

Product code	Description
PSM-101	FDA Analytical Chemical Reference Standards Kit
Components:	
PSM-101-A	FDA Pesticide Standard GC no. 1 (1X1 mL)
PSM-101-B	FDA Pesticide Standard GC no. 2 (1X1 mL)
PSM-101-C	FDA Pesticide Standard GC no. 3 (1X1 mL)
PSM-101-D	FDA Pesticide Standard GC no. 4 (1X1 mL)
PSM-101-E	FDA Pesticide Standard GC no. 5 (1X1 mL)
PSM-101-F	FDA Pesticide Standard LC no. 1 (1X1 mL)
PSM-101-G	FDA Pesticide Standard LC no. 2 (1X1 mL)
PSM-101-H	FDA Pesticide Standard LC no. 3 (1X1 mL)
PSM-101-I	FDA Pesticide Standard LC no. 4 (1X1 mL)
PSM-101-J	FDA Pesticide Standard LC no. 5 (1X1 mL)
PSM-101-K	FDA Pesticide Standard LC no. 6 (1X1 mL)
PSM-101-L	FDA Pesticide Standard GC/LC no. 1 (1X1 mL)
PSM-101-M	FDA Pesticide Standard GC/LC no. 2 (1X1 mL)
PSM-101-N	FDA Pesticide Standard GC/LC no. 3 (1X1 mL)
PSM-101-O	FDA Pesticide Standard GC/LC no. 4 (1X1 mL)
PSM-101-P	FDA Pesticide Standard GC/LC no. 5 (1X1 mL)

Safety Data Sheet

according to HPR, Schedule 1

Printing date 03/31/2019

Version Number 3

Reviewed on 03/31/2019

1 Identification

- **Product identifier**
- **Trade name:** FDA Pesticide Standard GC no. 1 (1X1 mL)
- **Part number:** PSM-101-A
- **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 identification

- **Classification of the substance or mixture**



GHS02 Flame

Flammable Liquids - Category 2

H225 Highly flammable liquid and vapour.



GHS07

Eye Irritation - Category 2A

H319 Causes serious eye irritation.

Specific Target Organ Toxicity - Single Exposure -
Category 3

H336 May cause drowsiness or dizziness.

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



GHS02



GHS07

- **Signal word** Danger
- **Hazard-determining components of labeling:**
acetone
- **Hazard statements**
Highly flammable liquid and vapour.
Causes serious eye irritation.
May cause drowsiness or dizziness.
- **Precautionary statements**
If medical advice is needed, have product container or label at hand.
Keep out of reach of children.
Read label before use.

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Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Ground and bond container and receiving equipment.
Use explosion-proof [electrical/ventilating/lighting] equipment.
Use non-sparking tools.
Take actions to prevent static discharges.
Avoid breathing dust/fume/gas/mist/vapours/spray.
Wash thoroughly after handling.
Use only outdoors or in a well-ventilated area.
Wear protective gloves/protective clothing/eye protection/face protection.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
Continue rinsing.
Call a poison center/doctor if you feel unwell.
If eye irritation persists: Get medical advice/attention.
In case of fire: Use for extinction: CO₂, powder or water spray.
Store in a well-ventilated place. Keep container tightly closed.
Store in a well-ventilated place. Keep cool.
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



· **HMIS-ratings (scale 0 - 4)**



3 Composition/Information on ingredients

· **Chemical characterization: Mixtures**

· **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:**

67-64-1 acetone

99.748% w/w

4 First aid measures

· **Description of first aid measures**

· **General information:** Immediately remove any clothing soiled by the product.

· **After inhalation:** Supply fresh air; consult doctor in case of complaints.

· **After skin contact:** Immediately rinse with water.

· **After eye contact:**

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· **After swallowing:** If symptoms persist consult doctor.

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Trade name: FDA Pesticide Standard GC no. 1 (1X1 mL)

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- **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 Firefighting 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** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
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 item 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.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
- **Information about protection against explosions and fires:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
- **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.

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Trade name: FDA Pesticide Standard GC no. 1 (1X1 mL)

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8 Exposure controls/ Personal protection

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

· **Control parameters**

· **Components with limit values that require monitoring at the workplace:**

67-64-1 acetone

EL	Short-term value: 500 ppm Long-term value: 250 ppm
EV	Short-term value: 750 ppm Long-term value: 500 ppm

· **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.

Avoid contact with the eyes.

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

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9 Physical and chemical properties

· Information on basic physical and chemical properties

· General Information

· Appearance:

Form:	Fluid
Color:	Colorless
Odor:	Characteristic
Odor threshold:	Not determined.

· pH-value: Not determined.

· Change in condition

Melting point/Melting range:	-94.7 °C
Boiling point/Boiling range:	55.8-56.6 °C

· Flash point: -17 °C

· Flammability (solid, gaseous): Not applicable.

· Ignition temperature: 465 °C

· Decomposition temperature: Not determined.

· Auto igniting: Product is not selfigniting.

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

· Explosion limits:

Lower:	2.6 Vol %
Upper:	13 Vol %

· Vapor pressure at 20 °C: 245.3 hPa

· Density at 20 °C:	0.791 g/cm ³
· 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 at 20 °C:	32 mPas
Kinematic:	Not determined.

· Solvent content:

Organic solvents: 99.8 %

Solids content: 0.2 %

· Other information: No further relevant information available.

10 Stability and reactivity

· Reactivity: No further relevant information available.

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- **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:

67-64-1 acetone

Oral	LD50	5,800 mg/kg (rat)
Dermal	LD50	20,000 mg/kg (rabbit)

2310-17-0 phosalone

Oral	LD50	85 mg/kg (rat)
Dermal	LD50	1,000 mg/kg (rabbit)

1582-09-8 trifluralin (ISO) (containing < 0,5 ppm NPDA)

Oral	LD50	1,930 mg/kg (rat)
Dermal	LD50	>5,000 mg/kg (rat)

· Primary irritant effect:

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

· **on the eye:** Irritating effect.

· **Sensitization:** No sensitizing effects known.

· Additional toxicological information:

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

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)

608-93-5	pentachlorobenzene	2B
82-68-8	quintozone (ISO)	3
101-21-3	chlorpropham	3
50-29-3	DDT (common name not adopted by ISO)	2A
319-84-6	alpha-BHC (alpha-HCH)	2B
319-85-7	(1alpha,2beta,3alpha,4beta,5alpha,6beta)-1,2,3,4,5,6-hexachlorocyclohexane	2B
1582-09-8	trifluralin (ISO) (containing < 0,5 ppm NPDA)	3

· NTP (National Toxicology Program)

50-29-3	DDT (common name not adopted by ISO)	R
319-84-6	alpha-BHC (alpha-HCH)	R
319-85-7	(1alpha,2beta,3alpha,4beta,5alpha,6beta)-1,2,3,4,5,6-hexachlorocyclohexane	R
319-86-8	delta-BHC (delta-HCH)	R

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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.
- **Additional ecological information:**
- **General notes:**
 Water hazard class 1 (Self-assessment): slightly hazardous for water
 Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **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 minimus Quantities | - |
| · UN-Number | |
| · DOT, TDG, IMDG, IATA | UN1090 |
| · UN proper shipping name | |
| · DOT | Acetone solution |
| · TDG | 1090 ACETONE solution, ENVIRONMENTALLY HAZARDOUS |
| · IMDG | ACETONE solution, MARINE POLLUTANT |
| · IATA | ACETONE solution |
| · Transport hazard class(es) | |
| · DOT, IATA | |
|  | |
| · Class | 3 Flammable liquids |

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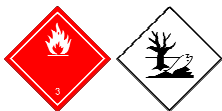
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· **Label** 3
 · **TDG, IMDG**



· **Class** 3 Flammable liquids
 · **Label** 3

· **Packing group**
 · **DOT, TDG, IMDG, IATA** II

· **Environmental hazards:** Product contains environmentally hazardous substances:
 fenitrothion (ISO), phosalone
 · **Marine pollutant:** Symbol (fish and tree)
 · **Special marking (TDG):** Symbol (fish and tree)

· **Special precautions for user** Warning: Flammable liquids
 · **Danger code (Kemler):** 33
 · **EMS Number:** F-E,S-D
 · **Stowage Category** B

· **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: 5 L
 On cargo aircraft only: 60 L

· **TDG**
 · **Excepted quantities (EQ)** Code: E2
 Maximum net quantity per inner packaging: 30 ml
 Maximum net quantity per outer packaging: 500 ml

· **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 1090 ACETONE SOLUTION, 3, II, ENVIRONMENTALLY HAZARDOUS

15 Regulatory information

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

· **Section 355 (extremely hazardous substances):**

122-14-5 fenitrothion (ISO)

· **Section 313 (Specific toxic chemical listings):**

92-52-4 biphenyl

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608-93-5	pentachlorobenzene
82-68-8	quintozene (ISO)
319-84-6	alpha-BHC (alpha-HCH)
1582-09-8	trifluralin (ISO) (containing < 0,5 ppm NPDA)
50471-44-8	vinclozolin (ISO)
99-30-9	dichloran

· TSCA (Toxic Substances Control Act):

67-64-1	acetone
92-52-4	biphenyl
608-93-5	pentachlorobenzene
82-68-8	quintozene (ISO)
50-29-3	DDT (common name not adopted by ISO)
319-84-6	alpha-BHC (alpha-HCH)
319-85-7	(1alpha,2beta,3alpha,4beta,5alpha,6beta)-1,2,3,4,5,6-hexachlorocyclohexane
319-86-8	delta-BHC (delta-HCH)
9002-91-9	metaldehyde
99-30-9	dichloran

· Canadian substance listings:
· Canadian Domestic Substances List (DSL)

67-64-1	acetone
92-52-4	biphenyl
608-93-5	pentachlorobenzene
1582-09-8	trifluralin (ISO) (containing < 0,5 ppm NPDA)
50471-44-8	vinclozolin (ISO)
9002-91-9	metaldehyde

· Canadian Ingredient Disclosure list (limit 0.1%)

None of the ingredients is listed.

· Canadian Ingredient Disclosure list (limit 1%)

All ingredients are listed.

· 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: regulatory@ultrasci.com

· Date of the latest revision of the safety data sheet 03/31/2019 / 2

· Abbreviations and acronyms:

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)

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NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative

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

CA

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according to HPR, Schedule 1

Printing date 03/31/2019

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Reviewed on 03/31/2019

1 Identification

- **Product identifier**
- **Trade name:** FDA Pesticide Standard GC no. 2 (1X1 mL)
- **Part number:** PSM-101-B
- **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 identification

- **Classification of the substance or mixture**



GHS02 Flame

Flammable Liquids - Category 2

H225 Highly flammable liquid and vapour.



GHS07

Eye Irritation - Category 2A

H319 Causes serious eye irritation.

Specific Target Organ Toxicity - Single Exposure -
Category 3

H336 May cause drowsiness or dizziness.

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



GHS02 GHS07

- **Signal word** Danger
- **Hazard-determining components of labeling:**
acetone
- **Hazard statements**
Highly flammable liquid and vapour.
Causes serious eye irritation.
May cause drowsiness or dizziness.
- **Precautionary statements**
If medical advice is needed, have product container or label at hand.
Keep out of reach of children.
Read label before use.

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Trade name: FDA Pesticide Standard GC no. 2 (1X1 mL)

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Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Ground and bond container and receiving equipment.
Use explosion-proof [electrical/ventilating/lighting] equipment.
Use non-sparking tools.
Take actions to prevent static discharges.
Avoid breathing dust/fume/gas/mist/vapours/spray.
Wash thoroughly after handling.
Use only outdoors or in a well-ventilated area.
Wear protective gloves/protective clothing/eye protection/face protection.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
Continue rinsing.
Call a poison center/doctor if you feel unwell.
If eye irritation persists: Get medical advice/attention.
In case of fire: Use for extinction: CO₂, powder or water spray.
Store in a well-ventilated place. Keep container tightly closed.
Store in a well-ventilated place. Keep cool.
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



Health = 2
Fire = 3
Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**



Health = 2
Fire = 3
Reactivity = 0

3 Composition/Information on ingredients

· **Chemical characterization: Mixtures**

· **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:**

67-64-1	acetone	99.786% w/w
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4 First aid measures

· **Description of first aid measures**

· **General information:** Immediately remove any clothing soiled by the product.

· **After inhalation:** Supply fresh air; consult doctor in case of complaints.

· **After skin contact:** Immediately rinse with water.

· **After eye contact:**

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· **After swallowing:** If symptoms persist consult doctor.

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- **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 Firefighting 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** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
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 item 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.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
- **Information about protection against explosions and fires:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
- **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.

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Trade name: FDA Pesticide Standard GC no. 2 (1X1 mL)

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8 Exposure controls/ Personal protection

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

· **Control parameters**

· **Components with limit values that require monitoring at the workplace:**

67-64-1 acetone

EL	Short-term value: 500 ppm Long-term value: 250 ppm
EV	Short-term value: 750 ppm Long-term value: 500 ppm

· **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.

Avoid contact with the eyes.

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

CA

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Safety Data Sheet

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Trade name: FDA Pesticide Standard GC no. 2 (1X1 mL)

(Contd. of page 4)

9 Physical and chemical properties

· Information on basic physical and chemical properties

· General Information

· Appearance:

Form: Fluid

Color: Colorless

· Odor: Characteristic

· Odor threshold: Not determined.

· pH-value: Not determined.

· Change in condition

Melting point/Melting range: -94.7 °C

Boiling point/Boiling range: 55.8-56.6 °C

· Flash point: -17 °C

· Flammability (solid, gaseous): Not applicable.

· Ignition temperature: 465 °C

· Decomposition temperature: Not determined.

· Auto igniting: Product is not selfigniting.

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

· Explosion limits:

Lower: 2.6 Vol %

Upper: 13 Vol %

· Vapor pressure at 20 °C: 245.3 hPa

· Density at 20 °C: 0.791 g/cm³

· 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 at 20 °C: 32 mPas

Kinematic: Not determined.

· Solvent content:

Organic solvents: 99.8 %

Solids content: 0.2 %

· Other information: No further relevant information available.

10 Stability and reactivity

· Reactivity: No further relevant information available.

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Trade name: FDA Pesticide Standard GC no. 2 (1X1 mL)

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- **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:

67-64-1 acetone

Oral	LD50	5,800 mg/kg (rat)
Dermal	LD50	20,000 mg/kg (rabbit)

91465-08-6 lambda-cyhalothrin

Oral	LD50	56 mg/kg (rat)
Dermal	LD50	632 mg/kg (rat)

80844-07-1 etofenprox

Oral	LD50	>42,800 mg/kg (rat)
Dermal	LD50	>2,140 mg/kg (rat)

82657-04-3 bifenthrin

Oral	LD50	55 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rabbit)

· Primary irritant effect:

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

· **on the eye:** Irritating effect.

· **Sensitization:** No sensitizing effects known.

· Additional toxicological information:

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

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)

51630-58-1	fenvalerate	3
90-43-7	biphenyl-2-ol	3
118-74-1	hexachlorobenzene	2B

· NTP (National Toxicology Program)

118-74-1	hexachlorobenzene	R
----------	-------------------	---

12 Ecological information

· Toxicity

· **Aquatic toxicity:** No further relevant information available.

· **Persistence and degradability** No further relevant information available.

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Trade name: FDA Pesticide Standard GC no. 2 (1X1 mL)

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- **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 1 (Self-assessment): slightly hazardous for water
 Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **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 minimus Quantities | - |
| · UN-Number | |
| · DOT, TDG, IMDG, IATA | UN1090 |
| · UN proper shipping name | |
| · DOT | Acetone solution |
| · TDG | 1090 ACETONE solution, ENVIRONMENTALLY HAZARDOUS |
| · IMDG | ACETONE solution, MARINE POLLUTANT |
| · IATA | ACETONE solution |
| · Transport hazard class(es) | |
| · DOT, IATA | |
|  | |
| · Class | 3 Flammable liquids |
| · Label | 3 |
| · TDG, IMDG | |
|   | |
| · Class | 3 Flammable liquids |

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Trade name: FDA Pesticide Standard GC no. 2 (1X1 mL)

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· Label	3
· Packing group · DOT, TDG, IMDG, IATA	II
· Environmental hazards: · Marine pollutant: · Special marking (TDG):	Product contains environmentally hazardous substances: bifenthrin, lambda-cyhalothrin Symbol (fish and tree) Symbol (fish and tree)
· Special precautions for user · Danger code (Kemler): · EMS Number: · Stowage Category	Warning: Flammable liquids 33 F-E,S-D B
· 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: 5 L On cargo aircraft only: 60 L
· TDG · Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· IMDG · Limited quantities (LQ) · Excepted quantities (EQ)	1L Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· UN "Model Regulation":	UN 1090 ACETONE SOLUTION, 3, II, ENVIRONMENTALLY HAZARDOUS

15 Regulatory information

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

· Section 355 (extremely hazardous substances):

None of the ingredients is listed.

