Kit Name: China Pesticide Test Mix

Kit PN: G3440-85045

This product is a kit, composed of the following individual chemical components:

<table>
<thead>
<tr>
<th>Component Part Number</th>
<th>Component Name</th>
<th>Volume or mass/container and unit</th>
<th>No. of component containers/kit</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGI-P03-1</td>
<td>Pesticide Standard 1</td>
<td>1 mL</td>
<td>2</td>
</tr>
<tr>
<td>AGI-P03-2</td>
<td>Pesticide Standard 2</td>
<td>1 mL</td>
<td>2</td>
</tr>
<tr>
<td>AGI-P03-3</td>
<td>Pesticide Standard 3</td>
<td>1 mL</td>
<td>2</td>
</tr>
<tr>
<td>AGI-P03-4</td>
<td>Pesticide Standard 4</td>
<td>1 mL</td>
<td>2</td>
</tr>
<tr>
<td>AGI-P03-5</td>
<td>Pesticide Standard 5</td>
<td>1 mL</td>
<td>2</td>
</tr>
<tr>
<td>AGI-P03-6</td>
<td>Pesticide Standard 6</td>
<td>1 mL</td>
<td>2</td>
</tr>
<tr>
<td>AGI-P03-7</td>
<td>Pesticide Standard 7</td>
<td>1 mL</td>
<td>2</td>
</tr>
<tr>
<td>AGI-P03-8</td>
<td>Pesticide Standard 8</td>
<td>1 mL</td>
<td>2</td>
</tr>
<tr>
<td>AGI-P03-9</td>
<td>Pesticide Standard 9</td>
<td>1 mL</td>
<td>2</td>
</tr>
<tr>
<td>AGI-P03-10</td>
<td>Pesticide Standard 10</td>
<td>1 mL</td>
<td>2</td>
</tr>
</tbody>
</table>

SDSs for each component follow this cover sheet.

Transportation Information for the Kit:

Proper Shipping Names:

<table>
<thead>
<tr>
<th>DOT</th>
<th>IATA/ICAO</th>
<th>China</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not regulated</td>
<td>Not regulated</td>
<td>UN1648 Acetonitrile solution</td>
</tr>
</tbody>
</table>

Not regulated
1 Identification

- **Product identifier**
  - **Trade name:** Pesticide Standard 1
  - **Part number:** AGI-P03-1

- **Relevant identified uses of the substance or mixture and uses advised against**
  - Reagents and Standards for Analytical Chemical Laboratory Use

- **Details of the supplier of the safety data sheet**
  - **Manufacturer/Supplier:** Agilent Technologies Australia Pty Ltd
    679 Springvale Road
    Mulgrave
    Victoria 3170, Australia

- **Further information obtainable from:**
  - Telephone: 1800 802 402
  - e-mail: pdl-msds_author@agilent.com
  - **Emergency telephone number:** CHEMTREC®: +(61) - 290372994

2 Hazard(s) Identification

- **Classification of the substance or mixture**
  - **GHS label elements** The product is classified and labelled according to the Globally Harmonised System (GHS).
  - **Hazard pictograms**

- **Signal word** Danger

- **Hazard-determining components of labelling:**
  - 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.

(Contd. on page 2)
Trade name: Pesticide Standard 1

Read label before use.
Keep away from heat/sparks/open flames/hot surfaces. No smoking.
Keep container tightly closed.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
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): Remove/Take off immediately all contaminated clothing. Rinse skin with water/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.

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

3 Composition and Information on Ingredients

- Chemical characterisation: Mixtures
- Description: Mixture of substances listed below with nonhazardous additions.

- Dangerous components:

<table>
<thead>
<tr>
<th>75-05-8 acetonitrile</th>
<th>99.733%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flam. Liq. 2, H225; Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332; Eye Irrit. 2A, H319</td>
<td></td>
</tr>
</tbody>
</table>

- Additional information: For the wording of the listed hazard phrases refer to section 16.

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: Call for a doctor immediately.
  - Information for doctor:
    - Most important symptoms and effects, both acute and delayed No further relevant information available.

