

Safety Data Sheet

acc. to OSHA HCS

Revision date 08/23/2024

1 Identification

- **Product identifier**
- **Product Name:** Volatiles Standard (1X1 mL)
- **Part number:** PMX-144-1
- **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

Germ Cell Mutagenicity 1B

H340 May cause genetic defects.

Carcinogenicity 1B

H350 May cause cancer.

Toxic to Reproduction 2

H361 Suspected of damaging fertility or the unborn child.

Specific Target Organ Toxicity - Single Exposure 1

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

Specific Target Organ Toxicity - Repeated Exposure 2

H373 May cause damage to the central nervous system, the kidneys and the cardiovascular system through prolonged or repeated exposure.



GHS07

Acute Toxicity - Oral 4

H302 Harmful if swallowed.

Acute Toxicity - Dermal 4

H312 Harmful in contact with skin.

Sensitization - Skin 1

H317 May cause an allergic skin reaction.

- **Label elements**

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

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· Hazard pictograms

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

methanol
2,2'-bioxirane
methacrylonitrile
carbon disulphide
methyl methacrylate
ethyl methacrylate

· Hazard statements

H225 Highly flammable liquid and vapor.
H302+H312 Harmful if swallowed or in contact with skin.
H331 Toxic if inhaled.
H317 May cause an allergic skin reaction.
H340 May cause genetic defects.
H350 May cause cancer.
H361 Suspected of damaging fertility or the unborn child.
H370 Causes damage to the central nervous system and the visual organs.
H373 May cause damage to the central nervous system, the kidneys and the cardiovascular system through prolonged or repeated exposure.

· Precautionary statements

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P241 Use explosion-proof electrical/ventilating/lighting/equipment.
P260 Do not breathe dust/fume/gas/mist/vapors/spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
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.
P272 Contaminated work clothing must not be allowed out of the workplace.
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P321 Specific treatment (see on this label).
P301+P312 If swallowed: Call a poison center/doctor if you feel unwell.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P363 Wash contaminated clothing before reuse.
P308+P313 IF exposed or concerned: Get medical advice/attention.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P314 Get medical advice/attention if you feel unwell.
P330 Rinse mouth.
P370+P378 In case of fire: Use CO₂, powder or water spray to extinguish.
P362+P364 Take off contaminated clothing and wash it before reuse.

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P405 Store locked up.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P403+P235 Store in a well-ventilated place. Keep cool.
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.

· vPvB: Not applicable.

3 Composition/information on ingredients

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

· Dangerous components:

67-56-1	methanol	95.7024%
57-57-8	3-propanolide	0.2528%
75-15-0	carbon disulphide	0.2528%
78-97-7	lactonitrile	0.2528%
80-62-6	methyl methacrylate	0.2528%
96-23-1	1,3-dichloro-2-propanol	0.2528%
97-63-2	ethyl methacrylate	0.2528%
106-89-8	1-chloro-2,3-epoxypropane	0.2528%
107-07-3	2-chloroethanol	0.2528%
107-12-0	propionitrile	0.2528%
107-18-6	allyl alcohol	0.2528%
107-19-7	prop-2-yn-1-ol	0.2528%
109-77-3	malononitrile	0.2528%
123-73-9	(E)-2-butenal	0.2528%
126-98-7	methacrylonitrile	0.2528%
542-76-7	3-chloropropionitrile	0.2528%
1464-53-5	2,2'-bioxirane	0.2528%

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4 First-aid measures

- **Description of first aid measures**
- **General information:**
Immediately remove any clothing soiled by the product.
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
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:** Immediately call a 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.
- **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
57-57-8	3-propanolide	1.5 ppm

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75-05-8	acetonitrile	13 ppm
75-15-0	carbon disulphide	13 ppm
78-97-7	lactonitrile	0.24 mg/m ³
80-62-6	methyl methacrylate	17 ppm
96-23-1	1,3-dichloro-2-propanol	0.33 ppm
97-63-2	ethyl methacrylate	5.5 ppm
106-89-8	1-chloro-2,3-epoxypropane	1.7 ppm
107-07-3	2-chloroethanol	0.11 ppm
107-12-0	propionitrile	0.27 ppm
107-18-6	allyl alcohol	0.09 ppm
107-19-7	prop-2-yn-1-ol	2.5 ppm
109-77-3	malononitrile	0.07 ppm
123-73-9	(E)-2-butenal	0.19 ppm
126-98-7	methacrylonitrile	0.091 ppm
542-76-7	3-chloropropionitrile	0.23 ppm
1464-53-5	2,2'-bioxirane	0.091 ppm