· Section 313 (Specific toxic chemical listings):

39515-41-8	alpha-cyano-3-phenoxybenzyl 2,2,3,3-tetramethylcyclopropanecarboxylate
51630-58-1	fenvalerate
90-43-7	biphenyl-2-ol
122-39-4	diphenylamine
118-74-1	hexachlorobenzene
82657-04-3	bifenthrin

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Safety Data Sheet

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Printing date 03/31/2019

Version Number 3

Reviewed on 03/31/2019

Trade name: FDA Pesticide Standard GC no. 2 (1X1 mL)

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· TSCA (Toxic Substances Control Act):

67-64-1	acetone
90-43-7	biphenyl-2-ol
122-39-4	diphenylamine
118-74-1	hexachlorobenzene

· Canadian substance listings:
· Canadian Domestic Substances List (DSL)

67-64-1	acetone
90-43-7	biphenyl-2-ol
122-39-4	diphenylamine
118-74-1	hexachlorobenzene
731-27-1	tolylfluanid (ISO)

· Canadian Ingredient Disclosure list (limit 0.1%)

None of the ingredients is listed.

· Canadian Ingredient Disclosure list (limit 1%)

All ingredients are listed.

· 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: regulatory@ultrasci.com

· Date of the latest revision of the safety data sheet 03/31/2019 / 2

· Abbreviations and acronyms:

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)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

· * Data compared to the previous version altered.

Safety Data Sheet

according to HPR, Schedule 1

Printing date 03/31/2019

Version Number 3

Reviewed on 03/31/2019

1 Identification

- **Product identifier**
- **Trade name:** FDA Pesticide Standard GC no. 3 (1X1 mL)
- **Part number:** PSM-101-C
- **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 identification

- **Classification of the substance or mixture**



GHS02 Flame

Flammable Liquids - Category 2

H225 Highly flammable liquid and vapour.



GHS07

Eye Irritation - Category 2A

H319 Causes serious eye irritation.

Specific Target Organ Toxicity - Single Exposure -
Category 3

H336 May cause drowsiness or dizziness.

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



GHS02



GHS07

- **Signal word** Danger
- **Hazard-determining components of labeling:**
acetone
- **Hazard statements**
Highly flammable liquid and vapour.
Causes serious eye irritation.
May cause drowsiness or dizziness.
- **Precautionary statements**
If medical advice is needed, have product container or label at hand.
Keep out of reach of children.
Read label before use.

(Contd. on page 2)

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Reviewed on 03/31/2019

Trade name: FDA Pesticide Standard GC no. 3 (1X1 mL)

(Contd. of page 1)

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Ground and bond container and receiving equipment.
Use explosion-proof [electrical/ventilating/lighting] equipment.
Use non-sparking tools.
Take actions to prevent static discharges.
Avoid breathing dust/fume/gas/mist/vapours/spray.
Wash thoroughly after handling.
Use only outdoors or in a well-ventilated area.
Wear protective gloves/protective clothing/eye protection/face protection.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
Continue rinsing.
Call a poison center/doctor if you feel unwell.
If eye irritation persists: Get medical advice/attention.
In case of fire: Use for extinction: CO₂, powder or water spray.
Store in a well-ventilated place. Keep container tightly closed.
Store in a well-ventilated place. Keep cool.
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



· **HMIS-ratings (scale 0 - 4)**



3 Composition/Information on ingredients

· **Chemical characterization: Mixtures**

· **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:**

67-64-1 acetone

99.748% w/w

4 First aid measures

· **Description of first aid measures**

· **General information:** Immediately remove any clothing soiled by the product.

· **After inhalation:** Supply fresh air; consult doctor in case of complaints.

· **After skin contact:** Immediately rinse with water.

· **After eye contact:**

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· **After swallowing:** If symptoms persist consult doctor.

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Safety Data Sheet

according to HPR, Schedule 1

Printing date 03/31/2019

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Reviewed on 03/31/2019

Trade name: FDA Pesticide Standard GC no. 3 (1X1 mL)

(Contd. of page 2)

- **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 Firefighting 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** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
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 item 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.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
- **Information about protection against explosions and fires:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
- **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.

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(Contd. on page 4)

Safety Data Sheet

according to HPR, Schedule 1

Printing date 03/31/2019

Version Number 3

Reviewed on 03/31/2019

Trade name: FDA Pesticide Standard GC no. 3 (1X1 mL)

(Contd. of page 3)

8 Exposure controls/ Personal protection

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

· **Control parameters**

· **Components with limit values that require monitoring at the workplace:**

67-64-1 acetone

EL	Short-term value: 500 ppm Long-term value: 250 ppm
EV	Short-term value: 750 ppm Long-term value: 500 ppm

· **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.

Avoid contact with the eyes.

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

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Safety Data Sheet

according to HPR, Schedule 1

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Reviewed on 03/31/2019

Trade name: FDA Pesticide Standard GC no. 3 (1X1 mL)

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9 Physical and chemical properties

· Information on basic physical and chemical properties

· General Information

· Appearance:

Form: Fluid

Color: Colorless

· Odor: Characteristic

· Odor threshold: Not determined.

· pH-value: Not determined.

· Change in condition

Melting point/Melting range: -94.7 °C

Boiling point/Boiling range: 55.8-56.6 °C

· Flash point: -17 °C

· Flammability (solid, gaseous): Not applicable.

· Ignition temperature: 465 °C

· Decomposition temperature: Not determined.

· Auto igniting: Product is not selfigniting.

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

· Explosion limits:

Lower: 2.6 Vol %

Upper: 13 Vol %

· Vapor pressure at 20 °C: 245.3 hPa

· Density at 20 °C: 0.791 g/cm³

· 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 at 20 °C: 32 mPas

Kinematic: Not determined.

· Solvent content:

Organic solvents: 99.7 %

Solids content: 0.2 %

· Other information: No further relevant information available.

10 Stability and reactivity

· Reactivity: No further relevant information available.

(Contd. on page 6)

Safety Data Sheet

according to HPR, Schedule 1

Printing date 03/31/2019

Version Number 3

Reviewed on 03/31/2019

Trade name: FDA Pesticide Standard GC no. 3 (1X1 mL)

(Contd. of page 5)

- **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:

67-64-1 acetone

Oral	LD50	5,800 mg/kg (rat)
Dermal	LD50	20,000 mg/kg (rabbit)

52918-63-5 deltamethrin (ISO)

Oral	LD50	9.36 mg/kg (rat)
Dermal	LD50	2,000 mg/kg (rabbit)

58-89-9 γ -HCH or γ -BHC

Oral	LD50	88 mg/kg (rat)
Dermal	LD50	900 mg/kg (rat)
Inhalative	LC50/4 h	1,560 mg/L (rat)

122453-73-0 chlorfenapyr

Oral	LD50	441 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rabbit)
Inhalative	LC50/4 h	1,900 mg/L (rat)

· Primary irritant effect:

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

· **on the eye:** Irritating effect.

· **Sensitization:** No sensitizing effects known.

· Additional toxicological information:

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

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)

52918-63-5	deltamethrin (ISO)	3
133-06-2	captan (ISO)	3
60-57-1	dieldrin (ISO)	3
58-89-9	γ -HCH or γ -BHC	1
72-43-5	methoxychlor	3

· NTP (National Toxicology Program)

58-89-9	γ -HCH or γ -BHC	R
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according to HPR, Schedule 1

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Reviewed on 03/31/2019

Trade name: FDA Pesticide Standard GC no. 3 (1X1 mL)

(Contd. of page 6)

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 1 (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **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 minimus Quantities | - |
| · UN-Number | |
| · DOT, TDG, IMDG, IATA | UN1090 |
| · UN proper shipping name | |
| · DOT | Acetone solution |
| · TDG | 1090 ACETONE solution, ENVIRONMENTALLY HAZARDOUS |
| · IMDG | ACETONE solution, MARINE POLLUTANT |
| · IATA | ACETONE solution |
| · Transport hazard class(es) | |
| · DOT, IATA | |
|  | |
| · Class | 3 Flammable liquids |

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according to HPR, Schedule 1

Printing date 03/31/2019

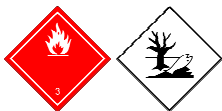
Version Number 3

Reviewed on 03/31/2019

Trade name: FDA Pesticide Standard GC no. 3 (1X1 mL)

(Contd. of page 7)

· **Label** 3
 · **TDG, IMDG**



· **Class** 3 Flammable liquids
 · **Label** 3

· **Packing group**
 · **DOT, TDG, IMDG, IATA** II

· **Environmental hazards:** Product contains environmentally hazardous substances:
 chlorfenapyr, deltamethrin (ISO)
 · **Marine pollutant:** Symbol (fish and tree)
 · **Special marking (TDG):** Symbol (fish and tree)

· **Special precautions for user** Warning: Flammable liquids
 · **Danger code (Kemler):** 33
 · **EMS Number:** F-E,S-D
 · **Stowage Category** B

· **Transport in bulk according to Annex II of MARPOL/73/78 and the IBC Code** Not applicable.

· **Transport/Additional information:**

· **DOT**
 · **Quantity limitations** On passenger aircraft/rail: 5 L
 On cargo aircraft only: 60 L

· **TDG**
 · **Excepted quantities (EQ)** Code: E2
 Maximum net quantity per inner packaging: 30 ml
 Maximum net quantity per outer packaging: 500 ml

· **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 1090 ACETONE SOLUTION, 3, II, ENVIRONMENTALLY HAZARDOUS

15 Regulatory information

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

· **Section 355 (extremely hazardous substances):**

58-89-9 γ -HCH or γ -BHC

54-11-5 nicotine

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Safety Data Sheet

according to HPR, Schedule 1

Printing date 03/31/2019

Version Number 3

Reviewed on 03/31/2019

Trade name: FDA Pesticide Standard GC no. 3 (1X1 mL)

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· Section 313 (Specific toxic chemical listings):

133-07-3	folpet (ISO)
133-06-2	captan (ISO)
58-89-9	γ -HCH or γ -BHC
72-43-5	methoxychlor
2303-17-5	tri-allate (ISO)
54-11-5	nicotine

· TSCA (Toxic Substances Control Act):

67-64-1	acetone
133-07-3	folpet (ISO)
133-06-2	captan (ISO)
58-89-9	γ -HCH or γ -BHC
54-11-5	nicotine
33629-47-9	Butralin

· Canadian substance listings:
· Canadian Domestic Substances List (DSL)

67-64-1	acetone
133-07-3	folpet (ISO)
133-06-2	captan (ISO)
58-89-9	γ -HCH or γ -BHC
113-48-4	MGK-264 (mixed, total)
72-43-5	methoxychlor
54-11-5	nicotine

· Canadian Ingredient Disclosure list (limit 0.1%)

None of the ingredients is listed.

· Canadian Ingredient Disclosure list (limit 1%)

All ingredients are listed.

· 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: regulatory@ultrasci.com

· Date of the latest revision of the safety data sheet 03/31/2019 / 2

· Abbreviations and acronyms:

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)

LC50: Lethal concentration, 50 percent

(Contd. on page 10)

Safety Data Sheet

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Printing date 03/31/2019

Version Number 3

Reviewed on 03/31/2019

Trade name: FDA Pesticide Standard GC no. 3 (1X1 mL)

LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative

(Contd. of page 9)

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

CA

Safety Data Sheet

according to HPR, Schedule 1

Printing date 03/31/2019

Version Number 3

Reviewed on 03/31/2019

1 Identification

- **Product identifier**
- **Trade name:** FDA Pesticide Standard GC no. 4 (1X1 mL)
- **Part number:** PSM-101-D
- **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 identification

- **Classification of the substance or mixture**



GHS02 Flame

Flammable Liquids - Category 2

H225 Highly flammable liquid and vapour.



GHS07

Eye Irritation - Category 2A

H319 Causes serious eye irritation.

Specific Target Organ Toxicity - Single Exposure -
Category 3

H336 May cause drowsiness or dizziness.

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



GHS02 GHS07

- **Signal word** Danger
- **Hazard-determining components of labeling:**
acetone
- **Hazard statements**
Highly flammable liquid and vapour.
Causes serious eye irritation.
May cause drowsiness or dizziness.
- **Precautionary statements**
If medical advice is needed, have product container or label at hand.
Keep out of reach of children.
Read label before use.

(Contd. on page 2)



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Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Ground and bond container and receiving equipment.
Use explosion-proof [electrical/ventilating/lighting] equipment.
Use non-sparking tools.
Take actions to prevent static discharges.
Avoid breathing dust/fume/gas/mist/vapours/spray.
Wash thoroughly after handling.
Use only outdoors or in a well-ventilated area.
Wear protective gloves/protective clothing/eye protection/face protection.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
Continue rinsing.
Call a poison center/doctor if you feel unwell.
If eye irritation persists: Get medical advice/attention.
In case of fire: Use for extinction: CO₂, powder or water spray.
Store in a well-ventilated place. Keep container tightly closed.
Store in a well-ventilated place. Keep cool.
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.

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

Health = 2
Fire = 3
Reactivity = 0

· HMIS-ratings (scale 0 - 4)

Health = 2
Fire = 3
Reactivity = 0

3 Composition/Information on ingredients

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

67-64-1 acetone

99.773% w/w

4 First aid measures

· Description of first aid measures**· General information:** Immediately remove any clothing soiled by the product.**· After inhalation:** Supply fresh air; consult doctor in case of complaints.**· After skin contact:** Immediately rinse with water.**· After eye contact:**

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· After swallowing: If symptoms persist consult doctor.

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(Contd. of page 2)

- **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 Firefighting 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** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
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 item 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.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
- **Information about protection against explosions and fires:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
- **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.

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(Contd. on page 4)

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Trade name: FDA Pesticide Standard GC no. 4 (1X1 mL)

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8 Exposure controls/ Personal protection

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

· **Control parameters**

· **Components with limit values that require monitoring at the workplace:**

67-64-1 acetone

EL	Short-term value: 500 ppm Long-term value: 250 ppm
EV	Short-term value: 750 ppm Long-term value: 500 ppm

· **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.

Avoid contact with the eyes.

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

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Trade name: FDA Pesticide Standard GC no. 4 (1X1 mL)

(Contd. of page 4)

9 Physical and chemical properties

· Information on basic physical and chemical properties

· General Information

· Appearance:

Form: Fluid

Color: Colorless

· Odor: Characteristic

· Odor threshold: Not determined.

· pH-value: Not determined.

· Change in condition

Melting point/Melting range: -94.7 °C

Boiling point/Boiling range: 55.8-56.6 °C

· Flash point: -17 °C

· Flammability (solid, gaseous): Not applicable.

· Ignition temperature: 465 °C

· Decomposition temperature: Not determined.

· Auto igniting: Product is not selfigniting.

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

· Explosion limits:

Lower: 2.6 Vol %

Upper: 13 Vol %

· Vapor pressure at 20 °C: 245.3 hPa

· Density at 20 °C: 0.791 g/cm³

· 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 at 20 °C: 32 mPas

Kinematic: Not determined.

· Solvent content:

Organic solvents: 99.8 %

Solids content: 0.1 %

· Other information: No further relevant information available.

10 Stability and reactivity

· Reactivity: No further relevant information available.

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Trade name: FDA Pesticide Standard GC no. 4 (1X1 mL)

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- **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:**

67-64-1 acetone

Oral	LD50	5,800 mg/kg (rat)
Dermal	LD50	20,000 mg/kg (rabbit)

13593-03-8 quinalphos (ISO)

Oral	LD50	26 mg/kg (rat)
Dermal	LD50	300 mg/kg (rat)
Inhalative	LC50/4 h	330 mg/L (mouse)

55-38-9 fenthion (ISO)

Oral	LD50	180 mg/kg (rat)
Dermal	LD50	330 mg/kg (rat)
Inhalative	LC50/4 h	800 mg/L (rat)

- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** Irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Irritant

- **Carcinogenic categories**

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

None of the ingredients is listed.

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

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 1 (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **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 minimus Quantities | - |
| · UN-Number | UN1090 |
| · DOT, TDG, IMDG, IATA | UN1090 |
| · UN proper shipping name | Acetone solution |
| · DOT | 1090 ACETONE solution |
| · TDG | ACETONE solution, MARINE POLLUTANT |
| · IMDG | ACETONE solution |
| · IATA | ACETONE solution |
| · Transport hazard class(es) | |
| · DOT, IATA | |
|  | |
| · Class | 3 Flammable liquids |
| · Label | 3 |
| · TDG, IMDG | |
|   | |
| · Class | 3 Flammable liquids |
| · Label | 3 |
| · Packing group | |
| · DOT, TDG, IMDG, IATA | II |

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· Environmental hazards:	Product contains environmentally hazardous substances: quinalphos (ISO)
· Marine pollutant:	Symbol (fish and tree)
· Special marking (TDG):	Symbol (fish and tree)
· Special precautions for user	Warning: Flammable liquids
· Danger code (Kemler):	33
· EMS Number:	F-E,S-D
· Stowage Category	B
· 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: 5 L On cargo aircraft only: 60 L
· TDG	
· Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· 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 1090 ACETONE SOLUTION, 3, II

15 Regulatory information

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

· **Section 355 (extremely hazardous substances):**

None of the ingredients is listed.

