- Skin contact** : Adverse symptoms may include the following:  
pain or irritation  
redness  
blistering may occur
- Ingestion** : Adverse symptoms may include the following:  
stomach pains

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

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- 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. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

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.

## Section 5. Fire-fighting measures

- Specific hazards arising from the chemical** : 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.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide
- 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. Do not breathe 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".
- 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).

### 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). Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. 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.

## Section 7. Handling and storage

### 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
Formic acid	<p><b>CA Saskatchewan Provincial (Canada, 4/2021)</b>            STEL 15 minutes: 10 ppm.            TWA 8 hours: 5 ppm.</p> <p><b>CA British Columbia Provincial (Canada, 9/2024)</b>            TWA 8 hours: 5 ppm.            STEL 15 minutes: 10 ppm.</p> <p><b>CA Ontario Provincial (Canada, 6/2019)</b>            TWA 8 hours: 5 ppm.            STEL 15 minutes: 10 ppm.</p> <p><b>CA Quebec Provincial (Canada, 2/2024)</b>            TWAEV 8 hours: 5 ppm.            TWAEV 8 hours: 9.4 mg/m<sup>3</sup>.            STEV 15 minutes: 10 ppm.            STEV 15 minutes: 19 mg/m<sup>3</sup>.</p> <p><b>CA Alberta Provincial (Canada, 3/2023)</b>            OEL 8 hours: 9.4 mg/m<sup>3</sup>.            OEL 15 minutes: 10 ppm.            OEL 8 hours: 5 ppm.            OEL 15 minutes: 19 mg/m<sup>3</sup>.</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 and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.
- 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.
- Color** : Colorless.
- Odor** : Pungent.
- Odor threshold** : Not available.
- pH** : Not available.
- Melting point/freezing point** : 4°C (39.2°F) [OECD 102]
- Initial boiling point and boiling range** : 100.23°C (212.4°F) [OECD 103]
- Flash point** : Closed cup: 49.5°C (121.1°F) [DIN EN ISO 13736]
- Evaporation rate** : 1.14 (butyl acetate = 1)
- Flammability (solid, gas)** : Not applicable.
- Upper/lower flammability or explosive limits** : Lower: 18%  
Upper: 51%



## Section 9. Physical and chemical properties

**Vapor pressure** : 4.3 kPa (32.03522 mm Hg) [room temperature] [EU A.4]  
17.4 kPa (130.51 mm Hg) [50°C (122°F)]

**Vapor density** : 1.6 [Air = 1]

**Relative density** : 1.2

**Density** : 1.22 g/cm<sup>3</sup> [20°C (68°F)]

<b>Solubility</b>	<b>Media</b>	<b>Result</b>
	methanol	Soluble
	diethyl ether	Soluble
	acetone	Soluble
	water	Soluble

**Miscible with water** : Yes.

**Partition coefficient: n-octanol/water** : -2.3 [OECD 107]

**Auto-ignition temperature** : 434°C (813.2°F)

**Decomposition temperature** : 150 to 300°C (302 to 572°F)

**Heat of combustion** : -4756670 J/kg

**Viscosity** : Dynamic (room temperature): 1.8 mPa·s (1.8 cP) [OECD 114]  
Kinematic (room temperature): 1.47 mm<sup>2</sup>/s (1.47 cSt) [OECD 114]  
Kinematic (40°C (104°F)): 1.02 mm<sup>2</sup>/s (1.02 cSt) [OECD 114]

### 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: metals and alkalis.  
Slightly reactive or incompatible with the following materials: acids.

**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

Product/ingredient name	Result
Formic acid	Rat - Oral - LD50 730 mg/kg Rat - Inhalation - LC50 Vapor 7400 mg/m <sup>3</sup> [4 hours]
<b>Conclusion/Summary [Product]</b>	: Not available.



## Section 11. Toxicological information

### Skin corrosion/irritation

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

### Serious eye damage/eye irritation

<b>Product/ingredient name</b>	<b>Result</b>	
Formic acid	Rabbit - Eyes - Severe irritant	Amount/concentration applied: 122 mg

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

### Respiratory corrosion/irritation

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

### Respiratory corrosion/irritation

Not available.

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

### Respiratory or skin sensitization

#### **Skin**

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

#### **Respiratory**

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

### Germ cell mutagenicity

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

### Carcinogenicity

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

### Reproductive toxicity

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

### Specific target organ toxicity (single exposure)

Not available.

### Specific target organ toxicity (repeated exposure)

Not available.

