1 Identification

- **Product identifier**
- **Trade name:** Custom Standard (1X1 mL)
- **Part number:** CUS-15711
- **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:**
  - ethyl acetate
- **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)
48.1.26

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)

```
  3
2
0
```

Health = 2
Fire = 3
Reactivity = 0

· HMIS-ratings (scale 0 - 4)

```
   HEALTH | 2
   FIRE   | 3
   REACTIVITY | 0
```

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:

| 141-78-6 ethyl acetate | 99.645% 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.
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.

(Contd. of page 2)
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:

<table>
<thead>
<tr>
<th>Component</th>
<th>EL Long-term value</th>
<th>EV Long-term value</th>
</tr>
</thead>
<tbody>
<tr>
<td>141-78-6 ethyl acetate</td>
<td>150 ppm</td>
<td>1,440 mg/m³, 400 ppm</td>
</tr>
</tbody>
</table>

· 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

9 Physical and chemical properties

· Information on basic physical and chemical properties

· General Information

· Appearance:
  - Form: Fluid
  - Color: Colorless

(Contd. on page 5)
### 10 Stability and reactivity

- **Reactivity**: No further relevant information available.
- **Chemical stability**: No dangerous reactions known.
- **Thermal decomposition / conditions to be avoided**: No decomposition if used according to specifications.
- **Conditions to avoid**: No further relevant information available.
- **Incompatible materials**: No further relevant information available.
Trade name: Custom Standard (1X1 mL)

- **Hazardous decomposition products:** No dangerous decomposition products known.

### 11 Toxicological information

- **Information on toxicological effects**

  - **Acute toxicity:**

    - **LD/LC50 values that are relevant for classification:**

      | ATE (Acute Toxicity Estimate) | Inhalative | LC50/4 h | 1,606 mg/L (rat) |
      |-------------------------------|------------|----------|------------------|
      | 141-78-6 ethyl acetate        | Oral       | LD50     | 5,620 mg/kg (rabbit) |
      |                               | Inhalative | LC50/4 h | 1,600 mg/L (rat)  |
      | 142459-58-3 flufenacet (ISO)  | Oral       | LD50     | 589 mg/kg (rat)   |
      |                               | Dermal     | LD50     | >2,000 mg/kg (rat) |
      |                               | Inhalative | LC50/4 h | >3,700 mg/L (rat) |
      | 121-75-5 malathion (ISO)      | Oral       | LD50     | 1,000 mg/kg (rat) |
      |                               | Dermal     | LD50     | 8,790 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)**
    - 1912-24-9 atrazine (ISO) 3
    - 122-34-9 simazine (ISO) 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 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
UN1173

UN proper shipping name
DOT
Ethyl acetate solution
TDG
1173 ETHYL ACETATE solution, ENVIRONMENTALLY HAZARDOUS
IMDG
ETHYL ACETATE solution, MARINE POLLUTANT
IATA
ETHYL ACETATE solution

Transport hazard class(es)

DOT, IATA

Class
3 Flammable liquids
Label
3

TDG, IMDG

Class
3 Flammable liquids
Label
3
### 15 Regulatory information

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

- **Section 355 (extremely hazardous substances):**
  - 122-14-5 fenitrothion (ISO)
  - 86-50-0 azinphos-methyl (ISO)
  - 60-51-5 dimethoate (ISO)

- **Section 313 (Specific toxic chemical listings):**
  - 114-26-1 propoxur (ISO)
  - 1912-24-9 atrazine (ISO)
  - 22781-23-3 bendiocarb (ISO)
  - 60-51-5 dimethoate (ISO)
  - 957-51-7 diphenamid (ISO)
Trade name: Custom Standard (1X1 mL)

<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Chemical Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>330-55-2</td>
<td>linuron (ISO)</td>
</tr>
<tr>
<td>21087-64-9</td>
<td>metribuzin (ISO)</td>
</tr>
<tr>
<td>19666-30-9</td>
<td>3-[2,4-dichloro-5-(1-methylethoxy)phenyl]-5-(1,1-dimethylethyl)-1,3,4-oxadiazol-2(3H)-one</td>
</tr>
<tr>
<td>709-98-8</td>
<td>propanil (ISO)</td>
</tr>
<tr>
<td>23950-58-5</td>
<td>propyzamide (ISO)</td>
</tr>
<tr>
<td>122-34-9</td>
<td>simazine (ISO)</td>
</tr>
<tr>
<td>121-75-5</td>
<td>malathion (ISO)</td>
</tr>
</tbody>
</table>

TSCA (Toxic Substances Control Act):

<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Chemical Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>141-78-6</td>
<td>ethyl acetate</td>
</tr>
<tr>
<td>1912-24-9</td>
<td>atrazine (ISO)</td>
</tr>
<tr>
<td>60-51-5</td>
<td>dimethoate (ISO)</td>
</tr>
<tr>
<td>330-55-2</td>
<td>linuron (ISO)</td>
</tr>
<tr>
<td>122-34-9</td>
<td>simazine (ISO)</td>
</tr>
<tr>
<td>5915-41-3</td>
<td>terbuthylazine</td>
</tr>
</tbody>
</table>

Canadian substance listings:

- **Canadian Domestic Substances List (DSL)**
- **Canadian Ingredient Disclosure list (limit 0.1%)**
- **Canadian Ingredient Disclosure list (limit 1%)**

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.

**Date of the latest revision of the safety data sheet**: 04/09/2019 / 1

**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