· **Section 313 (Specific toxic chemical listings):**

55-38-9	fenthion (ISO)
78-48-8	S,S,S-tributylphosphorotrithioate
42874-03-3	oxyfluorfen
40487-42-1	pendimethalin (ISO)
23950-58-5	propyzamide (ISO)
69409-94-5	fluvalinate

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

67-64-1	acetone
115-86-6	triphenyl phosphate
78-48-8	S,S,S-tributylphosphorotrithioate

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Trade name: FDA Pesticide Standard GC no. 4 (1X1 mL)

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5915-41-3	terbuthylazine
91-53-2	ethoxyquin
50563-36-5	2-chloro-N-(2,6-dimethylphenyl)-N-(2-methoxyethyl)acetamide

· **Canadian substance listings:**

· **Canadian Domestic Substances List (DSL)**

67-64-1	acetone
115-86-6	triphenyl phosphate
1085-98-9	dichlofluanid (ISO)
91-53-2	ethoxyquin

· **Canadian Ingredient Disclosure list (limit 0.1%)**

None of the ingredients is listed.

· **Canadian Ingredient Disclosure list (limit 1%)**

All ingredients are listed.

· **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:** regulatory@ultrasci.com

· **Date of the latest revision of the safety data sheet** 03/31/2019 / 2

· **Abbreviations and acronyms:**

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)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

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

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Safety Data Sheet

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Version Number 4

Reviewed on 03/31/2019

1 Identification

- **Product identifier**
- **Trade name:** FDA Pesticide Standard GC no. 5 (1X1 mL)
- **Part number:** PSM-101-E
- **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 identification

- **Classification of the substance or mixture**



GHS02 Flame

Flammable Liquids - Category 2

H225 Highly flammable liquid and vapour.



GHS07

Eye Irritation - Category 2A

H319 Causes serious eye irritation.

Specific Target Organ Toxicity - Single Exposure -
Category 3

H336 May cause drowsiness or dizziness.

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



GHS02



GHS07

- **Signal word** Danger
- **Hazard-determining components of labeling:**
acetone
- **Hazard statements**
Highly flammable liquid and vapour.
Causes serious eye irritation.
May cause drowsiness or dizziness.
- **Precautionary statements**
If medical advice is needed, have product container or label at hand.
Keep out of reach of children.
Read label before use.

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Trade name: FDA Pesticide Standard GC no. 5 (1X1 mL)

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Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Ground and bond container and receiving equipment.
Use explosion-proof [electrical/ventilating/lighting] equipment.
Use non-sparking tools.
Take actions to prevent static discharges.
Avoid breathing dust/fume/gas/mist/vapours/spray.
Wash thoroughly after handling.
Use only outdoors or in a well-ventilated area.
Wear protective gloves/protective clothing/eye protection/face protection.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
Continue rinsing.
Call a poison center/doctor if you feel unwell.
If eye irritation persists: Get medical advice/attention.
In case of fire: Use for extinction: CO₂, powder or water spray.
Store in a well-ventilated place. Keep container tightly closed.
Store in a well-ventilated place. Keep cool.
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



· **HMIS-ratings (scale 0 - 4)**



3 Composition/Information on ingredients

· **Chemical characterization: Mixtures**

· **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:**

67-64-1	acetone	99.761% w/w
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4 First aid measures

· **Description of first aid measures**

· **General information:** Immediately remove any clothing soiled by the product.

· **After inhalation:** Supply fresh air; consult doctor in case of complaints.

· **After skin contact:** Immediately rinse with water.

· **After eye contact:**

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· **After swallowing:** If symptoms persist consult doctor.

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Trade name: FDA Pesticide Standard GC no. 5 (1X1 mL)

(Contd. of page 2)

- **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 Firefighting 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** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
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 item 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.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
- **Information about protection against explosions and fires:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
- **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.

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(Contd. on page 4)

Safety Data Sheet

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Printing date 03/31/2019

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Reviewed on 03/31/2019

Trade name: FDA Pesticide Standard GC no. 5 (1X1 mL)

(Contd. of page 3)

8 Exposure controls/ Personal protection

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

· **Control parameters**

· **Components with limit values that require monitoring at the workplace:**

67-64-1 acetone

EL	Short-term value: 500 ppm Long-term value: 250 ppm
EV	Short-term value: 750 ppm Long-term value: 500 ppm

· **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.

Avoid contact with the eyes.

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

CA

(Contd. on page 5)



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Reviewed on 03/31/2019

Trade name: FDA Pesticide Standard GC no. 5 (1X1 mL)

(Contd. of page 4)

9 Physical and chemical properties

· Information on basic physical and chemical properties

· General Information

· Appearance:

Form: Fluid

Color: Colorless

· Odor: Characteristic

· Odor threshold: Not determined.

· pH-value: Not determined.

· Change in condition

Melting point/Melting range: -94.7 °C

Boiling point/Boiling range: 55.8-56.6 °C

· Flash point: -17 °C

· Flammability (solid, gaseous): Not applicable.

· Ignition temperature: 465 °C

· Decomposition temperature: Not determined.

· Auto igniting: Product is not selfigniting.

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

· Explosion limits:

Lower: 2.6 Vol %

Upper: 13 Vol %

· Vapor pressure at 20 °C: 245.3 hPa

· Density at 20 °C: 0.791 g/cm³

· 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 at 20 °C: 32 mPas

Kinematic: Not determined.

· Solvent content:

Organic solvents: 99.8 %

Solids content: 0.2 %

· Other information: No further relevant information available.

10 Stability and reactivity

· Reactivity: No further relevant information available.

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Safety Data Sheet

according to HPR, Schedule 1

Printing date 03/31/2019

Version Number 4

Reviewed on 03/31/2019

Trade name: FDA Pesticide Standard GC no. 5 (1X1 mL)

(Contd. of page 5)

- **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:

67-64-1 acetone

Oral	LD50	5,800 mg/kg (rat)
Dermal	LD50	20,000 mg/kg (rabbit)

1897-45-6 chlorothalonil (ISO)

Oral	LD50	10,000 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rabbit)
Inhalative	LC50/4 h	220 mg/L (rat)

120068-37-3 fipronil

Oral	LD50	97 mg/kg (rat)
Dermal	LD50	354 mg/kg (rabbit)
Inhalative	LC50/4 h	680 mg/L (rat)

10453-86-8 resmethrin (ISO)

Oral	LD50	1,244 mg/kg (rat)
Dermal	LD50	2,500 mg/kg (rabbit)

22224-92-6 fenamiphos (ISO)

Oral	LD50	10 mg/kg (rat)
Dermal	LD50	80 mg/kg (rat)
Inhalative	LC50/4 h	91 mg/L (rat)

68359-37-5 cyfluthrin (ISO)

Oral	LD50	900 mg/kg (rat)
Dermal	LD50	>5,000 mg/kg (rat)
Inhalative	LC50/4 h	530 mg/L (rat)

· Primary irritant effect:

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

· **on the eye:** Irritating effect.

· **Sensitization:** No sensitizing effects known.

· Additional toxicological information:

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

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)

1897-45-6	chlorothalonil (ISO)
-----------	----------------------

	2B
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Safety Data Sheet

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Trade name: FDA Pesticide Standard GC no. 5 (1X1 mL)

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115-32-2	dicofol (ISO)	3
72-20-8	endrin (ISO)	3
1024-57-3	heptachlor epoxide - isomer B	2B
122-34-9	simazine (ISO)	3

· **NTP (National Toxicology Program)**

None of the ingredients is listed.

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 1 (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **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 minimus Quantities	-
· UN-Number	
· DOT, TDG, IMDG, IATA	UN1090
· UN proper shipping name	
· DOT	Acetone solution
· TDG	1090 ACETONE solution, ENVIRONMENTALLY HAZARDOUS
· IMDG	ACETONE solution, MARINE POLLUTANT
· IATA	ACETONE solution

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Trade name: FDA Pesticide Standard GC no. 5 (1X1 mL)

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· **Transport hazard class(es)**

· **DOT, IATA**

· **Class**

3 Flammable liquids

· **Label**

3

· **TDG, IMDG**

· **Class**

3 Flammable liquids

· **Label**

3

· **Packing group**

· **DOT, TDG, IMDG, IATA**

II

· **Environmental hazards:**

Product contains environmentally hazardous substances: cyfluthrin (ISO), resmethrin (ISO)

· **Marine pollutant:**

Symbol (fish and tree)

· **Special marking (TDG):**

Symbol (fish and tree)

· **Special precautions for user**

Warning: Flammable liquids

· **Danger code (Kemler):**

33

· **EMS Number:**

F-E,S-D

· **Stowage Category**

B

· **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: 5 L

On cargo aircraft only: 60 L

· **TDG**

· **Excepted quantities (EQ)**

Code: E2

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 500 ml

· **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 1090 ACETONE SOLUTION, 3, II, ENVIRONMENTALLY HAZARDOUS

CA

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Safety Data Sheet

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Reviewed on 03/31/2019

Trade name: FDA Pesticide Standard GC no. 5 (1X1 mL)

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15 Regulatory information

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

· Sara

· **Section 355 (extremely hazardous substances):**

72-20-8	endrin (ISO)
22224-92-6	fenamiphos (ISO)

· **Section 313 (Specific toxic chemical listings):**

1897-45-6	chlorothalonil (ISO)
115-32-2	dicofol (ISO)
10453-86-8	resmethrin (ISO)
1861-40-1	benfluralin
1134-23-2	cycloate
709-98-8	propanil (ISO)
122-34-9	simazine (ISO)
7696-12-0	tetramethrin
68359-37-5	cyfluthrin (ISO)

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

67-64-1	acetone
1897-45-6	chlorothalonil (ISO)
122-34-9	simazine (ISO)
24157-81-1	2,6-diisopropylnaphthalene

· **Canadian substance listings:**

· **Canadian Domestic Substances List (DSL)**

67-64-1	acetone
1897-45-6	chlorothalonil (ISO)
10453-86-8	resmethrin (ISO)

· **Canadian Ingredient Disclosure list (limit 0.1%)**

None of the ingredients is listed.

· **Canadian Ingredient Disclosure list (limit 1%)**

All ingredients are listed.

· **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:** regulatory@ultrasci.com

· **Date of the latest revision of the safety data sheet** 03/31/2019 / 3

· **Abbreviations and acronyms:**

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

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Trade name: FDA Pesticide Standard GC no. 5 (1X1 mL)

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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)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative

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

CA

Safety Data Sheet

according to HPR, Schedule 1

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Version Number 4

Reviewed on 03/31/2019

1 Identification

- **Product identifier**
- **Trade name:** FDA Pesticide Standard LC no. 1 (1X1 mL)
- **Part number:** PSM-101-F
- **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 identification

- **Classification of the substance or mixture**



GHS02 Flame

Flammable Liquids - Category 2 H225 Highly flammable liquid and vapour.



GHS07

Acute Toxicity (Oral) - Category 4 H302 Harmful if swallowed.

Eye Irritation - Category 2A H319 Causes serious eye irritation.

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



GHS02 GHS07

- **Signal word** Danger
- **Hazard-determining components of labeling:**
acetonitrile
- **Hazard statements**
Highly flammable liquid and vapour.
Harmful if swallowed.
Causes serious eye irritation.
- **Precautionary statements**
If medical advice is needed, have product container or label at hand.
Keep out of reach of children.
Read label before use.
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

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Reviewed on 03/31/2019

Trade name: FDA Pesticide Standard LC no. 1 (1X1 mL)

(Contd. of page 1)

Keep container tightly closed.
 Ground and bond container and receiving equipment.
 Use explosion-proof [electrical/ventilating/lighting] equipment.
 Use non-sparking tools.
 Take actions to prevent static discharges.
 Wash thoroughly after handling.
 Do not eat, drink or smoke when using this product.
 Wear protective gloves/protective clothing/eye protection/face protection.
 If swallowed: Call a poison center/doctor if you feel unwell.
 Rinse mouth.
 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
 Continue rinsing.
 If eye irritation persists: Get medical advice/attention.
 In case of fire: Use for extinction: CO₂, powder or water spray.
 Store in a well-ventilated place. Keep cool.
 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



· **HMIS-ratings (scale 0 - 4)**



3 Composition/Information on ingredients

· **Chemical characterization: Mixtures**

· **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:**

75-05-8	acetonitrile	99.733% w/w
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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.

· **After inhalation:** Supply fresh air; consult doctor in case of complaints.

· **After skin contact:** Immediately rinse with water.

· **After eye contact:**

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· **After swallowing:** Immediately call a doctor.

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Safety Data Sheet

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Reviewed on 03/31/2019

Trade name: FDA Pesticide Standard LC no. 1 (1X1 mL)

(Contd. of page 2)

- **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 Firefighting 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** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
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 item 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.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling** No special precautions are necessary if used correctly.
- **Information about protection against explosions and fires:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
- **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.

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Reviewed on 03/31/2019

Trade name: FDA Pesticide Standard LC no. 1 (1X1 mL)

(Contd. of page 3)

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8 Exposure controls/ Personal protection

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

· **Control parameters**

· **Components with limit values that require monitoring at the workplace:**

75-05-8 acetonitrile

EL	Long-term value: 20 ppm Skin
EV	Long-term value: 20 ppm Skin

· **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.

Avoid contact with the eyes.

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

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Trade name: FDA Pesticide Standard LC no. 1 (1X1 mL)

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9 Physical and chemical properties

· Information on basic physical and chemical properties**· General Information****· Appearance:****Form:** Fluid**Color:** Colorless**· Odor:** Aromatic**· Odor threshold:** Not determined.**· pH-value:** Not determined.**· Change in condition****Melting point/Melting range:** -46 °C**Boiling point/Boiling range:** 81 °C**· Flash point:** 2 °C**· Flammability (solid, gaseous):** Not applicable.**· Ignition temperature:** 525 °C**· Decomposition temperature:** Not determined.**· Auto igniting:** Product is not selfigniting.**· Danger of explosion:** Product is not explosive. However, formation of explosive air/vapor mixtures are possible.**· Explosion limits:****Lower:** 4.4 Vol %**Upper:** 16 Vol %**· Vapor pressure at 20 °C:** 0 hPa**· Density at 20 °C:** 0.786 g/cm³**· 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 at 20 °C:** 0.39 mPas**Kinematic:** Not determined.**· Solvent content:****Organic solvents:** 0.0 %**Solids content:** 0.3 %**· Other information** No further relevant information available.

10 Stability and reactivity

· Reactivity No further relevant information available.

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Reviewed on 03/31/2019

Trade name: FDA Pesticide Standard LC no. 1 (1X1 mL)

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- **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	1,324 mg/kg (rat)
Dermal	LD50	>2,005 mg/kg (rabbit)
Inhalative	LC50/4 h	3,597 mg/L (mouse)

75-05-8 acetonitrile

Oral	LD50	1,320 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rabbit)
Inhalative	LC50/4 h	3,587 mg/L (mouse)

16752-77-5 methomyl

Oral	LD50	17 mg/kg (rat)
Dermal	LD50	5,880 mg/kg (rabbit)

210880-92-5 clothianidin

Oral	LD50	>5,000 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rat)
Inhalative	LC50/4 h	>5,538 mg/L (rat)

· Primary irritant effect:

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

· **on the eye:** Irritating effect.

· **Sensitization:** No sensitizing effects known.

· Additional toxicological information:

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

Harmful

Irritant

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)

63-25-2	carbaryl (ISO)	3
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· NTP (National Toxicology Program)

None of the ingredients is listed.

CA

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Trade name: FDA Pesticide Standard LC no. 1 (1X1 mL)

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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.
- **Additional ecological information:**
- **General notes:**
 Water hazard class 2 (Self-assessment): hazardous for water
 Do not allow product to reach ground water, water course or sewage system.
 Danger to drinking water if even 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 minimus Quantities | - |
| · UN-Number | |
| · DOT, TDG, IMDG, IATA | UN1648 |
| · UN proper shipping name | |
| · DOT | Acetonitrile solution |
| · TDG | 1648 ACETONITRILE solution, ENVIRONMENTALLY HAZARDOUS |
| · IMDG, IATA | ACETONITRILE solution |
| · Transport hazard class(es) | |
| · DOT, IMDG, IATA | |
|  | |
| · Class | 3 Flammable liquids |

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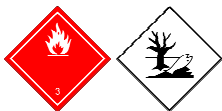
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Reviewed on 03/31/2019

Trade name: FDA Pesticide Standard LC no. 1 (1X1 mL)

(Contd. of page 7)

- **Label** 3
- **TDG (Transport dangerous goods):**



- **Class** 3 Flammable liquids
- **Label** 3

- **Packing group**
- **DOT, TDG, IMDG, IATA** II

- **Environmental hazards:**
- **Special marking (TDG):** Symbol (fish and tree)

- **Special precautions for user** Warning: Flammable liquids
- **Danger code (Kemler):** 33
- **EMS Number:** F-E,S-D
- **Stowage Category** B

- **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: 5 L
On cargo aircraft only: 60 L

- **TDG**
- **Excepted quantities (EQ)** Code: E2
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 500 ml

- **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 1648 ACETONITRILE SOLUTION, 3, II,
ENVIRONMENTALLY HAZARDOUS

15 Regulatory information

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

- **Section 355 (extremely hazardous substances):**

1563-66-2	carbofuran (ISO)
23135-22-0	N',N'-dimethylcarbamoyl(methylthio)methylenamine N-methylcarbamate
16752-77-5	methomyl
10265-92-6	methamidophos (ISO)

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Reviewed on 03/31/2019

Trade name: FDA Pesticide Standard LC no. 1 (1X1 mL)

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· Section 313 (Specific toxic chemical listings):

75-05-8	acetonitrile
35554-44-0	imazalil (ISO)
30560-19-1	acephate (ISO)
1563-66-2	carbofuran (ISO)
35367-38-5	diflubenzuron
63-25-2	carbaryl (ISO)
148-79-8	thiabendzol (ISO)

· TSCA (Toxic Substances Control Act):

75-05-8	acetonitrile
1563-66-2	carbofuran (ISO)
35367-38-5	diflubenzuron
63-25-2	carbaryl (ISO)
148-79-8	thiabendzol (ISO)

· Canadian substance listings:
· Canadian Domestic Substances List (DSL)

75-05-8	acetonitrile
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· Canadian Ingredient Disclosure list (limit 0.1%)

All ingredients are listed.