## Section 11. Toxicological information

### Aspiration hazard

Not available.

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

### Potential acute health effects

**Eye contact** : Causes serious eye damage.  
**Inhalation** : Toxic if inhaled. Severely corrosive to the respiratory system.  
**Skin contact** : Causes severe burns.  
**Ingestion** : Severely corrosive to the digestive tract. Causes severe burns. May cause burns to mouth, throat and stomach. Harmful if swallowed.

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

**Eye contact** : Adverse symptoms may include the following:  
 pain  
 watering  
 redness  
**Inhalation** : Adverse symptoms may include the following:  
 respiratory tract irritation  
 coughing  
**Skin contact** : Adverse symptoms may include the following:  
 pain or irritation  
 redness  
 blistering may occur  
**Ingestion** : Adverse symptoms may include the following:  
 stomach pains

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

### Numerical measures of toxicity

#### Acute toxicity estimates

## Section 11. Toxicological information

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
Formic acid	730	N/A	N/A	7.4	N/A

## Section 12. Ecological information

### Toxicity

Product/ingredient name	Result
Formic acid	Acute - NOEC - Fresh water ≥100 mg/l [21 days] Daphnia - <i>Daphnia magna</i> Acute - EC50 - Fresh water 151.2 mg/l [48 hours] Daphnia - Water flea - <i>Daphnia magna</i> - Larvae

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

### Persistence and degradability

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

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Formic acid	-	-	Readily

### Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
Formic acid	-2.3	-	Low

### Mobility in soil

**Soil/Water partition coefficient** : 5.39642 Koc

**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

**TDG / IMDG / IATA** : Not regulated.

### Additional information

**Remarks:** De minimis quantities

**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** : This material is listed.

**CEPA Toxic substances** : This material is not listed.

### 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

**Canada** : This material is listed or exempted.

**United States** : This material is active or exempted.

## Section 16. Other information

### History

**Date of issue/Date of revision** : 06/30/2025

**Date of previous issue** : No previous validation

**Version** : 1

**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

## Section 16. Other information

### Procedure used to derive the classification

Classification	Justification
FLAMMABLE LIQUIDS - Category 3	Expert judgment
ACUTE TOXICITY (oral) - Category 4	Expert judgment
ACUTE TOXICITY (inhalation) - Category 3	On basis of test data
SKIN CORROSION - Category 1A	Expert judgment
SERIOUS EYE DAMAGE - Category 1	Expert judgment
Health Hazards Not Otherwise Classified - Category 1	On basis of test data

✔ Indicates information that has changed from previously issued version.

### Notice to reader

**Disclaimer:** 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.

# SAFETY DATA SHEET

InfinityLab LC Performance Checkout Std

## Section 1. Identification

**Product identifier** : InfinityLab LC Performance Checkout Std

**Part no.** : 5191-4547-1

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

**Identified uses** : Reagents and Standards for Analytical Chemistry Laboratory Use  
2 x 0.5 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
H301	ACUTE TOXICITY (oral) - Category 3
H311	ACUTE TOXICITY (dermal) - Category 3
H331	ACUTE TOXICITY (inhalation) - Category 3
H351	CARCINOGENICITY - Category 2
H360	TOXIC TO REPRODUCTION - Category 1B
H370	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 1
H400	AQUATIC HAZARD (ACUTE) - Category 1
H410	AQUATIC HAZARD (LONG-TERM) - Category 1

### GHS label elements

**Hazard pictograms** :



**Signal word** : Danger

**Hazard statements** : H225 - Highly flammable liquid and vapor.  
H301 + H311 + H331 - Toxic if swallowed, in contact with skin or if inhaled.  
H351 - Suspected of causing cancer.  
H360 - May damage fertility or the unborn child.  
H370 - Causes damage to organs.  
H410 - Very 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.  
P260 - Do not breathe vapor.  
P270 - Do not eat, drink or smoke when using this product.  
P264 - Wash thoroughly after handling.

## Section 2. Hazard identification

- Response** : P391 - Collect spillage.  
 P308 + P311 - IF exposed or concerned: Call a POISON CENTER or doctor.  
 P304 + P340, P311 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor.  
 P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor.  
 P302 + P312, P352 - IF ON SKIN: Call a POISON CENTER or doctor if you feel unwell. Wash with plenty of water.  
 P361 + P364 - Take off immediately all contaminated clothing and wash it before reuse.
- Storage** : Not applicable.
- 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	
Methanol	methyl alcohol	≥65 - ≤85	CAS: 67-56-1	-
bis(2-Ethylhexyl) phthalate	di-sec-octyl phthalate	≥0.1 - ≤1	CAS: 117-81-7	-

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. If necessary, call a poison center or physician.
- 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.
- Skin contact** : Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. If necessary, call a poison center or physician. 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. Do not induce vomiting unless directed to do so by medical personnel. 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.