· PAC-2:

67-56-1	methanol	2,100 ppm
57-57-8	3-propanolide	5 ppm
75-05-8	acetonitrile	50 ppm
75-15-0	carbon disulphide	160 ppm
78-97-7	lactonitrile	2.6 mg/m ³
80-62-6	methyl methacrylate	120 ppm
96-23-1	1,3-dichloro-2-propanol	0.89 ppm
97-63-2	ethyl methacrylate	61 ppm
106-89-8	1-chloro-2,3-epoxypropane	24 ppm
107-07-3	2-chloroethanol	1.2 ppm
107-12-0	propionitrile	3.0 ppm
107-18-6	allyl alcohol	1.7 ppm
107-19-7	prop-2-yn-1-ol	16 ppm
109-77-3	malononitrile	0.77 ppm
123-73-9	(E)-2-butenal	4.4 ppm
126-98-7	methacrylonitrile	1.0 ppm
542-76-7	3-chloropropionitrile	2.5 ppm
1464-53-5	2,2'-bioxirane	1 ppm

· PAC-3:

67-56-1	methanol	7200* ppm
57-57-8	3-propanolide	30 ppm
75-05-8	acetonitrile	150 ppm
75-15-0	carbon disulphide	480 ppm
78-97-7	lactonitrile	16 mg/m ³

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80-62-6	methyl methacrylate	570 ppm
96-23-1	1,3-dichloro-2-propanol	5.4 ppm
97-63-2	ethyl methacrylate	370 ppm
106-89-8	1-chloro-2,3-epoxypropane	72 ppm
107-07-3	2-chloroethanol	3.5 ppm
107-12-0	propionitrile	9.1 ppm
107-18-6	allyl alcohol	13 ppm
107-19-7	prop-2-yn-1-ol	72 ppm
109-77-3	malononitrile	2.3 ppm
123-73-9	(E)-2-butenal	14 ppm
126-98-7	methacrylonitrile	3.1 ppm
542-76-7	3-chloropropionitrile	5.4 ppm
1464-53-5	2,2'-bioxirane	4 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.
- **Control parameters**
- **Components with limit values that require monitoring at the workplace:**
The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.
At this time, the other constituents have no known exposure limits.

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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

57-57-8 3-propanolide

PEL	see 29 CFR 1910.1003
REL	See Pocket Guide App. A
TLV	Long-term value: 0.5 ppm A3

75-15-0 carbon disulphide

PEL	Long-term value: 20 ppm Ceiling limit value: 30; 100* ppm *30-min peak per 8-hr shift
REL	Short-term value: 30 mg/m ³ , 10 ppm Long-term value: 3 mg/m ³ , 1 ppm Skin
TLV	Long-term value: 1 ppm Skin, BEI, A4

80-62-6 methyl methacrylate

PEL	Long-term value: 410 mg/m ³ , 100 ppm
REL	Long-term value: 410 mg/m ³ , 100 ppm
TLV	Short-term value: 100 ppm Long-term value: 50 ppm DSEN, A4

106-89-8 1-chloro-2,3-epoxypropane

PEL	Long-term value: 19 mg/m ³ , 5 ppm Skin
REL	See Pocket Guide App. A
TLV	Long-term value: 0.1 ppm Skin, DSEN, A2

107-07-3 2-chloroethanol

PEL	Long-term value: 16 mg/m ³ , 5 ppm Skin
REL	Ceiling limit value: 3 mg/m ³ , 1 ppm Skin
TLV	Ceiling limit value: 1 ppm Skin, A4