(Contd. on page 3)
5 Fire Fighting Measures

- Extinguishing media
- Suitable extinguishing agents:
  CO2, 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 product to reach sewage system or any water course.
  Inform respective authorities in case of seepage into water course or sewage system.
  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 fire - and explosion protection:
  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 container 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 and personal protection

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

· Control parameters

· Ingredients with limit values that require monitoring at the workplace:

<table>
<thead>
<tr>
<th>75-05-8 acetonitrile</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Short-term value</strong>: 101 mg/m³, 60 ppm</td>
</tr>
<tr>
<td><strong>Long-term value</strong>: 67 mg/m³, 40 ppm</td>
</tr>
<tr>
<td><strong>Sk</strong></td>
</tr>
</tbody>
</table>

· Additional information: The lists valid during the making 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.

· Respiratory protection:
  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 11-13mil thickness are recommended for normal use. The breakthrough time is 1hr. For cleaning a spill where there is direct contact of the chemical, butyl rubber gloves are recommended 12-15mil 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

(Contd. on page 5)
9 Physical and Chemical Properties

- Information on basic physical and chemical properties
- General Information
  - Appearance:
    - Form: Fluid
    - Colour: Colourless
  - Odour: Aromatic
  - Odour threshold: Not determined.
- pH-value: Not determined.
- Change in condition
  - Melting point/freezing point: -46 °C
  - Initial boiling point and boiling range: 81 °C
- Flash point: 2 °C
- Flammability (solid, gas): Not applicable.
- Ignition temperature: 525 °C
- Decomposition temperature: Not determined.
- Auto-ignition temperature: Product is not selfigniting.
- Explosive properties: Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
- Explosion limits:
  - Lower: 4.4 Vol %
  - Upper: 16 Vol %
- Vapour pressure at 20 °C: 0 hPa
- Density at 20 °C: 0.786 g/cm³
- Relative density: Not determined.
- Vapour 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:
  - VOC (EC): 0.00 %
- Solids content: 0.2 %
- Other information: No further relevant information available.

10 Stability and Reactivity

- Reactivity: No further relevant information available.
11 Toxicological Information

- 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.

### 11.1 LD/LC50 values relevant for classification:

<table>
<thead>
<tr>
<th>Toxicity</th>
<th>ATE (Acute Toxicity Estimates)</th>
<th>75-05-8 acetonitrile</th>
<th>25311-71-1 isofenphos (ISO)</th>
<th>119168-77-3 tebufenpyrad</th>
<th>24151-93-7 piperophos (ISO)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral LD50</td>
<td>1,324 mg/kg (rat)</td>
<td>1,320 mg/kg (rat)</td>
<td>21.1 mg/kg (rat)</td>
<td>595 mg/kg (rat)</td>
<td>324 mg/kg (rat)</td>
</tr>
<tr>
<td>Dermal LD50</td>
<td>&gt;2,005 mg/kg (rabbit)</td>
<td>&gt;2,000 mg/kg (rabbit)</td>
<td>162 mg/kg (rabbit)</td>
<td>&gt;2,000 mg/kg (rat)</td>
<td>&gt;2,150 mg/kg (rat)</td>
</tr>
<tr>
<td>Inhalative LC50/4 h</td>
<td>3,597 mg/L (mouse)</td>
<td>3,587 mg/L (mouse)</td>
<td>144 mg/L (rat)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Primary irritant effect:
- Skin corrosion/irritation: No irritant effect.
- Serious eye damage/irritation: Irritating effect.
- Respiratory or skin sensitisation: No sensitising effects known.
- Additional toxicological information:
  The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
  Harmful
  Irritant

12 Ecological Information

- Toxicity
- Aquatic toxicity: No further relevant information available.
- Persistence and degradability: No further relevant information available.
Safety Data Sheet
according to WHS Regulations

Trade name: Pesticide Standard 1

- **Behaviour 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 (German Regulation) (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 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

- **UN-Number**
- **ADG, IMDG, IATA**
  UN1648

- **UN proper shipping name**
- **ADG**
  1648 ACETONITRILE solution, ENVIRONMENTALLY HAZARDOUS
- **IMDG**
  ACETONITRILE solution, MARINE POLLUTANT
- **IATA**
  ACETONITRILE solution