## Section 4. First-aid measures

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

#### Potential acute health effects

- Eye contact** : No known significant effects or critical hazards.
- Inhalation** : Toxic if inhaled. Causes damage to organs following a single exposure if inhaled.
- Skin contact** : Toxic in contact with skin. Causes damage to organs following a single exposure in contact with skin.
- Ingestion** : Toxic if swallowed. Causes damage to organs following a single exposure if swallowed.

#### Over-exposure signs/symptoms

- Eye contact** : No specific data.
- Inhalation** : Adverse symptoms may include the following:  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations
- Skin contact** : Adverse symptoms may include the following:  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations
- Ingestion** : Adverse symptoms may include the following:  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations

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

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- 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. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

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. This material is very 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  
Formaldehyde.

## Section 5. Fire-fighting measures

**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. Do not breathe 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".

**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. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. 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.

## Section 7. Handling and storage

**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
Methanol	<p><b>CA Saskatchewan Provincial (Canada, 4/2021)</b> Absorbed through skin.            STEL 15 minutes: 250 ppm.            TWA 8 hours: 200 ppm.</p> <p><b>CA British Columbia Provincial (Canada, 9/2024)</b> Absorbed through skin.            TWA 8 hours: 200 ppm.            STEL 15 minutes: 250 ppm.</p> <p><b>CA Ontario Provincial (Canada, 6/2019)</b> Absorbed through skin.            TWA 8 hours: 200 ppm.            STEL 15 minutes: 250 ppm.</p> <p><b>CA Quebec Provincial (Canada, 2/2024)</b> Absorbed through skin.            TWAEV 8 hours: 200 ppm.            TWAEV 8 hours: 262 mg/m<sup>3</sup>.            STEV 15 minutes: 250 ppm.            STEV 15 minutes: 328 mg/m<sup>3</sup>.</p> <p><b>CA Alberta Provincial (Canada, 3/2023)</b> Absorbed through skin.            OEL 8 hours: 262 mg/m<sup>3</sup>.            OEL 8 hours: 200 ppm.            OEL 15 minutes: 250 ppm.            OEL 15 minutes: 328 mg/m<sup>3</sup>.</p>
bis(2-Ethylhexyl) phthalate	<p><b>CA Saskatchewan Provincial (Canada, 4/2021)</b>            STEL 15 minutes: 10 mg/m<sup>3</sup>.            TWA 8 hours: 5 mg/m<sup>3</sup>.</p> <p><b>CA British Columbia Provincial (Canada, 9/2024)</b> Carc 2B, Repr. Absorbed through skin.            TWA 8 hours: 5 mg/m<sup>3</sup>.</p> <p><b>CA Ontario Provincial (Canada, 6/2019)</b>            TWA 8 hours: 3 mg/m<sup>3</sup>.            STEL 15 minutes: 5 mg/m<sup>3</sup>.</p> <p><b>CA Quebec Provincial (Canada, 2/2024)</b> C3.            TWAEV 8 hours: 5 mg/m<sup>3</sup>.            STEV 15 minutes: 10 mg/m<sup>3</sup>.</p> <p><b>CA Alberta Provincial (Canada, 3/2023)</b>            OEL 8 hours: 5 mg/m<sup>3</sup>.</p>

## Section 8. Exposure controls/personal protection

### 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.

### 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: safety glasses with side-shields.
- 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.
- Color** : Not available.
- Odor** : Not available.
- Odor threshold** : Not available.

## Section 9. Physical and chemical properties

<b>pH</b>	: Not available.
<b>Melting point/freezing point</b>	: Not available.
<b>Initial boiling point and boiling range</b>	: Not available.
<b>Flash point</b>	: Closed cup: -18 to 23°C (-0.4 to 73.4°F)
<b>Evaporation rate</b>	: Not available.
<b>Flammability (solid, gas)</b>	: Not applicable.
<b>Upper/lower flammability or explosive limits</b>	: Not available.
<b>Vapor pressure</b>	: 10.9 kPa (81.505859 mm Hg) [Calculated]
<b>Vapor density</b>	: Not available.
<b>Relative density</b>	: Not available.