· Canadian Ingredient Disclosure list (limit 1%)

None of the ingredients is listed.

· 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: regulatory@ultrasci.com

· Date of the latest revision of the safety data sheet 03/31/2019 / 3

· Abbreviations and acronyms:

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)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

· * Data compared to the previous version altered.

Safety Data Sheet

according to HPR, Schedule 1

Printing date 03/31/2019

Version Number 3

Reviewed on 03/31/2019

1 Identification

- **Product identifier**
- **Trade name:** FDA Pesticide Standard LC no. 2 (1X1 mL)
- **Part number:** PSM-101-G
- **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 identification

- **Classification of the substance or mixture**



GHS02 Flame

Flammable Liquids - Category 2 H225 Highly flammable liquid and vapour.



GHS07

Acute Toxicity (Oral) - Category 4 H302 Harmful if swallowed.

Eye Irritation - Category 2A H319 Causes serious eye irritation.

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



GHS02 GHS07

- **Signal word** Danger
- **Hazard-determining components of labeling:**
acetonitrile
- **Hazard statements**
Highly flammable liquid and vapour.
Harmful if swallowed.
Causes serious eye irritation.
- **Precautionary statements**
If medical advice is needed, have product container or label at hand.
Keep out of reach of children.
Read label before use.
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

(Contd. on page 2)

Safety Data Sheet

according to HPR, Schedule 1

Printing date 03/31/2019

Version Number 3

Reviewed on 03/31/2019

Trade name: FDA Pesticide Standard LC no. 2 (1X1 mL)

(Contd. of page 1)

Keep container tightly closed.
 Ground and bond container and receiving equipment.
 Use explosion-proof [electrical/ventilating/lighting] equipment.
 Use non-sparking tools.
 Take actions to prevent static discharges.
 Wash thoroughly after handling.
 Do not eat, drink or smoke when using this product.
 Wear protective gloves/protective clothing/eye protection/face protection.
 If swallowed: Call a poison center/doctor if you feel unwell.
 Rinse mouth.
 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
 Continue rinsing.
 If eye irritation persists: Get medical advice/attention.
 In case of fire: Use for extinction: CO₂, powder or water spray.
 Store in a well-ventilated place. Keep cool.
 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



· **HMIS-ratings (scale 0 - 4)**



3 Composition/Information on ingredients

· **Chemical characterization: Mixtures**

· **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:**

75-05-8	acetonitrile	99.746% w/w
---------	--------------	-------------

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.

· **After inhalation:** Supply fresh air; consult doctor in case of complaints.

· **After skin contact:** Immediately rinse with water.

· **After eye contact:**

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· **After swallowing:** Immediately call a doctor.

(Contd. on page 3)

Safety Data Sheet

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Version Number 3

Reviewed on 03/31/2019

Trade name: FDA Pesticide Standard LC no. 2 (1X1 mL)

(Contd. of page 2)

- **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 Firefighting 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** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
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 item 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.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling** No special precautions are necessary if used correctly.
- **Information about protection against explosions and fires:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
- **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.

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Trade name: FDA Pesticide Standard LC no. 2 (1X1 mL)

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8 Exposure controls/ Personal protection

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

· **Control parameters**

· **Components with limit values that require monitoring at the workplace:**

75-05-8 acetonitrile

EL	Long-term value: 20 ppm Skin
EV	Long-term value: 20 ppm Skin

· **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.

Avoid contact with the eyes.

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

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9 Physical and chemical properties

· Information on basic physical and chemical properties	
· General Information	
· Appearance:	
Form:	Fluid
Color:	Colorless
· Odor:	Aromatic
· Odor threshold:	Not determined.
· pH-value:	Not determined.
· Change in condition	
Melting point/Melting range:	-46 °C
Boiling point/Boiling range:	81 °C
· Flash point:	2 °C
· Flammability (solid, gaseous):	Not applicable.
· Ignition temperature:	525 °C
· Decomposition temperature:	Not determined.
· Auto igniting:	Product is not selfigniting.
· Danger of explosion:	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
· Explosion limits:	
Lower:	4.4 Vol %
Upper:	16 Vol %
· Vapor pressure at 20 °C:	0 hPa
· Density at 20 °C:	0.786 g/cm ³
· 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 at 20 °C:	0.39 mPas
Kinematic:	Not determined.
· Solvent content:	
Solids content:	0.2 %
· 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.

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Trade name: FDA Pesticide Standard LC no. 2 (1X1 mL)

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- **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	1,323 mg/kg (rat)
Dermal	LD50	>2,005 mg/kg (rabbit)
Inhalative	LC50/4 h	3,596 mg/L (mouse)

75-05-8 acetonitrile

Oral	LD50	1,320 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rabbit)
Inhalative	LC50/4 h	3,587 mg/L (mouse)

101463-69-8 flufenoxuron

Oral	LD50	>3,000 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rat)
Inhalative	LC50/4 h	5,000 mg/L (rat)

330-54-1 diuron(ISO)

Oral	LD50	1,017 mg/kg (rat)
Dermal	LD50	>5,000 mg/kg (rat)
Inhalative	LC50/4 h	>5.05 mg/L (rat)

14816-18-3 phoxim (ISO)

Oral	LD50	300 mg/kg (rat)
Dermal	LD50	1,000 mg/kg (rat)

- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** Irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Harmful
Irritant

- **Carcinogenic categories**

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

None of the ingredients is listed.

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· NTP (National Toxicology Program)

None of the ingredients is listed.

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 2 (Self-assessment): hazardous for water
 Do not allow product to reach ground water, water course or sewage system.
 Danger to drinking water if even 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 minimus Quantities | - |
| · UN-Number | |
| · DOT, TDG, IMDG, IATA | UN1648 |
| · UN proper shipping name | |
| · DOT | Acetonitrile solution |
| · TDG | 1648 ACETONITRILE solution, ENVIRONMENTALLY HAZARDOUS |
| · IMDG | ACETONITRILE solution, MARINE POLLUTANT |
| · IATA | ACETONITRILE solution |

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Trade name: FDA Pesticide Standard LC no. 2 (1X1 mL)

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· **Transport hazard class(es)**

· **DOT, IATA**

· **Class**

3 Flammable liquids

· **Label**

3

· **TDG, IMDG**

· **Class**

3 Flammable liquids

· **Label**

3

· **Packing group**

· **DOT, TDG, IMDG, IATA**

II

· **Environmental hazards:**

Product contains environmentally hazardous substances: 4-[2-[4-(1,1-dimethylethyl)phenyl]-ethoxy]quinazoline, flufenoxuron

· **Marine pollutant:**

Symbol (fish and tree)

· **Special marking (TDG):**

Symbol (fish and tree)

· **Special precautions for user**

Warning: Flammable liquids

· **Danger code (Kemler):**

33

· **EMS Number:**

F-E,S-D

· **Stowage Category**

B

· **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: 5 L

On cargo aircraft only: 60 L

· **TDG**

· **Excepted quantities (EQ)**

Code: E2

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 500 ml

· **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 1648 ACETONITRILE SOLUTION, 3, II,
ENVIRONMENTALLY HAZARDOUS

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Trade name: FDA Pesticide Standard LC no. 2 (1X1 mL)

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15 Regulatory information

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

· Sara

· **Section 355 (extremely hazardous substances):**

None of the ingredients is listed.

· **Section 313 (Specific toxic chemical listings):**

75-05-8	acetonitrile
---------	--------------

22781-23-3	bendiocarb (ISO)
------------	------------------

330-54-1	diuron(ISO)
----------	-------------

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

75-05-8	acetonitrile
---------	--------------

330-54-1	diuron(ISO)
----------	-------------

· **Canadian substance listings:**

· **Canadian Domestic Substances List (DSL)**

75-05-8	acetonitrile
---------	--------------

22781-23-3	bendiocarb (ISO)
------------	------------------

330-54-1	diuron(ISO)
----------	-------------

83-79-4	rotenone
---------	----------

14816-18-3	phoxim (ISO)
------------	--------------

· **Canadian Ingredient Disclosure list (limit 0.1%)**

All ingredients are listed.

· **Canadian Ingredient Disclosure list (limit 1%)**

None of the ingredients is listed.

· **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:** regulatory@ultrasci.com

· **Date of the latest revision of the safety data sheet** 03/31/2019 / 2

· **Abbreviations and acronyms:**

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)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

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

Safety Data Sheet

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Printing date 03/31/2019

Version Number 4

Reviewed on 03/31/2019

1 Identification

- **Product identifier**
- **Trade name:** FDA Pesticide Standard LC no. 3 (1X1 mL)
- **Part number:** PSM-101-H
- **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 identification

- **Classification of the substance or mixture**



GHS02 Flame

Flammable Liquids - Category 2 H225 Highly flammable liquid and vapour.



GHS07

Acute Toxicity (Oral) - Category 4 H302 Harmful if swallowed.

Eye Irritation - Category 2A H319 Causes serious eye irritation.

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



GHS02 GHS07

- **Signal word** Danger
- **Hazard-determining components of labeling:**
acetonitrile
- **Hazard statements**
Highly flammable liquid and vapour.
Harmful if swallowed.
Causes serious eye irritation.
- **Precautionary statements**
If medical advice is needed, have product container or label at hand.
Keep out of reach of children.
Read label before use.
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

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Keep container tightly closed.
 Ground and bond container and receiving equipment.
 Use explosion-proof [electrical/ventilating/lighting] equipment.
 Use non-sparking tools.
 Take actions to prevent static discharges.
 Wash thoroughly after handling.
 Do not eat, drink or smoke when using this product.
 Wear protective gloves/protective clothing/eye protection/face protection.
 If swallowed: Call a poison center/doctor if you feel unwell.
 Rinse mouth.
 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
 Continue rinsing.
 If eye irritation persists: Get medical advice/attention.
 In case of fire: Use for extinction: CO₂, powder or water spray.
 Store in a well-ventilated place. Keep cool.
 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



· **HMIS-ratings (scale 0 - 4)**



3 Composition/Information on ingredients

· **Chemical characterization: Mixtures**

· **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:**

75-05-8	acetonitrile	99.771% w/w
---------	--------------	-------------

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.

· **After inhalation:** Supply fresh air; consult doctor in case of complaints.

· **After skin contact:** Immediately rinse with water.

· **After eye contact:**

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· **After swallowing:** Immediately call a doctor.

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Trade name: FDA Pesticide Standard LC no. 3 (1X1 mL)

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- **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 Firefighting 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** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
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 item 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.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling** No special precautions are necessary if used correctly.
- **Information about protection against explosions and fires:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
- **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.

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Trade name: FDA Pesticide Standard LC no. 3 (1X1 mL)

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8 Exposure controls/ Personal protection

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

· **Control parameters**

· **Components with limit values that require monitoring at the workplace:**

75-05-8 acetonitrile

EL	Long-term value: 20 ppm Skin
EV	Long-term value: 20 ppm Skin

· **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.

Avoid contact with the eyes.

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

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Trade name: FDA Pesticide Standard LC no. 3 (1X1 mL)

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9 Physical and chemical properties

· Information on basic physical and chemical properties	
· General Information	
· Appearance:	
Form:	Fluid
Color:	Colorless
· Odor:	Aromatic
· Odor threshold:	Not determined.
· pH-value:	Not determined.
· Change in condition	
Melting point/Melting range:	-46 °C
Boiling point/Boiling range:	81 °C
· Flash point:	2 °C
· Flammability (solid, gaseous):	Not applicable.
· Ignition temperature:	525 °C
· Decomposition temperature:	Not determined.
· Auto igniting:	Product is not selfigniting.
· Danger of explosion:	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
· Explosion limits:	
Lower:	4.4 Vol %
Upper:	16 Vol %
· Vapor pressure at 20 °C:	0 hPa
· Density at 20 °C:	0.786 g/cm ³
· 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 at 20 °C:	0.39 mPas
Kinematic:	Not determined.
· Solvent content:	
Solids content:	0.2 %
· 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.

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Trade name: FDA Pesticide Standard LC no. 3 (1X1 mL)

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- **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	1,323 mg/kg (rat)
Dermal	LD50	>2,005 mg/kg (rabbit)
Inhalative	LC50/4 h	3,595 mg/L (mouse)

75-05-8 acetonitrile

Oral	LD50	1,320 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rabbit)
Inhalative	LC50/4 h	3,587 mg/L (mouse)

13684-56-5 desmedipham

Oral	LD50	9,600 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rabbit)

- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** Irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Harmful
Irritant

- **Carcinogenic categories**

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

116-06-3	aldicarb (ISO)	3
----------	----------------	---

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

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 2 (Self-assessment): hazardous for water
 - Do not allow product to reach ground water, water course or sewage system.
 - Danger to drinking water if even 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 packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- **Not Regulated, De minimus Quantities** -
- **UN-Number**
- **DOT, TDG, IMDG, IATA** UN1648
- **UN proper shipping name**
- **DOT** Acetonitrile solution
- **TDG** 1648 ACETONITRILE solution, ENVIRONMENTALLY HAZARDOUS
- **IMDG** ACETONITRILE solution, MARINE POLLUTANT
- **IATA** ACETONITRILE solution
- **Transport hazard class(es)**
- **DOT, IATA**
- 
- **Class** 3 Flammable liquids
- **Label** 3
- **TDG, IMDG**
- 

- **Class** 3 Flammable liquids
- **Label** 3

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Trade name: FDA Pesticide Standard LC no. 3 (1X1 mL)

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· Packing group	
· DOT, TDG, IMDG, IATA	II
· Environmental hazards:	Product contains environmentally hazardous substances: ethyl[2-(4-phenoxyphenoxy)ethyl]carbamate
· Marine pollutant:	Symbol (fish and tree)
· Special marking (TDG):	Symbol (fish and tree)
· Special precautions for user	Warning: Flammable liquids
· Danger code (Kemler):	33
· EMS Number:	F-E,S-D
· Stowage Category	B
· 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: 5 L On cargo aircraft only: 60 L
· TDG	
· Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· 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 1648 ACETONITRILE SOLUTION, 3, II, ENVIRONMENTALLY HAZARDOUS

15 Regulatory information

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

· Section 355 (extremely hazardous substances):

116-06-3 | aldicarb (ISO)

· Section 313 (Specific toxic chemical listings):

75-05-8 | acetonitrile

72490-01-8 | ethyl[2-(4-phenoxyphenoxy)ethyl]carbamate

114-26-1 | propoxur (ISO)

116-06-3 | aldicarb (ISO)

34014-18-1 | tebuthiuron (ISO)

3383-96-8 | temephos

13684-56-5 | desmedipham

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Safety Data Sheet

according to HPR, Schedule 1

Printing date 03/31/2019

Version Number 4

Reviewed on 03/31/2019

Trade name: FDA Pesticide Standard LC no. 3 (1X1 mL)

(Contd. of page 8)

· TSCA (Toxic Substances Control Act):

75-05-8	acetonitrile
101-42-8	fenuron
116-06-3	aldicarb (ISO)
3383-96-8	temephos
3766-81-2	2-butylphenyl methylcarbamate

· Canadian substance listings:
· Canadian Domestic Substances List (DSL)

75-05-8	acetonitrile
114-26-1	propoxur (ISO)
101-42-8	fenuron

· Canadian Ingredient Disclosure list (limit 0.1%)

All ingredients are listed.

· Canadian Ingredient Disclosure list (limit 1%)

None of the ingredients is listed.

· 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: regulatory@ultrasci.com

· Date of the latest revision of the safety data sheet 03/31/2019 / 3

· Abbreviations and acronyms:

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)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

· * Data compared to the previous version altered.

Safety Data Sheet

according to HPR, Schedule 1

Printing date 03/31/2019

Version Number 3

Reviewed on 03/31/2019

1 Identification

- **Product identifier**
- **Trade name:** FDA Pesticide Standard LC no. 4 (1X1 mL)
- **Part number:** PSM-101-I
- **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 identification

- **Classification of the substance or mixture**



GHS02 Flame

Flammable Liquids - Category 2 H225 Highly flammable liquid and vapour.



GHS07

Acute Toxicity (Oral) - Category 4 H302 Harmful if swallowed.

Eye Irritation - Category 2A H319 Causes serious eye irritation.