107-12-0 propionitrile

PEL	Long-term value: 5 mg/m ³ as CN; Skin
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REL	Long-term value: 14 mg/m ³ , 6 ppm
TLV	Ceiling limit value: NIC-10 ppm NIC-Skin
107-18-6 allyl alcohol	
PEL	Long-term value: 5 mg/m ³ , 2 ppm Skin
REL	Short-term value: 10 mg/m ³ , 4 ppm Long-term value: 5 mg/m ³ , 2 ppm Skin
TLV	Long-term value: 0.5 ppm Skin, A4
107-19-7 prop-2-yn-1-ol	
REL	Long-term value: 2 mg/m ³ , 1 ppm Skin
TLV	Long-term value: 1 ppm Skin
109-77-3 malononitrile	
REL	Long-term value: 8 mg/m ³ , 3 ppm
123-73-9 (E)-2-butenal	
PEL	Long-term value: 6 mg/m ³ , 2 ppm
REL	Long-term value: 6 mg/m ³ , 2 ppm See Pocket Guide App. C
TLV	Ceiling limit value: 0.86 mg/m ³ , 0.3 ppm Skin
126-98-7 methacrylonitrile	
REL	Long-term value: 3 mg/m ³ , 1 ppm Skin
TLV	Long-term value: 1 ppm Skin, A4
Ingredients with biological limit values:	
67-56-1 methanol	
BEI	15 mg/L Medium: urine Time: end of shift Parameter: Methanol (background, nonspecific)
75-15-0 carbon disulphide	
BEI	0.5 mg/g creatinine Medium: urine Time: end of shift Parameter: 2-Thioxothiazolidine-4-carboxylic acid (background, nonspecific)

· **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.

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Wash hands before breaks and at the end of work.

Store protective clothing separately.

Avoid contact with the eyes and skin.

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

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.

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· 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):	0.80939 g/cm ³ (6.75436 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.
· Solvent content:	
Organic solvents:	96.0 %
VOC content:	95.96 %
	776.7 g/l / 6.48 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)

Oral	LD50	1,982 mg/kg
Dermal	LD50	1,432 mg/kg
Inhalative	LC50/4 h	2.9 mg/L

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67-56-1 methanol

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

75-15-0 carbon disulphide

Oral	LD50	1,200 mg/kg (rat)
Inhalative	LC50/4 h	10.35 mg/L (rat)

78-97-7 lactonitrile

Oral	LD50	87 mg/kg (rat)
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80-62-6 methyl methacrylate

Oral	LD50	7,900 mg/kg (rat)
Dermal	LD50	>5,000 mg/kg (rabbit)
Inhalative	LC50/4 h	78,000 mg/L (rat)

96-23-1 1,3-dichloro-2-propanol

Oral	LD50	110 mg/kg (rat)
Dermal	LD50	800 mg/kg (rabbit)

97-63-2 ethyl methacrylate

Oral	LD50	1,223 mg/kg (rat)
Inhalative	LC50/4 h	8,300 mg/L (rat)

106-89-8 1-chloro-2,3-epoxypropane

Oral	LD50	90 mg/kg (rat)
Dermal	LD50	515 mg/kg (rabbit)
Inhalative	LC50/4 h	250 mg/L (rat)

107-07-3 2-chloroethanol

Oral	LD50	385 mg/kg (mouse)
		71 mg/kg (rat)
Dermal	LD50	67 mg/kg (mouse)
Inhalative	LC50/4 h	0.29 mg/L (rat)

107-12-0 propionitrile

Oral	LD50	39 mg/kg (rat)
Dermal	LD50	210 mg/kg (rabbit)

107-18-6 allyl alcohol

Oral	LD50	64 mg/kg (rat)
Dermal	LD50	45 mg/kg (rabbit)

107-19-7 prop-2-yn-1-ol

Oral	LD50	56 mg/kg (rat)
Dermal	LD50	88 mg/kg (rabbit)

109-77-3 malononitrile

Oral	LD50	19 mg/kg (mouse)
		61 mg/kg (rat)
Dermal	LD50	350 mg/kg (rat)

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123-73-9 (E)-2-butenal

Oral	LD50	240 mg/kg (mouse)
Dermal	LD50	380 mg/kg (rabbit)
Inhalative	LC50/4 h	0.3 mg/L (rat)

126-98-7 methacrylonitrile

Oral	LD50	250 mg/kg (rat)
Dermal	LD50	320 mg/kg (rabbit)

542-76-7 3-chloropropionitrile

Oral	LD50	50 mg/kg (rat)
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1464-53-5 2,2'-bioxirane

Oral	LD50	72 mg/kg (mouse)
Dermal	LD50	80 mg/kg (rabbit)
Inhalative	LC50/4 h	90 mg/L (rat)

· Primary irritant effect:
· on the skin: No irritant effect.

· on the eye: No irritating effect.

· Sensitization: Sensitization possible through skin contact.

· Additional toxicological information:

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

Toxic

Harmful

Irritant

The product can cause inheritable damage.

· Carcinogenic categories
· IARC (International Agency for Research on Cancer)

57-57-8	3-propanolide	2B
80-62-6	methyl methacrylate	3
96-23-1	1,3-dichloro-2-propanol	2B
106-89-8	1-chloro-2,3-epoxypropane	2A

· NTP (National Toxicology Program)

57-57-8	3-propanolide	R
106-89-8	1-chloro-2,3-epoxypropane	R
1464-53-5	2,2'-bioxirane	R

· OSHA-Ca (Occupational Safety & Health Administration)

57-57-8	3-propanolide
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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.