<b>Solubility</b>	: <table><tr><th>Media</th><th>Result</th></tr><tr><td>water</td><td>Soluble</td></tr></table>	Media	Result	water	Soluble
Media	Result				
water	Soluble				

<b>Miscible with water</b>	: Yes.
<b>Partition coefficient: n-octanol/water</b>	: Not applicable.

Auto-ignition temperature	:	Ingredient name	°C	°F	Method
		methanol	455	851	DIN 51794

<b>Decomposition temperature</b>	: Not available.
<b>Viscosity</b>	: Dynamic (room temperature): Not available. Kinematic (room temperature): Not available. Kinematic (40°C (104°F)): Not available.

### Particle characteristics

<b>Median particle size</b>	: 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.
----------------------------	---

<b>Incompatible materials</b>	: Reactive or incompatible with the following materials: oxidizing materials
-------------------------------	---

<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

Methanol

Rabbit - Dermal - LD50

15800 mg/kg

Rat - Oral - LD50

5600 mg/kg

Rat - Inhalation - LC50 Vapor

145000 ppm [1 hours]

Rat - Inhalation - LC50 Vapor

64000 ppm [4 hours]

Rat - Inhalation - LC50 Vapor

83.84 mg/l [4 hours]

Rat - Inhalation - LC50 Vapor

189.95 mg/l [1 hours]

bis(2-Ethylhexyl) phthalate

Rabbit - Dermal - LD50

25 g/kg

Rat - Oral - LD50

30 g/kg

##### Conclusion/Summary [Product]

: Not available.

#### Skin corrosion/irritation

##### Product/ingredient name

##### Result

Methanol

Rabbit - Skin - Moderate irritant

Duration of treatment/  
exposure: 24 hoursAmount/concentration  
applied: 20 mg

bis(2-Ethylhexyl) phthalate

Rabbit - Skin - Mild irritant

Duration of treatment/  
exposure: 24 hoursAmount/concentration  
applied: 500 mg

##### Conclusion/Summary [Product]

: Repeated exposure may cause skin dryness or cracking.

##### Ingredient name

##### Conclusion/Summary

Methanol

Repeated exposure may cause skin dryness or cracking.

#### Serious eye damage/eye irritation

##### Product/ingredient name

##### Result

Methanol

Rabbit - Eyes - Moderate irritant

Duration of treatment/  
exposure: 24 hoursAmount/concentration  
applied: 100 mg

Rabbit - Eyes - Moderate irritant

Amount/concentration  
applied: 40 mg

Rabbit - Eyes - Severe irritant

Amount/concentration  
applied: 0.1 Ml

bis(2-Ethylhexyl) phthalate

Rabbit - Eyes - Mild irritant

Duration of treatment/  
exposure: 24 hoursAmount/concentration  
applied: 500 mg

Rabbit - Eyes - Mild irritant

Amount/concentration  
applied: 500 mg

##### Conclusion/Summary [Product]

: May cause eye irritation.

##### Ingredient name

##### Conclusion/Summary

Methanol

May cause eye irritation.

#### Respiratory corrosion/irritation

##### Conclusion/Summary [Product]

: Not available.

## Section 11. Toxicological information

### Respiratory corrosion/irritation

Not available.

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

### Respiratory or skin sensitization

#### **Skin**

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

#### **Respiratory**

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

### Germ cell mutagenicity

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

### Carcinogenicity

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

#### **Classification**

<b>Product/ingredient name</b>	<b>IARC</b>	<b>NTP</b>	<b>ACGIH</b>
bis(2-Ethylhexyl) phthalate	2B	Reasonably anticipated to be a human carcinogen.	A3

### Reproductive toxicity

**Conclusion/Summary** : Repeated or prolonged exposure to the substance can produce reproductive system damage.  
**[Product]**

#### **Ingredient name**

Methanol

#### **Conclusion/Summary**

Repeated or prolonged exposure to the substance can produce reproductive system damage.

### Specific target organ toxicity (single exposure)

#### **Product/ingredient name**

Methanol

#### **Result**

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 1

### Specific target organ toxicity (repeated exposure)

Not available.

### Aspiration hazard

Not available.