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



GHS02 GHS07

- **Signal word** Danger
- **Hazard-determining components of labeling:**
acetonitrile
- **Hazard statements**
Highly flammable liquid and vapour.
Harmful if swallowed.
Causes serious eye irritation.
- **Precautionary statements**
If medical advice is needed, have product container or label at hand.
Keep out of reach of children.
Read label before use.
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

(Contd. on page 2)

Safety Data Sheet

according to HPR, Schedule 1

Printing date 03/31/2019

Version Number 3

Reviewed on 03/31/2019

Trade name: FDA Pesticide Standard LC no. 4 (1X1 mL)

(Contd. of page 1)

Keep container tightly closed.
 Ground and bond container and receiving equipment.
 Use explosion-proof [electrical/ventilating/lighting] equipment.
 Use non-sparking tools.
 Take actions to prevent static discharges.
 Wash thoroughly after handling.
 Do not eat, drink or smoke when using this product.
 Wear protective gloves/protective clothing/eye protection/face protection.
 If swallowed: Call a poison center/doctor if you feel unwell.
 Rinse mouth.
 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
 Continue rinsing.
 If eye irritation persists: Get medical advice/attention.
 In case of fire: Use for extinction: CO₂, powder or water spray.
 Store in a well-ventilated place. Keep cool.
 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



· **HMIS-ratings (scale 0 - 4)**



3 Composition/Information on ingredients

· **Chemical characterization: Mixtures**

· **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:**

75-05-8	acetonitrile	99.733% w/w
---------	--------------	-------------

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.

· **After inhalation:** Supply fresh air; consult doctor in case of complaints.

· **After skin contact:** Immediately rinse with water.

· **After eye contact:**

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· **After swallowing:** Immediately call a doctor.

(Contd. on page 3)

Safety Data Sheet

according to HPR, Schedule 1

Printing date 03/31/2019

Version Number 3

Reviewed on 03/31/2019

Trade name: FDA Pesticide Standard LC no. 4 (1X1 mL)

(Contd. of page 2)

- **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 Firefighting 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** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
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 item 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.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling** No special precautions are necessary if used correctly.
- **Information about protection against explosions and fires:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
- **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.

CA

(Contd. on page 4)

Safety Data Sheet

according to HPR, Schedule 1

Printing date 03/31/2019

Version Number 3

Reviewed on 03/31/2019

Trade name: FDA Pesticide Standard LC no. 4 (1X1 mL)

(Contd. of page 3)

8 Exposure controls/ Personal protection

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

· **Control parameters**

· **Components with limit values that require monitoring at the workplace:**

75-05-8 acetonitrile

EL	Long-term value: 20 ppm Skin
EV	Long-term value: 20 ppm Skin

· **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.

Avoid contact with the eyes.

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

CA

(Contd. on page 5)

Safety Data Sheet

according to HPR, Schedule 1

Printing date 03/31/2019

Version Number 3

Reviewed on 03/31/2019

Trade name: FDA Pesticide Standard LC no. 4 (1X1 mL)

(Contd. of page 4)

9 Physical and chemical properties

· Information on basic physical and chemical properties	
· General Information	
· Appearance:	
Form:	Fluid
Color:	Colorless
· Odor:	Aromatic
· Odor threshold:	Not determined.
· pH-value:	Not determined.
· Change in condition	
Melting point/Melting range:	-46 °C
Boiling point/Boiling range:	81 °C
· Flash point:	2 °C
· Flammability (solid, gaseous):	Not applicable.
· Ignition temperature:	525 °C
· Decomposition temperature:	Not determined.
· Auto igniting:	Product is not selfigniting.
· Danger of explosion:	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
· Explosion limits:	
Lower:	4.4 Vol %
Upper:	16 Vol %
· Vapor pressure at 20 °C:	0 hPa
· Density at 20 °C:	0.786 g/cm ³
· 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 at 20 °C:	0.39 mPas
Kinematic:	Not determined.
· Solvent content:	
Solids content:	0.2 %
· 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.

(Contd. on page 6)

Safety Data Sheet

according to HPR, Schedule 1

Printing date 03/31/2019

Version Number 3

Reviewed on 03/31/2019

Trade name: FDA Pesticide Standard LC no. 4 (1X1 mL)

(Contd. of page 5)

- **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	1,324 mg/kg (rat)
Dermal	LD50	>2,005 mg/kg (rabbit)
Inhalative	LC50/4 h	3,597 mg/L (mouse)

75-05-8 acetonitrile

Oral	LD50	1,320 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rabbit)
Inhalative	LC50/4 h	3,587 mg/L (mouse)

156052-68-5 zoxamide

Oral	LD50	>5,000 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rat)

- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** Irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Harmful
Irritant

- **Carcinogenic categories**

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

315-18-4	mexacarbate (ISO)	3
----------	-------------------	---

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

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.

(Contd. on page 7)

CA

Safety Data Sheet

according to HPR, Schedule 1

Printing date 03/31/2019

Version Number 3

Reviewed on 03/31/2019

Trade name: FDA Pesticide Standard LC no. 4 (1X1 mL)

(Contd. of page 6)

- **Additional ecological information:**
- **General notes:**
 - Water hazard class 2 (Self-assessment): hazardous for water
 - Do not allow product to reach ground water, water course or sewage system.
 - Danger to drinking water if even 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 minimus Quantities | - |
| · UN-Number | |
| · DOT, TDG, IMDG, IATA | UN1648 |
| · UN proper shipping name | |
| · DOT | Acetonitrile solution |
| · TDG | 1648 ACETONITRILE solution |
| · IMDG, IATA | ACETONITRILE solution |
| · Transport hazard class(es) | |
| · DOT, TDG, IMDG, IATA | |
|  | |
| · Class | 3 Flammable liquids |
| · Label | 3 |
| · Packing group | |
| · DOT, TDG, IMDG, IATA | II |
| · Environmental hazards: | Not applicable. |
| · Special precautions for user | Warning: Flammable liquids |
| · Danger code (Kemler): | 33 |
| · EMS Number: | F-E,S-D |
| · Stowage Category | B |
| · Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code | Not applicable. |

(Contd. on page 8)

Safety Data Sheet

according to HPR, Schedule 1

Printing date 03/31/2019

Version Number 3

Reviewed on 03/31/2019

Trade name: FDA Pesticide Standard LC no. 4 (1X1 mL)

(Contd. of page 7)

· Transport/Additional information:
· DOT
· Quantity limitations

On passenger aircraft/rail: 5 L

On cargo aircraft only: 60 L

· TDG
· Excepted quantities (EQ)

Code: E2

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 500 ml

· 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 1648 ACETONITRILE SOLUTION, 3, II

15 Regulatory information

· Safety, health and environmental regulations/legislation specific for the substance or mixture
· Sara
· Section 355 (extremely hazardous substances):

3878-19-1 fuberidazole

315-18-4 mexacarbate (ISO)

· Section 313 (Specific toxic chemical listings):

75-05-8 acetonitrile

· TSCA (Toxic Substances Control Act):

75-05-8 acetonitrile

15545-48-9 chlorotoluron

· Canadian substance listings:
· Canadian Domestic Substances List (DSL)

75-05-8 acetonitrile

· Canadian Ingredient Disclosure list (limit 0.1%)

All ingredients are listed.

· Canadian Ingredient Disclosure list (limit 1%)

None of the ingredients is listed.

· 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: regulatory@ultrasci.com

· Date of the latest revision of the safety data sheet 03/31/2019 / 2

(Contd. on page 9)

Safety Data Sheet

according to HPR, Schedule 1

Printing date 03/31/2019

Version Number 3

Reviewed on 03/31/2019

Trade name: FDA Pesticide Standard LC no. 4 (1X1 mL)

(Contd. of page 8)

· Abbreviations and acronyms:

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)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative

· * Data compared to the previous version altered.

CA

Safety Data Sheet

according to HPR, Schedule 1

Printing date 03/31/2019

Version Number 3

Reviewed on 03/31/2019

1 Identification

- **Product identifier**
- **Trade name:** FDA Pesticide Standard LC no. 5 (1X1 mL)
- **Part number:** PSM-101-J
- **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 identification

- **Classification of the substance or mixture**



GHS02 Flame

Flammable Liquids - Category 2 H225 Highly flammable liquid and vapour.



GHS07

Acute Toxicity (Oral) - Category 4 H302 Harmful if swallowed.

Eye Irritation - Category 2A H319 Causes serious eye irritation.

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



GHS02 GHS07

- **Signal word** Danger
- **Hazard-determining components of labeling:**
acetonitrile
- **Hazard statements**
Highly flammable liquid and vapour.
Harmful if swallowed.
Causes serious eye irritation.
- **Precautionary statements**
If medical advice is needed, have product container or label at hand.
Keep out of reach of children.
Read label before use.
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

(Contd. on page 2)

Safety Data Sheet

according to HPR, Schedule 1

Printing date 03/31/2019

Version Number 3

Reviewed on 03/31/2019

Trade name: FDA Pesticide Standard LC no. 5 (1X1 mL)

(Contd. of page 1)

Keep container tightly closed.
 Ground and bond container and receiving equipment.
 Use explosion-proof [electrical/ventilating/lighting] equipment.
 Use non-sparking tools.
 Take actions to prevent static discharges.
 Wash thoroughly after handling.
 Do not eat, drink or smoke when using this product.
 Wear protective gloves/protective clothing/eye protection/face protection.
 If swallowed: Call a poison center/doctor if you feel unwell.
 Rinse mouth.
 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
 Continue rinsing.
 If eye irritation persists: Get medical advice/attention.
 In case of fire: Use for extinction: CO₂, powder or water spray.
 Store in a well-ventilated place. Keep cool.
 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



· **HMIS-ratings (scale 0 - 4)**



3 Composition/Information on ingredients

· **Chemical characterization: Mixtures**

· **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:**

75-05-8	acetonitrile	99.81% w/w
---------	--------------	------------

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.

· **After inhalation:** Supply fresh air; consult doctor in case of complaints.

· **After skin contact:** Immediately rinse with water.

· **After eye contact:**

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· **After swallowing:** Immediately call a doctor.

(Contd. on page 3)

Safety Data Sheet

according to HPR, Schedule 1

Printing date 03/31/2019

Version Number 3

Reviewed on 03/31/2019

Trade name: FDA Pesticide Standard LC no. 5 (1X1 mL)

(Contd. of page 2)

- **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 Firefighting 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** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
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 item 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.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling** No special precautions are necessary if used correctly.
- **Information about protection against explosions and fires:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
- **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.

CA

(Contd. on page 4)

Safety Data Sheet

according to HPR, Schedule 1

Printing date 03/31/2019

Version Number 3

Reviewed on 03/31/2019

Trade name: FDA Pesticide Standard LC no. 5 (1X1 mL)

(Contd. of page 3)

8 Exposure controls/ Personal protection

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

· **Control parameters**

· **Components with limit values that require monitoring at the workplace:**

75-05-8 acetonitrile

EL	Long-term value: 20 ppm Skin
EV	Long-term value: 20 ppm Skin

· **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.

Avoid contact with the eyes.

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

CA

(Contd. on page 5)

Safety Data Sheet

according to HPR, Schedule 1

Printing date 03/31/2019

Version Number 3

Reviewed on 03/31/2019

Trade name: FDA Pesticide Standard LC no. 5 (1X1 mL)

(Contd. of page 4)

9 Physical and chemical properties

· Information on basic physical and chemical properties	
· General Information	
· Appearance:	
Form:	Fluid
Color:	Colorless
· Odor:	Aromatic
· Odor threshold:	Not determined.
· pH-value:	Not determined.
· Change in condition	
Melting point/Melting range:	-46 °C
Boiling point/Boiling range:	81 °C
· Flash point:	2 °C
· Flammability (solid, gaseous):	Not applicable.
· Ignition temperature:	525 °C
· Decomposition temperature:	Not determined.
· Auto igniting:	Product is not selfigniting.
· Danger of explosion:	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
· Explosion limits:	
Lower:	4.4 Vol %
Upper:	16 Vol %
· Vapor pressure at 20 °C:	0 hPa
· Density at 20 °C:	0.786 g/cm ³
· 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 at 20 °C:	0.39 mPas
Kinematic:	Not determined.
· Solvent content:	
Solids content:	0.2 %
· 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.

(Contd. on page 6)

Safety Data Sheet

according to HPR, Schedule 1

Printing date 03/31/2019

Version Number 3

Reviewed on 03/31/2019

Trade name: FDA Pesticide Standard LC no. 5 (1X1 mL)

(Contd. of page 5)

- **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	1,323 mg/kg (rat)
Dermal	LD50	>2,004 mg/kg (rabbit)
Inhalative	LC50/4 h	3,594 mg/L (mouse)

75-05-8 acetonitrile

Oral	LD50	1,320 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rabbit)
Inhalative	LC50/4 h	3,587 mg/L (mouse)

71751-41-2 abamectin (combination of avermectin B1a and avermectin B1b) (ISO)

Oral	LD50	1.5 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rabbit)
Inhalative	LC50/4 h	1,100 mg/L (rat)

52-68-6 trichlorfon (ISO)

Oral	LD50	882 mg/kg (rat)
Dermal	LD50	2,000 mg/kg (rat)

- **Primary irritant effect:**

- **on the skin:** No irritant effect.

- **on the eye:** Irritating effect.

- **Sensitization:** No sensitizing effects known.

- **Additional toxicological information:**

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

Harmful

Irritant

- **Carcinogenic categories**

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

52-68-6 trichlorfon (ISO)

3

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

12 Ecological information

- **Toxicity**

- **Aquatic toxicity:** No further relevant information available.

- **Persistence and degradability** No further relevant information available.

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Safety Data Sheet

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Trade name: FDA Pesticide Standard LC no. 5 (1X1 mL)

(Contd. of page 6)

- **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 2 (Self-assessment): hazardous for water
 Do not allow product to reach ground water, water course or sewage system.
 Danger to drinking water if even 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 minimus Quantities | - |
| · UN-Number | UN1648 |
| · DOT, TDG, IMDG, IATA | UN1648 |
| · UN proper shipping name | Acetonitrile solution |
| · DOT | 1648 ACETONITRILE solution, ENVIRONMENTALLY |
| · TDG | HAZARDOUS |
| · IMDG | ACETONITRILE solution, MARINE POLLUTANT |
| · IATA | ACETONITRILE solution |
| · Transport hazard class(es) | |
| · DOT, IATA | |
|  | |
| · Class | 3 Flammable liquids |
| · Label | 3 |
| · TDG, IMDG | |
|   | |
| · Class | 3 Flammable liquids |

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Safety Data Sheet

according to HPR, Schedule 1

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Version Number 3

Reviewed on 03/31/2019

Trade name: FDA Pesticide Standard LC no. 5 (1X1 mL)

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· Label	3
· Packing group · DOT, TDG, IMDG, IATA	II
· Environmental hazards: · Marine pollutant: · Special marking (TDG):	Product contains environmentally hazardous substances: abamectin (combination of avermectin B1a and avermectin B1b) (ISO), trichlorfon (ISO) Symbol (fish and tree) Symbol (fish and tree)
· Special precautions for user · Danger code (Kemler): · EMS Number: · Stowage Category	Warning: Flammable liquids 33 F-E,S-D B
· Transport in bulk according to Annex II of MARPOL/73/78 and the IBC Code	Not applicable.
· Transport/Additional information: · DOT · Quantity limitations	 On passenger aircraft/rail: 5 L On cargo aircraft only: 60 L
· TDG · Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· IMDG · Limited quantities (LQ) · Excepted quantities (EQ)	1L Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· UN "Model Regulation":	UN 1648 ACETONITRILE SOLUTION, 3, II, ENVIRONMENTALLY HAZARDOUS

15 Regulatory information

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

· Section 355 (extremely hazardous substances):	
534-52-1	DNOC
23422-53-9	formetanate hydrochloride
· Section 313 (Specific toxic chemical listings):	
75-05-8	acetonitrile
71751-41-2	abamectin (combination of avermectin B1a and avermectin B1b) (ISO)
534-52-1	DNOC
52-68-6	trichlorfon (ISO)
72178-02-0	5-[2-chloro-4-(trifluoromethyl)phenoxy]-N-(methylsulphonyl)-2-nitrobenzamide

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Reviewed on 03/31/2019

Trade name: FDA Pesticide Standard LC no. 5 (1X1 mL)

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· TSCA (Toxic Substances Control Act):

75-05-8	acetonitrile
534-52-1	DNOC
23422-53-9	formetanate hydrochloride
57966-95-7	2-cyano-N-[(ethylamino)carbonyl]-2-(methoxyimino)acetamide

· Canadian substance listings:
· Canadian Domestic Substances List (DSL)

75-05-8	acetonitrile
534-52-1	DNOC
52-68-6	trichlorfon (ISO)
70288-86-7	ivermectin

· Canadian Ingredient Disclosure list (limit 0.1%)

All ingredients are listed.

· Canadian Ingredient Disclosure list (limit 1%)

None of the ingredients is listed.

· 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: regulatory@ultrasci.com

· Date of the latest revision of the safety data sheet 03/31/2019 / 2

· Abbreviations and acronyms:

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)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

· * Data compared to the previous version altered.

Safety Data Sheet

according to HPR, Schedule 1

Printing date 03/31/2019

Version Number 3

Reviewed on 03/31/2019

1 Identification

- **Product identifier**
- **Trade name:** FDA Pesticide Standard LC no. 6 (1X1 mL)
- **Part number:** PSM-101-K
- **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 identification

- **Classification of the substance or mixture**



GHS02 Flame

Flammable Liquids - Category 2 H225 Highly flammable liquid and vapour.