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- **Additional ecological information:**
- **General notes:**
Water hazard class 3 (Self-assessment): extremely hazardous for water
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 | UN1230 |
| · DOT, IMDG, IATA | UN1230 |
| · UN proper shipping name | Methanol |
| · DOT | METHANOL |
| · IMDG, IATA | METHANOL |
| · Transport hazard class(es) | |
| · DOT | |
|   | |
| · Class | 3 Flammable liquids |
| · Label | 3, 6.1 |
| · IMDG | |
|   | |
| · Class | 3 Flammable liquids |

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· Label	3/6.1
· IATA	
 	
· Class	3 Flammable liquids
· 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, 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):

57-57-8	3-propanolide
75-15-0	carbon disulphide
78-97-7	lactonitrile
106-89-8	1-chloro-2,3-epoxypropane
107-07-3	2-chloroethanol
107-12-0	propionitrile
107-18-6	allyl alcohol
109-77-3	malononitrile

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123-73-9	(E)-2-butenal
126-98-7	methacrylonitrile
542-76-7	3-chloropropionitrile
1464-53-5	2,2'-bioxirane

· Section 313 (Specific toxic chemical listings):

67-56-1	methanol
57-57-8	3-propanolide
75-05-8	acetonitrile
75-15-0	carbon disulphide
80-62-6	methyl methacrylate
96-23-1	1,3-dichloro-2-propanol
106-89-8	1-chloro-2,3-epoxypropane
107-18-6	allyl alcohol
107-19-7	prop-2-yn-1-ol
109-77-3	malononitrile
126-98-7	methacrylonitrile
542-76-7	3-chloropropionitrile
1464-53-5	2,2'-bioxirane

· TSCA (Toxic Substances Control Act):

All components have the value ACTIVE.

· Hazardous Air Pollutants

67-56-1	methanol
57-57-8	3-propanolide
75-05-8	acetonitrile
75-15-0	carbon disulphide
80-62-6	methyl methacrylate
106-89-8	1-chloro-2,3-epoxypropane

· Proposition 65
· Chemicals known to cause cancer:

57-57-8	3-propanolide
96-23-1	1,3-dichloro-2-propanol
106-89-8	1-chloro-2,3-epoxypropane
1464-53-5	2,2'-bioxirane

· Chemicals known to cause reproductive toxicity for females:

75-15-0	carbon disulphide
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· Chemicals known to cause reproductive toxicity for males:

75-15-0	carbon disulphide
106-89-8	1-chloro-2,3-epoxypropane

· Chemicals known to cause developmental toxicity:

67-56-1	methanol
75-15-0	carbon disulphide

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· Carcinogenic categories
· EPA (Environmental Protection Agency)

75-05-8	acetonitrile	CBD, D
80-62-6	methyl methacrylate	E, NL
106-89-8	1-chloro-2,3-epoxypropane	B2
123-73-9	(E)-2-butenal	C

· TLV (Threshold Limit Value)

57-57-8	3-propanolide	A3
75-05-8	acetonitrile	A4
75-15-0	carbon disulphide	A4
80-62-6	methyl methacrylate	A4
106-89-8	1-chloro-2,3-epoxypropane	A3
107-07-3	2-chloroethanol	A4
107-18-6	allyl alcohol	A4

· NIOSH-Ca (National Institute for Occupational Safety and Health)

57-57-8	3-propanolide
106-89-8	1-chloro-2,3-epoxypropane

· National regulations:
· Additional classification according to Decree on Hazardous Materials:

Carcinogenic hazardous material group III (dangerous).

· Information about limitation of use:

Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation.
Exceptions can be made by the authorities in certain cases.

· 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 08/23/2024 / 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

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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 - Oral 4: Acute toxicity – Category 4

Acute Toxicity - Inhalation 3: Acute toxicity – Category 3

Sensitization - Skin 1: Skin sensitisation – Category 1

Germ Cell Mutagenicity 1B: Germ cell mutagenicity – Category 1B

Carcinogenicity 1B: Carcinogenicity – Category 1B

Toxic to Reproduction 2: Reproductive toxicity – Category 2

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

Specific Target Organ Toxicity - Repeated Exposure 2: Specific target organ toxicity (repeated exposure) – Category 2

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

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