## Section 11. Toxicological information

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

### Potential acute health effects

**Eye contact** : No known significant effects or critical hazards.

**Inhalation** : Toxic if inhaled. Causes damage to organs following a single exposure if inhaled.

**Skin contact** : Toxic in contact with skin. Causes damage to organs following a single exposure in contact with skin.

**Ingestion** : Toxic if swallowed. Causes damage to organs following a single exposure if swallowed.

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

**Eye contact** : No specific data.

**Inhalation** : Adverse symptoms may include the following:  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations

**Skin contact** : Adverse symptoms may include the following:  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations

**Ingestion** : Adverse symptoms may include the following:  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations

### 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** : May damage fertility or the unborn child.

### Numerical measures of toxicity

#### Acute toxicity estimates

## Section 11. Toxicological information

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
InfinityLab LC Performance Checkout Std	131.9	395.8	N/A	4.0	N/A
Methanol	100	300	N/A	3	N/A
bis(2-Ethylhexyl) phthalate	30000	25000	N/A	N/A	N/A

**Other information** : Adverse symptoms may include the following: blurred or double vision, Eye contact can result in corneal damage or blindness. Repeated or prolonged exposure to the substance can produce liver damage. Narcotic effect. May cause nervous system disturbances.

## Section 12. Ecological information

### Toxicity

Product/ingredient name	Result		
Methanol	Acute - LC50 - Marine water	2500 mg/l [48 hours]	Crustaceans - Common shrimp, sand shrimp - <i>Crangon crangon</i> - Adult
	Acute - LC50 - Fresh water	290 mg/l [96 hours]	Fish - Zebra danio - <i>Danio rerio</i> - Egg
	Chronic - NOEC - Marine water	9.96 mg/l [96 hours]	Algae - Green algae - <i>Ulva pertusa</i>
	Acute - EC50 - Marine water	2736 mg/l [96 hours]	Algae - Green algae - <i>Ulva pertusa</i>
bis(2-Ethylhexyl) phthalate	Acute - LC50 - Fresh water	37.95 mg/l [96 hours]	Fish - common carp - <i>Cyprinus carpio</i>
	Chronic - NOEC - Fresh water	0.077 mg/l [21 days]	Daphnia - Water flea - <i>Daphnia magna</i>
	Chronic - NOEC - Fresh water	0.1 µg/l [28 days]	Fish - Guppy - <i>Poecilia reticulata</i> - Larvae
	Acute - EC50	6.02 mg/l [96 hours]	Algae - Green algae - <i>Chlorella vulgaris</i> - Exponential growth phase
	Acute - LC50 - Marine water	1.04 ng/l [48 hours]	Crustaceans - Copepod - <i>Parvocalanus crassirostris</i> - Nauplii
	Chronic - NOEC - Marine water	1.2 µg/l [4 days]	Algae - Dinoflagellate - <i>Alexandrium pacificum</i>

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

### Persistence and degradability

Product/ingredient name	Result		
bis(2-Ethylhexyl) phthalate	OECD [Ready Biodegradability - CO <sub>2</sub> Evolution Test]	82% [29 days] - Readily	Aerobic - 20.3 mg/l - Activated sludge
	OECD [Ready Biodegradability - CO <sub>2</sub> Evolution Test]	82% [29 days] - Readily	Aerobic - 20.3 mg/l

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

## Section 12. Ecological information

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Methanol	-	-	Readily

### Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
Methanol	-0.77	<10	Low
bis(2-Ethylhexyl) phthalate	7.6	1380	High

### 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

**TDG / IMDG / IATA** : Not regulated.

### Additional information

**Remarks:** De minimis quantities

**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: methanol

**CEPA Toxic substances** : None of the components are listed.

### 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

<b>Canada</b>	: Not determined.
<b>United States</b>	: All components are active or exempted.

## Section 16. Other information

### History

<b>Date of issue/Date of revision</b>	: 06/30/2025
<b>Date of previous issue</b>	: No previous validation
<b>Version</b>	: 1
<b>Key to abbreviations</b>	: 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

<b>Classification</b>	<b>Justification</b>
FLAMMABLE LIQUIDS - Category 2	Expert judgment
ACUTE TOXICITY (oral) - Category 3	Calculation method
ACUTE TOXICITY (dermal) - Category 3	Calculation method
ACUTE TOXICITY (inhalation) - Category 3	Calculation method
CARCINOGENICITY - Category 2	Calculation method
TOXIC TO REPRODUCTION - Category 1B	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 1	Calculation method
AQUATIC HAZARD (ACUTE) - Category 1	Calculation method
AQUATIC HAZARD (LONG-TERM) - Category 1	Calculation method

Indicates information that has changed from previously issued version.

### Notice to reader

**Disclaimer:** 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.