GHS07

Acute Toxicity (Oral) - Category 4 H302 Harmful if swallowed.

Eye Irritation - Category 2A H319 Causes serious eye irritation.

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



GHS02 GHS07

- **Signal word** Danger
- **Hazard-determining components of labeling:**
acetonitrile
- **Hazard statements**
Highly flammable liquid and vapour.
Harmful if swallowed.
Causes serious eye irritation.
- **Precautionary statements**
If medical advice is needed, have product container or label at hand.
Keep out of reach of children.
Read label before use.
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

(Contd. on page 2)

Safety Data Sheet

according to HPR, Schedule 1

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Reviewed on 03/31/2019

Trade name: FDA Pesticide Standard LC no. 6 (1X1 mL)

(Contd. of page 1)

Keep container tightly closed.
 Ground and bond container and receiving equipment.
 Use explosion-proof [electrical/ventilating/lighting] equipment.
 Use non-sparking tools.
 Take actions to prevent static discharges.
 Wash thoroughly after handling.
 Do not eat, drink or smoke when using this product.
 Wear protective gloves/protective clothing/eye protection/face protection.
 If swallowed: Call a poison center/doctor if you feel unwell.
 Rinse mouth.
 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
 Continue rinsing.
 If eye irritation persists: Get medical advice/attention.
 In case of fire: Use for extinction: CO₂, powder or water spray.
 Store in a well-ventilated place. Keep cool.
 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



· **HMIS-ratings (scale 0 - 4)**



3 Composition/Information on ingredients

· **Chemical characterization: Mixtures**

· **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:**

75-05-8	acetonitrile	99.746% w/w
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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.

· **After inhalation:** Supply fresh air; consult doctor in case of complaints.

· **After skin contact:** Immediately rinse with water.

· **After eye contact:**

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· **After swallowing:** Immediately call a doctor.

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Safety Data Sheet

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Reviewed on 03/31/2019

Trade name: FDA Pesticide Standard LC no. 6 (1X1 mL)

(Contd. of page 2)

- **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 Firefighting 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** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
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 item 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.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling** No special precautions are necessary if used correctly.
- **Information about protection against explosions and fires:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
- **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.

CA

(Contd. on page 4)

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Reviewed on 03/31/2019

Trade name: FDA Pesticide Standard LC no. 6 (1X1 mL)

(Contd. of page 3)

8 Exposure controls/ Personal protection

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

· **Control parameters**

· **Components with limit values that require monitoring at the workplace:**

75-05-8 acetonitrile

EL	Long-term value: 20 ppm Skin
EV	Long-term value: 20 ppm Skin

· **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.

Avoid contact with the eyes.

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

CA

(Contd. on page 5)

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Reviewed on 03/31/2019

Trade name: FDA Pesticide Standard LC no. 6 (1X1 mL)

(Contd. of page 4)

9 Physical and chemical properties

· Information on basic physical and chemical properties	
· General Information	
· Appearance:	
Form:	Fluid
Color:	Colorless
· Odor:	Aromatic
· Odor threshold:	Not determined.
· pH-value:	Not determined.
· Change in condition	
Melting point/Melting range:	-46 °C
Boiling point/Boiling range:	81 °C
· Flash point:	2 °C
· Flammability (solid, gaseous):	Not applicable.
· Ignition temperature:	525 °C
· Decomposition temperature:	Not determined.
· Auto igniting:	Product is not selfigniting.
· Danger of explosion:	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
· Explosion limits:	
Lower:	4.4 Vol %
Upper:	16 Vol %
· Vapor pressure at 20 °C:	0 hPa
· Density at 20 °C:	0.786 g/cm ³
· 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 at 20 °C:	0.39 mPas
Kinematic:	Not determined.
· Solvent content:	
Solids content:	0.2 %
· 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.

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Reviewed on 03/31/2019

Trade name: FDA Pesticide Standard LC no. 6 (1X1 mL)

(Contd. of page 5)

- **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	1,323 mg/kg (rat)
Dermal	LD50	>2,005 mg/kg (rabbit)
Inhalative	LC50/4 h	3,596 mg/L (mouse)

75-05-8 acetonitrile

Oral	LD50	1,320 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rabbit)
Inhalative	LC50/4 h	3,587 mg/L (mouse)

15972-60-8 alachlor (ISO)

Oral	LD50	930 mg/kg (rat)
Dermal	LD50	3,500 mg/kg (rabbit)

74223-64-6 metsulfuron-methyl

Oral	LD50	>5,000 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rabbit)
Inhalative	LC50/4 h	>5,000 mg/L (rat)

126535-15-7 benzoic acid, 2-[[[4-(dimethylamino)-6-(2,2,2-trifluoroethoxy)-1,3,5-triazin-2-yl]amino]carbonyl]amino]sulfonyl]-3-methyl-, methyl ester

Oral	LD50	>5,000 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rabbit)
Inhalative	LC50/4 h	>5,100 mg/L (rat)

- **Primary irritant effect:**

- **on the skin:** No irritant effect.

- **on the eye:** Irritating effect.

- **Sensitization:** No sensitizing effects known.

- **Additional toxicological information:**

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

Harmful

Irritant

- **Carcinogenic categories**

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

None of the ingredients is listed.

(Contd. on page 7)

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Trade name: FDA Pesticide Standard LC no. 6 (1X1 mL)

(Contd. of page 6)

· **NTP (National Toxicology Program)**

3347-22-6 dithianon (ISO)

R

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 2 (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even 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 minimus Quantities** -
- **UN-Number**
- **DOT, TDG, IMDG, IATA** UN1648
- **UN proper shipping name**
- **DOT** Acetonitrile solution
- **TDG** 1648 ACETONITRILE solution, ENVIRONMENTALLY HAZARDOUS
- **IMDG** ACETONITRILE solution, MARINE POLLUTANT
- **IATA** ACETONITRILE solution

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Reviewed on 03/31/2019

Trade name: FDA Pesticide Standard LC no. 6 (1X1 mL)

(Contd. of page 7)

· **Transport hazard class(es)**

· **DOT, IATA**

· **Class**

3 Flammable liquids

· **Label**

3

· **TDG, IMDG**

· **Class**

3 Flammable liquids

· **Label**

3

· **Packing group**

· **DOT, TDG, IMDG, IATA**

II

· **Environmental hazards:**

Product contains environmentally hazardous substances: 2-chloro-N-(ethoxymethyl)-N-(2-ethyl-6-methylphenyl)acetamide, metsulfuron-methyl

· **Marine pollutant:**

Symbol (fish and tree)

· **Special marking (TDG):**

Symbol (fish and tree)

· **Special precautions for user**

Warning: Flammable liquids

· **Danger code (Kemler):**

33

· **EMS Number:**

F-E,S-D

· **Stowage Category**

B

· **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: 5 L

On cargo aircraft only: 60 L

· **TDG**

· **Excepted quantities (EQ)**

Code: E2

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 500 ml

· **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

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Safety Data Sheet

according to HPR, Schedule 1

Printing date 03/31/2019

Version Number 3

Reviewed on 03/31/2019

Trade name: FDA Pesticide Standard LC no. 6 (1X1 mL)

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· **UN "Model Regulation":** UN 1648 ACETONITRILE SOLUTION, 3, II,
ENVIRONMENTALLY HAZARDOUS

15 Regulatory information

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

· **Section 355 (extremely hazardous substances):**

None of the ingredients is listed.

· **Section 313 (Specific toxic chemical listings):**

75-05-8	acetonitrile
90982-32-4	benzoic acid, 2-[[[(4-chloro-6-methoxy-2-pyrimidinyl)amino]carbonyl]amino]sulfonyl-, ethyl ester
15972-60-8	alachlor (ISO)
59669-26-0	thiodicarb
2439-10-3	dodine
13356-08-6	bis(tris(2-methyl-2-phenylpropyl)tin) oxide

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

75-05-8	acetonitrile
2439-10-3	dodine
13356-08-6	bis(tris(2-methyl-2-phenylpropyl)tin) oxide

· **Canadian substance listings:**

· **Canadian Domestic Substances List (DSL)**

75-05-8	acetonitrile
2439-10-3	dodine
101205-02-1	cycloxdim
13356-08-6	bis(tris(2-methyl-2-phenylpropyl)tin) oxide

· **Canadian Ingredient Disclosure list (limit 0.1%)**

All ingredients are listed.

· **Canadian Ingredient Disclosure list (limit 1%)**

None of the ingredients is listed.

- **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:** regulatory@ultrasai.com
- **Date of the latest revision of the safety data sheet** 03/31/2019 / 2
- **Abbreviations and acronyms:**
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

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Safety Data Sheet

according to HPR, Schedule 1

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Version Number 3

Reviewed on 03/31/2019

Trade name: FDA Pesticide Standard LC no. 6 (1X1 mL)

(Contd. of page 9)

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)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative

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

CA

Safety Data Sheet

according to HPR, Schedule 1

Printing date 03/31/2019

Version Number 3

Reviewed on 03/31/2019

1 Identification

- **Product identifier**
- **Trade name:** FDA Pesticide Standard GC/LC no. 1 (1X1 mL)
- **Part number:** PSM-101-L
- **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 identification

- **Classification of the substance or mixture**



GHS02 Flame

Flammable Liquids - Category 2 H225 Highly flammable liquid and vapour.



GHS07

Acute Toxicity (Oral) - Category 4 H302 Harmful if swallowed.

Eye Irritation - Category 2A H319 Causes serious eye irritation.

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



GHS02 GHS07

- **Signal word** Danger
- **Hazard-determining components of labeling:**
acetonitrile
- **Hazard statements**
Highly flammable liquid and vapour.
Harmful if swallowed.
Causes serious eye irritation.
- **Precautionary statements**
If medical advice is needed, have product container or label at hand.
Keep out of reach of children.
Read label before use.
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

(Contd. on page 2)

Safety Data Sheet

according to HPR, Schedule 1

Printing date 03/31/2019

Version Number 3

Reviewed on 03/31/2019

Trade name: FDA Pesticide Standard GC/LC no. 1 (1X1 mL)

(Contd. of page 1)

Keep container tightly closed.
 Ground and bond container and receiving equipment.
 Use explosion-proof [electrical/ventilating/lighting] equipment.
 Use non-sparking tools.
 Take actions to prevent static discharges.
 Wash thoroughly after handling.
 Do not eat, drink or smoke when using this product.
 Wear protective gloves/protective clothing/eye protection/face protection.
 If swallowed: Call a poison center/doctor if you feel unwell.
 Rinse mouth.
 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
 Continue rinsing.
 If eye irritation persists: Get medical advice/attention.
 In case of fire: Use for extinction: CO₂, powder or water spray.
 Store in a well-ventilated place. Keep cool.
 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



· **HMIS-ratings (scale 0 - 4)**



3 Composition/Information on ingredients

· **Chemical characterization: Mixtures**

· **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:**

75-05-8	acetonitrile	99.746% w/w
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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.

· **After inhalation:** Supply fresh air; consult doctor in case of complaints.

· **After skin contact:** Immediately rinse with water.

· **After eye contact:**

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· **After swallowing:** Immediately call a doctor.

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- **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 Firefighting 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** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
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 item 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.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling** No special precautions are necessary if used correctly.
- **Information about protection against explosions and fires:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
- **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.

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8 Exposure controls/ Personal protection

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

· **Control parameters**

· **Components with limit values that require monitoring at the workplace:**

75-05-8 acetonitrile

EL	Long-term value: 20 ppm Skin
EV	Long-term value: 20 ppm Skin

· **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.

Avoid contact with the eyes.

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

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9 Physical and chemical properties

· Information on basic physical and chemical properties**· General Information****· Appearance:****Form:** Fluid**Color:** Colorless**· Odor:** Aromatic**· Odor threshold:** Not determined.**· pH-value:** Not determined.**· Change in condition****Melting point/Melting range:** -46 °C**Boiling point/Boiling range:** 81 °C**· Flash point:** 2 °C**· Flammability (solid, gaseous):** Not applicable.**· Ignition temperature:** 525 °C**· Decomposition temperature:** Not determined.**· Auto igniting:** Product is not selfigniting.**· Danger of explosion:** Product is not explosive. However, formation of explosive air/vapor mixtures are possible.**· Explosion limits:****Lower:** 4.4 Vol %**Upper:** 16 Vol %**· Vapor pressure at 20 °C:** 0 hPa**· Density at 20 °C:** 0.786 g/cm³**· 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 at 20 °C:** 0.39 mPas**Kinematic:** Not determined.**· Solvent content:****Organic solvents:** 0.0 %**Solids content:** 0.2 %**· Other information** No further relevant information available.

10 Stability and reactivity

· Reactivity No further relevant information available.

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- **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	1,323 mg/kg (rat)
Dermal	LD50	>2,005 mg/kg (rabbit)
Inhalative	LC50/4 h	3,596 mg/L (mouse)

75-05-8 acetonitrile

Oral	LD50	1,320 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rabbit)
Inhalative	LC50/4 h	3,587 mg/L (mouse)

121552-61-2 cyprodinil

Oral	LD50	2,796 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rat)

732-11-6 phosmet (ISO)

Oral	LD50	92.5 mg/kg (rat)
Dermal	LD50	1,150 mg/kg (rat)
		>3,160 mg/kg (rabbit)
Inhalative	LC50/4 h	54 mg/L (rat)

121-75-5 malathion (ISO)

Oral	LD50	1,000 mg/kg (rat)
Dermal	LD50	8,790 mg/kg (rabbit)

2921-88-2 chlorpyrifos (ISO)

Oral	LD50	60 mg/kg (mouse)
		135 mg/kg (rat)
Dermal	LD50	120 mg/kg (mouse)
		202 mg/kg (rat)
Inhalative	LC50/4 h	>200 mg/L (rat)

- **Primary irritant effect:**

- **on the skin:** No irritant effect.

- **on the eye:** Irritating effect.

- **Sensitization:** No sensitizing effects known.

- **Additional toxicological information:**

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

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Irritant

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

51-03-6	piperonyl butoxide	3
121-75-5	malathion (ISO)	2A

· NTP (National Toxicology Program)

None of the ingredients is listed.

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 2 (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even 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 minimus Quantities -

· UN-Number
· DOT, TDG, IMDG, IATA UN1648

· UN proper shipping name
· DOT Acetonitrile solution

· TDG 1648 ACETONITRILE solution, ENVIRONMENTALLY

HAZARDOUS

· IMDG ACETONITRILE solution, MARINE POLLUTANT

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· **IATA** ACETONITRILE solution

· **Transport hazard class(es)**

· **DOT, IATA**

· **Class** 3 Flammable liquids

· **Label** 3

· **TDG, IMDG**

· **Class** 3 Flammable liquids

· **Label** 3

· **Packing group**

· **DOT, TDG, IMDG, IATA** II

· **Environmental hazards:** Product contains environmentally hazardous substances: malathion (ISO), chlorpyrifos (ISO)

· **Marine pollutant:** Symbol (fish and tree)

· **Special marking (TDG):** Symbol (fish and tree)

· **Special precautions for user** Warning: Flammable liquids

· **Danger code (Kemler):** 33

· **EMS Number:** F-E,S-D

· **Stowage Category** B

· **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: 5 L
On cargo aircraft only: 60 L

· **TDG**

· **Excepted quantities (EQ)** Code: E2
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 500 ml

· **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

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· **UN "Model Regulation":** UN 1648 ACETONITRILE SOLUTION, 3, II,
ENVIRONMENTALLY HAZARDOUS

15 Regulatory information

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

· **Section 355 (extremely hazardous substances):**

60-51-5	dimethoate (ISO)
732-11-6	phosmet (ISO)
6923-22-4	monocrotophos (ISO)

· **Section 313 (Specific toxic chemical listings):**

75-05-8	acetonitrile
60-51-5	dimethoate (ISO)
51-03-6	piperonyl butoxide
121-75-5	malathion (ISO)
60207-90-1	propiconazole
88671-89-0	myclobutanil

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

75-05-8	acetonitrile
60-51-5	dimethoate (ISO)
51-03-6	piperonyl butoxide

· **Canadian substance listings:**

· **Canadian Domestic Substances List (DSL)**

75-05-8	acetonitrile
51-03-6	piperonyl butoxide
121-75-5	malathion (ISO)
2921-88-2	chlorpyrifos (ISO)

· **Canadian Ingredient Disclosure list (limit 0.1%)**

All ingredients are listed.

· **Canadian Ingredient Disclosure list (limit 1%)**

None of the ingredients is listed.

- **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:** regulatory@ultrasci.com
- **Date of the latest revision of the safety data sheet** 03/31/2019 / 2
- **Abbreviations and acronyms:**
IMDG: International Maritime Code for Dangerous Goods

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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)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative

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

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1 Identification

- **Product identifier**
- **Trade name:** FDA Pesticide Standard GC/LC no. 2 (1X1 mL)
- **Part number:** PSM-101-M
- **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 identification

- **Classification of the substance or mixture**



GHS02 Flame

Flammable Liquids - Category 2 H225 Highly flammable liquid and vapour.



GHS07

Acute Toxicity (Oral) - Category 4 H302 Harmful if swallowed.

Eye Irritation - Category 2A H319 Causes serious eye irritation.

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



GHS02 GHS07

- **Signal word** Danger
- **Hazard-determining components of labeling:**
acetonitrile
- **Hazard statements**
Highly flammable liquid and vapour.
Harmful if swallowed.
Causes serious eye irritation.
- **Precautionary statements**
If medical advice is needed, have product container or label at hand.
Keep out of reach of children.
Read label before use.
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

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Keep container tightly closed.
 Ground and bond container and receiving equipment.
 Use explosion-proof [electrical/ventilating/lighting] equipment.
 Use non-sparking tools.
 Take actions to prevent static discharges.
 Wash thoroughly after handling.
 Do not eat, drink or smoke when using this product.
 Wear protective gloves/protective clothing/eye protection/face protection.
 If swallowed: Call a poison center/doctor if you feel unwell.
 Rinse mouth.
 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
 Continue rinsing.
 If eye irritation persists: Get medical advice/attention.
 In case of fire: Use for extinction: CO₂, powder or water spray.
 Store in a well-ventilated place. Keep cool.
 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



· **HMIS-ratings (scale 0 - 4)**



3 Composition/Information on ingredients

· **Chemical characterization: Mixtures**

· **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:**

75-05-8	acetonitrile	99.746% w/w
---------	--------------	-------------

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.

· **After inhalation:** Supply fresh air; consult doctor in case of complaints.

· **After skin contact:** Immediately rinse with water.

· **After eye contact:**

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· **After swallowing:** Immediately call a doctor.

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- **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 Firefighting 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** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
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 item 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.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling** No special precautions are necessary if used correctly.
- **Information about protection against explosions and fires:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
- **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.

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8 Exposure controls/ Personal protection

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

· **Control parameters**

· **Components with limit values that require monitoring at the workplace:**

75-05-8 acetonitrile

EL	Long-term value: 20 ppm Skin
EV	Long-term value: 20 ppm Skin

· **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.

Avoid contact with the eyes.

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

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9 Physical and chemical properties

· Information on basic physical and chemical properties

· General Information

· Appearance:

Form:	Fluid
Color:	Colorless
Odor:	Aromatic
Odor threshold:	Not determined.

· pH-value: Not determined.

· Change in condition

Melting point/Melting range:	-46 °C
Boiling point/Boiling range:	81 °C

· Flash point: 2 °C

· Flammability (solid, gaseous): Not applicable.

· Ignition temperature: 525 °C

· Decomposition temperature: Not determined.

· Auto igniting: Product is not selfigniting.

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

· Explosion limits:

Lower:	4.4 Vol %
Upper:	16 Vol %

· Vapor pressure at 20 °C: 0 hPa

· Density at 20 °C: 0.786 g/cm³

· 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 at 20 °C:	0.39 mPas
Kinematic:	Not determined.

· Solvent content:

Organic solvents: 0.0 %

Solids content: 0.2 %

· Other information: No further relevant information available.

10 Stability and reactivity

· Reactivity: No further relevant information available.

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- **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	1,323 mg/kg (rat)
Dermal	LD50	>2,005 mg/kg (rabbit)
Inhalative	LC50/4 h	3,596 mg/L (mouse)

75-05-8 acetonitrile

Oral	LD50	1,320 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rabbit)
Inhalative	LC50/4 h	3,587 mg/L (mouse)

563-12-2 ethion (ISO)

Oral	LD50	13 mg/kg (rat)
Dermal	LD50	62 mg/kg (rat)
Inhalative	LC50/4 h	864 mg/L (rat)

62-73-7 dichlorvos (ISO)

Oral	LD50	25 mg/kg (rat)
Dermal	LD50	107 mg/kg (rat)
		107 mg/kg (rabbit)
Inhalative	LC50/4 h	15 mg/L (rat)

24017-47-8 triazophos (ISO)

Oral	LD50	57 mg/kg (rat)
Dermal	LD50	1,100 mg/kg (rat)
Inhalative	LC50/4 h	28 mg/L (rat)

153719-23-4 thiamethoxam

Oral	LD50	1,563 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rat)
Inhalative	LC50/4 h	>3,720 mg/L (rat)

- **Primary irritant effect:**

- **on the skin:** No irritant effect.

- **on the eye:** Irritating effect.

- **Sensitization:** No sensitizing effects known.

- **Additional toxicological information:**

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

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Irritant

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

1912-24-9	atrazine (ISO)	3
62-73-7	dichlorvos (ISO)	2B

· NTP (National Toxicology Program)

None of the ingredients is listed.

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 2 (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even 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 minimus Quantities -

· UN-Number
· DOT, TDG, IMDG, IATA

UN1648

· UN proper shipping name
· DOT
· TDG

Acetonitrile solution

1648 ACETONITRILE solution, ENVIRONMENTALLY
HAZARDOUS

· IMDG

ACETONITRILE solution, MARINE POLLUTANT

(Contd. on page 8)

CA

Safety Data Sheet

according to HPR, Schedule 1

Printing date 03/31/2019

Version Number 3

Reviewed on 03/31/2019

Trade name: FDA Pesticide Standard GC/LC no. 2 (1X1 mL)

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· IATA

ACETONITRILE solution

· Transport hazard class(es)

· DOT, IATA



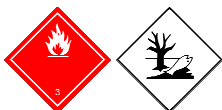
· Class

3 Flammable liquids

· Label

3

· TDG, IMDG



· Class

3 Flammable liquids

· Label

3

· Packing group

· DOT, TDG, IMDG, IATA

II

· Environmental hazards:

Product contains environmentally hazardous substances: bifenazate, ethion (ISO)

· Marine pollutant:

Symbol (fish and tree)

· Special marking (TDG):

Symbol (fish and tree)

· Special precautions for user

Warning: Flammable liquids

· Danger code (Kemler):

33

· EMS Number:

F-E,S-D

· Stowage Category

B

· 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: 5 L
On cargo aircraft only: 60 L

· TDG

· Excepted quantities (EQ)

Code: E2
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 500 ml

· 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

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CA

Safety Data Sheet

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Trade name: FDA Pesticide Standard GC/LC no. 2 (1X1 mL)

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· **UN "Model Regulation":** UN 1648 ACETONITRILE SOLUTION, 3, II,
ENVIRONMENTALLY HAZARDOUS

15 Regulatory information

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

· **Section 355 (extremely hazardous substances):**

563-12-2	ethion (ISO)
62-73-7	dichlorvos (ISO)
24017-47-8	triazophos (ISO)

· **Section 313 (Specific toxic chemical listings):**

75-05-8	acetonitrile
1912-24-9	atrazine (ISO)
62-73-7	dichlorvos (ISO)
60168-88-9	fenarimol (ISO)

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

75-05-8	acetonitrile
1912-24-9	atrazine (ISO)
62-73-7	dichlorvos (ISO)
60168-88-9	fenarimol (ISO)
41814-78-2	5-methyl-1,2,4-triazolo(3,4-b)benzo-1,3-thiazole

· **Canadian substance listings:**

· **Canadian Domestic Substances List (DSL)**

75-05-8	acetonitrile
1912-24-9	atrazine (ISO)
62-73-7	dichlorvos (ISO)

· **Canadian Ingredient Disclosure list (limit 0.1%)**

All ingredients are listed.

· **Canadian Ingredient Disclosure list (limit 1%)**

None of the ingredients is listed.

- **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:** regulatory@ultrasci.com
- **Date of the latest revision of the safety data sheet** 03/31/2019 / 2
- **Abbreviations and acronyms:**
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation

(Contd. on page 10)

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Trade name: FDA Pesticide Standard GC/LC no. 2 (1X1 mL)

(Contd. of page 9)

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)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative

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

CA

Safety Data Sheet

according to HPR, Schedule 1

Printing date 03/31/2019

Version Number 3

Reviewed on 03/31/2019

1 Identification

- **Product identifier**
- **Trade name:** FDA Pesticide Standard GC/LC no. 3 (1X1 mL)
- **Part number:** PSM-101-N
- **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 identification

- **Classification of the substance or mixture**



GHS02 Flame

Flammable Liquids - Category 2 H225 Highly flammable liquid and vapour.



GHS07

Acute Toxicity (Oral) - Category 4 H302 Harmful if swallowed.

Eye Irritation - Category 2A H319 Causes serious eye irritation.

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



GHS02 GHS07

- **Signal word** Danger
- **Hazard-determining components of labeling:**
acetonitrile
- **Hazard statements**
Highly flammable liquid and vapour.
Harmful if swallowed.
Causes serious eye irritation.
- **Precautionary statements**
If medical advice is needed, have product container or label at hand.
Keep out of reach of children.
Read label before use.
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

(Contd. on page 2)

Safety Data Sheet

according to HPR, Schedule 1

Printing date 03/31/2019

Version Number 3

Reviewed on 03/31/2019

Trade name: FDA Pesticide Standard GC/LC no. 3 (1X1 mL)

(Contd. of page 1)

Keep container tightly closed.
 Ground and bond container and receiving equipment.
 Use explosion-proof [electrical/ventilating/lighting] equipment.
 Use non-sparking tools.
 Take actions to prevent static discharges.
 Wash thoroughly after handling.
 Do not eat, drink or smoke when using this product.
 Wear protective gloves/protective clothing/eye protection/face protection.
 If swallowed: Call a poison center/doctor if you feel unwell.
 Rinse mouth.
 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
 Continue rinsing.
 If eye irritation persists: Get medical advice/attention.
 In case of fire: Use for extinction: CO₂, powder or water spray.
 Store in a well-ventilated place. Keep cool.
 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



· **HMIS-ratings (scale 0 - 4)**



3 Composition/Information on ingredients

· **Chemical characterization: Mixtures**

· **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:**

75-05-8	acetonitrile	99.746% w/w
---------	--------------	-------------

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.

· **After inhalation:** Supply fresh air; consult doctor in case of complaints.

· **After skin contact:** Immediately rinse with water.

· **After eye contact:**

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· **After swallowing:** Immediately call a doctor.

(Contd. on page 3)

Safety Data Sheet

according to HPR, Schedule 1

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Version Number 3

Reviewed on 03/31/2019

Trade name: FDA Pesticide Standard GC/LC no. 3 (1X1 mL)

(Contd. of page 2)

- **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 Firefighting 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** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
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 item 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.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling** No special precautions are necessary if used correctly.
- **Information about protection against explosions and fires:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
- **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.

CA

(Contd. on page 4)

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Printing date 03/31/2019

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Reviewed on 03/31/2019

Trade name: FDA Pesticide Standard GC/LC no. 3 (1X1 mL)

(Contd. of page 3)

8 Exposure controls/ Personal protection

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

· **Control parameters**

· **Components with limit values that require monitoring at the workplace:**

75-05-8 acetonitrile

EL	Long-term value: 20 ppm Skin
EV	Long-term value: 20 ppm Skin

· **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.

Avoid contact with the eyes.

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

CA

(Contd. on page 5)

Safety Data Sheet
according to HPR, Schedule 1

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Reviewed on 03/31/2019

Trade name: FDA Pesticide Standard GC/LC no. 3 (1X1 mL)

(Contd. of page 4)

9 Physical and chemical properties

· Information on basic physical and chemical properties

· General Information

· Appearance:

Form: Fluid

Color: Colorless

· Odor: Aromatic

· Odor threshold: Not determined.

· pH-value: Not determined.

· Change in condition

Melting point/Melting range: -46 °C

Boiling point/Boiling range: 81 °C

· Flash point: 2 °C

· Flammability (solid, gaseous): Not applicable.

· Ignition temperature: 525 °C

· Decomposition temperature: Not determined.

· Auto igniting: Product is not selfigniting.

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

· Explosion limits:

Lower: 4.4 Vol %

Upper: 16 Vol %

· Vapor pressure at 20 °C: 0 hPa

· Density at 20 °C: 0.786 g/cm³

· 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 at 20 °C: 0.39 mPas

Kinematic: Not determined.

· Solvent content:

Organic solvents: 0.0 %

Solids content: 0.2 %

· Other information: No further relevant information available.

10 Stability and reactivity

· Reactivity: No further relevant information available.

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Safety Data Sheet

according to HPR, Schedule 1

Printing date 03/31/2019

Version Number 3

Reviewed on 03/31/2019

Trade name: FDA Pesticide Standard GC/LC no. 3 (1X1 mL)

(Contd. of page 5)

- **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	1,323 mg/kg (rat)
Dermal	LD50	>2,005 mg/kg (rabbit)
Inhalative	LC50/4 h	3,596 mg/L (mouse)

75-05-8 acetonitrile

Oral	LD50	1,320 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rabbit)
Inhalative	LC50/4 h	3,587 mg/L (mouse)

41198-08-7 O-(4-bromo-2-chlorophenyl) O-ethyl S-propyl phosphorothioate

Oral	LD50	620.5 mg/kg (rat)
Inhalative	LC50/4 h	>2.2 mg/L (rat)

298-00-0 parathion -methyl (ISO)

Oral	LD50	6.01 mg/kg (rat)
Dermal	LD50	67 mg/kg (rat)
		300 mg/kg (rabbit)

7786-34-7 mevinphos (ISO)

Oral	LD50	3 mg/kg (rat)
Dermal	LD50	4 mg/kg (rat)

56-38-2 parathion (ISO)

Oral	LD50	2 mg/kg (rat)
Dermal	LD50	6.8 mg/kg (rat)

33089-61-1 amitraz (ISO)

Oral	LD50	800 mg/kg (rat)
Dermal	LD50	>200 mg/kg (rabbit)
Inhalative	LC50/4 h	65,000 mg/L (rat)

119168-77-3 tebufenpyrad

Oral	LD50	595 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rat)

- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** Irritating effect.

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Safety Data Sheet

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Reviewed on 03/31/2019

Trade name: FDA Pesticide Standard GC/LC no. 3 (1X1 mL)

(Contd. of page 6)

· **Sensitization:** No sensitizing effects known.· **Additional toxicological information:**

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

Harmful

Irritant

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

298-00-0	parathion -methyl (ISO)	3
56-38-2	parathion (ISO)	2B

· **NTP (National Toxicology Program)**

None of the ingredients is listed.

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 2 (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even 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 minimus Quantities** -· **UN-Number**· **DOT, TDG, IMDG, IATA**

UN1648

(Contd. on page 8)

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Safety Data Sheet

according to HPR, Schedule 1

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Version Number 3

Reviewed on 03/31/2019

Trade name: FDA Pesticide Standard GC/LC no. 3 (1X1 mL)

(Contd. of page 7)

· UN proper shipping name	Acetonitrile solution
· DOT	1648 ACETONITRILE solution, ENVIRONMENTALLY
· TDG	HAZARDOUS
· IMDG	ACETONITRILE solution, MARINE POLLUTANT
· IATA	ACETONITRILE solution

· **Transport hazard class(es)**

· **DOT, IATA**


· Class	3 Flammable liquids
· Label	3
· TDG, IMDG	



· Class	3 Flammable liquids
· Label	3

· **Packing group**

· **DOT, TDG, IMDG, IATA** II

· Environmental hazards:	Product contains environmentally hazardous substances: kresoxim-methyl (ISO), O-(4-bromo-2-chlorophenyl) O-ethyl S-propyl phosphorothioate
---------------------------------	--

· Marine pollutant:	Symbol (fish and tree)
----------------------------	------------------------

· Special marking (TDG):	Symbol (fish and tree)
---------------------------------	------------------------

· Special precautions for user	Warning: Flammable liquids
---------------------------------------	----------------------------

· Danger code (Kemler):	33
--------------------------------	----

· EMS Number:	F-E,S-D
----------------------	---------

· Stowage Category	B
---------------------------	---

· 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: 5 L On cargo aircraft only: 60 L
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· **TDG**

· Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
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Safety Data Sheet

according to HPR, Schedule 1

Printing date 03/31/2019

Version Number 3

Reviewed on 03/31/2019

Trade name: FDA Pesticide Standard GC/LC no. 3 (1X1 mL)

(Contd. of page 8)

- | | |
|--|---|
| <ul style="list-style-type: none"> · IMDG · Limited quantities (LQ) · Excepted quantities (EQ) | <p>1L
Code: E2
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 500 ml</p> |
| <ul style="list-style-type: none"> · UN "Model Regulation": | <p>UN 1648 ACETONITRILE SOLUTION, 3, II,
ENVIRONMENTALLY HAZARDOUS</p> |

15 Regulatory information

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

· **Section 355 (extremely hazardous substances):**

56-72-4	coumaphos (ISO)
2104-64-5	O-ethyl O-4-nitrophenyl phenylphosphonothioate
298-00-0	parathion -methyl (ISO)
86-50-0	azinphos-methyl (ISO)
141-66-2	(E)-3-(dimethylamino)-1-methyl-3-oxoprop-1-enyl dimethyl phosphate
950-37-8	methidathion
7786-34-7	mevinphos (ISO)
56-38-2	parathion (ISO)

· **Section 313 (Specific toxic chemical listings):**

75-05-8	acetonitrile
29232-93-7	pirimiphos-methyl (ISO)
41198-08-7	O-(4-bromo-2-chlorophenyl) O-ethyl S-propyl phosphorothioate
298-00-0	parathion -methyl (ISO)
5234-68-4	carboxin
7786-34-7	mevinphos (ISO)
56-38-2	parathion (ISO)
33089-61-1	amitraz (ISO)

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

75-05-8	acetonitrile
63284-71-9	nuarimol

· **Canadian substance listings:**

· **Canadian Domestic Substances List (DSL)**

75-05-8	acetonitrile
---------	--------------

· **Canadian Ingredient Disclosure list (limit 0.1%)**

All ingredients are listed.

· **Canadian Ingredient Disclosure list (limit 1%)**

None of the ingredients is listed.

(Contd. on page 10)

Safety Data Sheet

according to HPR, Schedule 1

Printing date 03/31/2019

Version Number 3

Reviewed on 03/31/2019

Trade name: FDA Pesticide Standard GC/LC no. 3 (1X1 mL)

(Contd. of page 9)

· **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:** regulatory@ultrasci.com
- **Date of the latest revision of the safety data sheet** 03/31/2019 / 2
- **Abbreviations and acronyms:**
 - 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)
 - LC50: Lethal concentration, 50 percent
 - LD50: Lethal dose, 50 percent
 - PBT: Persistent, Bioaccumulative and Toxic
 - vPvB: very Persistent and very Bioaccumulative
- *** Data compared to the previous version altered.**

CA

Safety Data Sheet

according to HPR, Schedule 1

Printing date 03/31/2019

Version Number 3

Reviewed on 03/31/2019

1 Identification

- **Product identifier**
- **Trade name:** FDA Pesticide Standard GC/LC no. 4 (1X1 mL)
- **Part number:** PSM-101-O
- **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 identification

- **Classification of the substance or mixture**



GHS02 Flame

Flammable Liquids - Category 2 H225 Highly flammable liquid and vapour.



GHS07

Acute Toxicity (Oral) - Category 4 H302 Harmful if swallowed.

Eye Irritation - Category 2A H319 Causes serious eye irritation.

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



GHS02 GHS07

- **Signal word** Danger
- **Hazard-determining components of labeling:**
acetonitrile
- **Hazard statements**
Highly flammable liquid and vapour.
Harmful if swallowed.
Causes serious eye irritation.
- **Precautionary statements**
If medical advice is needed, have product container or label at hand.
Keep out of reach of children.
Read label before use.
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

(Contd. on page 2)

Safety Data Sheet

according to HPR, Schedule 1

Printing date 03/31/2019

Version Number 3

Reviewed on 03/31/2019

Trade name: FDA Pesticide Standard GC/LC no. 4 (1X1 mL)

(Contd. of page 1)

Keep container tightly closed.
 Ground and bond container and receiving equipment.
 Use explosion-proof [electrical/ventilating/lighting] equipment.
 Use non-sparking tools.
 Take actions to prevent static discharges.
 Wash thoroughly after handling.
 Do not eat, drink or smoke when using this product.
 Wear protective gloves/protective clothing/eye protection/face protection.
 If swallowed: Call a poison center/doctor if you feel unwell.
 Rinse mouth.
 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
 Continue rinsing.
 If eye irritation persists: Get medical advice/attention.
 In case of fire: Use for extinction: CO₂, powder or water spray.
 Store in a well-ventilated place. Keep cool.
 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



· **HMIS-ratings (scale 0 - 4)**



3 Composition/Information on ingredients

· **Chemical characterization: Mixtures**

· **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:**

75-05-8	acetonitrile	99.759% w/w
---------	--------------	-------------

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.

· **After inhalation:** Supply fresh air; consult doctor in case of complaints.

· **After skin contact:** Immediately rinse with water.

· **After eye contact:**

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· **After swallowing:** Immediately call a doctor.

(Contd. on page 3)

Safety Data Sheet

according to HPR, Schedule 1

Printing date 03/31/2019

Version Number 3

Reviewed on 03/31/2019

Trade name: FDA Pesticide Standard GC/LC no. 4 (1X1 mL)

(Contd. of page 2)

- **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 Firefighting 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** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
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 item 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.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling** No special precautions are necessary if used correctly.
- **Information about protection against explosions and fires:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
- **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.

CA

(Contd. on page 4)

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Trade name: FDA Pesticide Standard GC/LC no. 4 (1X1 mL)

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8 Exposure controls/ Personal protection

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

· **Control parameters**

· **Components with limit values that require monitoring at the workplace:**

75-05-8 acetonitrile

EL	Long-term value: 20 ppm Skin
EV	Long-term value: 20 ppm Skin

· **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.

Avoid contact with the eyes.

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

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Trade name: FDA Pesticide Standard GC/LC no. 4 (1X1 mL)

(Contd. of page 4)

9 Physical and chemical properties

· Information on basic physical and chemical properties

· General Information

· Appearance:

Form: Fluid

Color: Colorless

· Odor: Aromatic

· Odor threshold: Not determined.

· pH-value: Not determined.

· Change in condition

Melting point/Melting range: -46 °C

Boiling point/Boiling range: 81 °C

· Flash point: 2 °C

· Flammability (solid, gaseous): Not applicable.

· Ignition temperature: 525 °C

· Decomposition temperature: Not determined.

· Auto igniting: Product is not selfigniting.

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

· Explosion limits:

Lower: 4.4 Vol %

Upper: 16 Vol %

· Vapor pressure at 20 °C: 0 hPa

· Density at 20 °C: 0.786 g/cm³

· 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 at 20 °C: 0.39 mPas

Kinematic: Not determined.

· Solvent content:

Organic solvents: 0.0 %

Solids content: 0.2 %

· Other information: No further relevant information available.

10 Stability and reactivity

· Reactivity: No further relevant information available.

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- **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	1,323 mg/kg (rat)
Dermal	LD50	>2,005 mg/kg (rabbit)
Inhalative	LC50/4 h	3,596 mg/L (mouse)

75-05-8 acetonitrile

Oral	LD50	1,320 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rabbit)
Inhalative	LC50/4 h	3,587 mg/L (mouse)

96489-71-3 2-tert-butyl-5-(4-tert-butylbenzylthio)-4-chloropyridazin-3(2H)-one

Oral	LD50	205 mg/kg (mouse)
Dermal	LD50	>2,000 mg/kg (rabbit)
Inhalative	LC50/4 h	620 mg/L (rat)

2312-35-8 propargite (ISO)

Oral	LD50	2,800 mg/kg (rat)
Dermal	LD50	10,300 mg/kg (rabbit)

834-12-8 ametryn (ISO)

Oral	LD50	1,626 mg/kg (rat)
Dermal	LD50	8,160 mg/kg (rabbit)
Inhalative	LC50/4 h	>2.22 mg/L (rat)

21087-64-9 metribuzin (ISO)

Oral	LD50	1,090 mg/kg (rat)
Dermal	LD50	>20,000 mg/kg (rabbit)
Inhalative	LC50/4 h	>860 mg/L (rat)

- **Primary irritant effect:**

- **on the skin:** No irritant effect.

- **on the eye:** Irritating effect.

- **Sensitization:** No sensitizing effects known.

- **Additional toxicological information:**

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

Harmful

Irritant

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Trade name: FDA Pesticide Standard GC/LC no. 4 (1X1 mL)

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· **Carcinogenic categories**

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

None of the ingredients is listed.

· **NTP (National Toxicology Program)**

None of the ingredients is listed.

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 2 (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even 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 minimus Quantities**

-

· **UN-Number**

· **DOT, TDG, IMDG, IATA**

UN1648

· **UN proper shipping name**

· **DOT**

· **TDG**

Acetonitrile solution

1648 ACETONITRILE solution, ENVIRONMENTALLY
HAZARDOUS

· **IMDG**

· **IATA**

ACETONITRILE solution, MARINE POLLUTANT

ACETONITRILE solution

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· **Transport hazard class(es)**

· **DOT, IATA**

· **Class**

3 Flammable liquids

· **Label**

3

· **TDG, IMDG**

· **Class**

3 Flammable liquids

· **Label**

3

· **Packing group**

· **DOT, TDG, IMDG, IATA**

II

· **Environmental hazards:**

Product contains environmentally hazardous substances: benalaxyl, 2-tert-butyl-5-(4-tert-butylbenzylthio)-4-chloropyridazin-3(2H)-one

· **Marine pollutant:**

Symbol (fish and tree)

· **Special marking (TDG):**

Symbol (fish and tree)

· **Special precautions for user**

Warning: Flammable liquids

· **Danger code (Kemler):**

33

· **EMS Number:**

F-E,S-D

· **Stowage Category**

B

· **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: 5 L

On cargo aircraft only: 60 L

· **TDG**

· **Excepted quantities (EQ)**

Code: E2

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 500 ml

· **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 1648 ACETONITRILE SOLUTION, 3, II,
ENVIRONMENTALLY HAZARDOUS

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15 Regulatory information

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

· Sara

· **Section 355 (extremely hazardous substances):**

470-90-6	chlorfenvinphos (ISO)
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· **Section 313 (Specific toxic chemical listings):**

75-05-8	acetonitrile
2312-35-8	propargite (ISO)
834-12-8	ametryn (ISO)
330-55-2	linuron (ISO)
21087-64-9	metribuzin (ISO)

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

75-05-8	acetonitrile
2631-40-5	isoprocab (ISO)
330-55-2	linuron (ISO)

· **Canadian substance listings:**

· **Canadian Domestic Substances List (DSL)**

75-05-8	acetonitrile
---------	--------------

· **Canadian Ingredient Disclosure list (limit 0.1%)**

All ingredients are listed.

· **Canadian Ingredient Disclosure list (limit 1%)**

None of the ingredients is listed.

· **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:** regulatory@ultrasci.com

· **Date of the latest revision of the safety data sheet** 03/31/2019 / 2

· **Abbreviations and acronyms:**

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)
 LC50: Lethal concentration, 50 percent
 LD50: Lethal dose, 50 percent
 PBT: Persistent, Bioaccumulative and Toxic
 vPvB: very Persistent and very Bioaccumulative

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

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1 Identification

- **Product identifier**
- **Trade name:** FDA Pesticide Standard GC/LC no. 5 (1X1 mL)
- **Part number:** PSM-101-P
- **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 identification

- **Classification of the substance or mixture**



GHS02 Flame

Flammable Liquids - Category 2 H225 Highly flammable liquid and vapour.



GHS07

Acute Toxicity (Oral) - Category 4 H302 Harmful if swallowed.

Eye Irritation - Category 2A H319 Causes serious eye irritation.

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



GHS02 GHS07

- **Signal word** Danger
- **Hazard-determining components of labeling:**
acetonitrile
- **Hazard statements**
Highly flammable liquid and vapour.
Harmful if swallowed.
Causes serious eye irritation.
- **Precautionary statements**
If medical advice is needed, have product container or label at hand.
Keep out of reach of children.
Read label before use.
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

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Keep container tightly closed.
 Ground and bond container and receiving equipment.
 Use explosion-proof [electrical/ventilating/lighting] equipment.
 Use non-sparking tools.
 Take actions to prevent static discharges.
 Wash thoroughly after handling.
 Do not eat, drink or smoke when using this product.
 Wear protective gloves/protective clothing/eye protection/face protection.
 If swallowed: Call a poison center/doctor if you feel unwell.
 Rinse mouth.
 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
 Continue rinsing.
 If eye irritation persists: Get medical advice/attention.
 In case of fire: Use for extinction: CO₂, powder or water spray.
 Store in a well-ventilated place. Keep cool.
 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



· **HMIS-ratings (scale 0 - 4)**



3 Composition/Information on ingredients

· **Chemical characterization: Mixtures**

· **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:**

75-05-8	acetonitrile	99.759% w/w
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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.

· **After inhalation:** Supply fresh air; consult doctor in case of complaints.

· **After skin contact:** Immediately rinse with water.

· **After eye contact:**

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· **After swallowing:** Immediately call a doctor.

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- **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 Firefighting 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** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
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 item 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.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling** No special precautions are necessary if used correctly.
- **Information about protection against explosions and fires:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
- **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.

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8 Exposure controls/ Personal protection

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

· **Control parameters**

· **Components with limit values that require monitoring at the workplace:**

75-05-8 acetonitrile

EL	Long-term value: 20 ppm Skin
EV	Long-term value: 20 ppm Skin

· **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.

Avoid contact with the eyes.

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

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9 Physical and chemical properties

· Information on basic physical and chemical properties	
· General Information	
· Appearance:	
Form:	Fluid
Color:	Colorless
· Odor:	Aromatic
· Odor threshold:	Not determined.
· pH-value:	Not determined.
· Change in condition	
Melting point/Melting range:	-46 °C
Boiling point/Boiling range:	81 °C
· Flash point:	2 °C
· Flammability (solid, gaseous):	Not applicable.
· Ignition temperature:	525 °C
· Decomposition temperature:	Not determined.
· Auto igniting:	Product is not selfigniting.
· Danger of explosion:	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
· Explosion limits:	
Lower:	4.4 Vol %
Upper:	16 Vol %
· Vapor pressure at 20 °C:	0 hPa
· Density at 20 °C:	0.786 g/cm ³
· 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 at 20 °C:	0.39 mPas
Kinematic:	Not determined.
· Solvent content:	
Organic solvents:	0.0 %
· Solids content:	
0.2 %	
· Other information	No further relevant information available.

10 Stability and reactivity

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

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- **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	1,323 mg/kg (rat)
Dermal	LD50	>2,005 mg/kg (rabbit)
Inhalative	LC50/4 h	3,596 mg/L (mouse)

75-05-8 acetonitrile

Oral	LD50	1,320 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rabbit)
Inhalative	LC50/4 h	3,587 mg/L (mouse)

153233-91-1 etoxazol

Oral	LD50	>5,000 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rat)
Inhalative	LC50/4 h	>1.09 mg/L (rat)

5598-13-0 chlorpyrifos-methyl

Oral	LD50	1,828 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rabbit)
Inhalative	LC50/4 h	>670 mg/L (rat)

- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** Irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Harmful
Irritant

- **Carcinogenic categories**

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

333-41-5	diazinon (ISO)	2A
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- **NTP (National Toxicology Program)**

None of the ingredients is listed.

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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.
- **Additional ecological information:**
- **General notes:**
 Water hazard class 2 (Self-assessment): hazardous for water
 Do not allow product to reach ground water, water course or sewage system.
 Danger to drinking water if even 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 minimus Quantities** -
- **UN-Number**
- **DOT, TDG, IMDG, IATA** UN1648
- **UN proper shipping name**
- **DOT** Acetonitrile solution
- **TDG** 1648 ACETONITRILE solution, ENVIRONMENTALLY HAZARDOUS
- **IMDG** ACETONITRILE solution, MARINE POLLUTANT
- **IATA** ACETONITRILE solution
- **Transport hazard class(es)**
- **DOT, IATA**
- 
- **Class** 3 Flammable liquids

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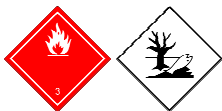
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· **Label** 3
 · **TDG, IMDG**



· **Class** 3 Flammable liquids
 · **Label** 3

· **Packing group**
 · **DOT, TDG, IMDG, IATA** II

· **Environmental hazards:** Product contains environmentally hazardous substances: etoxazol, chlorpyrifos-methyl
 · **Marine pollutant:** Symbol (fish and tree)
 · **Special marking (TDG):** Symbol (fish and tree)

· **Special precautions for user** Warning: Flammable liquids
 · **Danger code (Kemler):** 33
 · **EMS Number:** F-E,S-D
 · **Stowage Category** B

· **Transport in bulk according to Annex II of MARPOL/73/78 and the IBC Code** Not applicable.

· **Transport/Additional information:**

· **DOT**
 · **Quantity limitations** On passenger aircraft/rail: 5 L
 On cargo aircraft only: 60 L

· **TDG**
 · **Excepted quantities (EQ)** Code: E2
 Maximum net quantity per inner packaging: 30 ml
 Maximum net quantity per outer packaging: 500 ml

· **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 1648 ACETONITRILE SOLUTION, 3, II, ENVIRONMENTALLY HAZARDOUS

15 Regulatory information

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

· **Section 355 (extremely hazardous substances):**

13194-48-4 ethoprophos (ISO)

2032-65-7 mercaptodimethur (ISO)

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Safety Data Sheet

according to HPR, Schedule 1

Printing date 03/31/2019

Version Number 3

Reviewed on 03/31/2019

Trade name: FDA Pesticide Standard GC/LC no. 5 (1X1 mL)

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· Section 313 (Specific toxic chemical listings):

75-05-8	acetonitrile
5598-13-0	chlorpyrifos-methyl
333-41-5	diazinon (ISO)
13194-48-4	ethoprophos (ISO)
2032-65-7	mercaptodimethur (ISO)
7287-19-6	prometryn
43121-43-3	triadimefon (ISO)

· TSCA (Toxic Substances Control Act):

75-05-8	acetonitrile
333-41-5	diazinon (ISO)
59756-60-4	fluridone

· Canadian substance listings:
· Canadian Domestic Substances List (DSL)

75-05-8	acetonitrile
333-41-5	diazinon (ISO)

· Canadian Ingredient Disclosure list (limit 0.1%)

All ingredients are listed.

· Canadian Ingredient Disclosure list (limit 1%)

None of the ingredients is listed.

· 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: regulatory@ultrasci.com

· Date of the latest revision of the safety data sheet 03/31/2019 / 2

· Abbreviations and acronyms:

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)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

· * Data compared to the previous version altered.