- **Transport hazard class(es)**
  - **ADG, IMDG**
    - **Class**
    - **Label**
      - **Class** 3 Flammable liquids.
      - **Label** 3
    - **IATA**
      - **Class**
      - **Label**
        - **Class** 3 Flammable liquids.
        - **Label** 3
### Trade name: Pesticide Standard 1

- **Packing group**
  - ADG, IMDG, IATA: II
- **Environmental hazards:**
  - Product contains environmentally hazardous substances: imazalil (ISO), permethrin (ISO)
  - Marine pollutant: Symbol (fish and tree)
  - Special marking (ADG): Symbol (fish and tree)
- **Special precautions for user**
  - Warning: Flammable liquids.
  - Danger code (Kemler): 33
  - EMS Number: F-E,S-D
  - Stowage Category: B
  - Stowage Code: SW2 Clear of living quarters.
- **Transport in bulk according to Annex II of Marpol and the IBC Code**
  - Not applicable.
- **Transport/Additional information:**
  - **ADG**
    - 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
  - **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

- **Australian Inventory of Chemical Substances**
  - 75-05-8 acetonitrile
  - 51-03-6 piperonyl butoxide
  - 30560-19-1 acephate (ISO)
  - 786-19-6 carbophenothion (ISO)
  - 99-30-9 dichloran
  - 1194-65-6 dichlobenil (ISO)
  - 78-48-8 S,S,S-tributylphosphorotrithioate
  - 25311-71-1 isofenphos (ISO)
  - 57837-19-1 metalaxyl (ISO)
  - 51218-45-2 metolachlor

(Contd. on page 9)
Trade name: Pesticide Standard 1

<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Chemical Name</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>43121-43-3</td>
<td>triadimefon (ISO)</td>
<td></td>
</tr>
<tr>
<td>52645-53-1</td>
<td>permethrin (ISO)</td>
<td></td>
</tr>
</tbody>
</table>

- **Standard for the Uniform Scheduling of Medicines and Poisons**
  - 35554-44-0 imazalil (ISO) S5
  - 141517-21-7 trifloxystrobin (ISO) S5
  - 30560-19-1 acephate (ISO) S6
  - 107534-96-3 1-(4-chlorophenyl)-4,4-dimethyl-3-(1,2,4-triazol-1-ylmethyl)pentan-3-ol S5
  - 786-19-6 carbofuran (ISO) S7
  - 99-30-9 dichloran S5
  - 1194-65-6 dichlobenil (ISO) S6
  - 25311-71-1 isofenphos (ISO) S7
  - 57837-19-1 metalaxyl (ISO) S5, S6
  - 43121-43-3 triadimefon (ISO) S5, S6
  - 119168-77-3 tebufenpyrad S6
  - 24151-93-7 piperophos (ISO) S6
  - 52645-53-1 permethrin (ISO) S4, S5, S6

- **Directive 2012/18/EU**
  - **Named dangerous substances - ANNEX I** None of the ingredients is listed.

- **Seveso category**
  - E2 Hazardous to the Aquatic Environment
  - P5c FLAMMABLE LIQUIDS

- **Qualifying quantity (tonnes) for the application of lower-tier requirements** 200 t
- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 500 t
- **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.

- **Relevant phrases**
  - H225 Highly flammable liquid and vapour.
  - H302 Harmful if swallowed.
  - H312 Harmful in contact with skin.
  - H319 Causes serious eye irritation.
  - H332 Harmful if inhaled.

- **Abbreviations and acronyms:**
  - ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
  - IMDG: International Maritime Code for Dangerous Goods
  - 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)
  - VOC: Volatile Organic Compounds (USA, EU)
  - LC50: Lethal concentration, 50 percent
  - LD50: Lethal dose, 50 percent
  - PBT: Persistent, Bioaccumulative and Toxic
  - vPvB: very Persistent and very Bioaccumulative
  - Flam. Liq. 2: Flammable liquids – Category 2
### Trade name: Pesticide Standard 1

<table>
<thead>
<tr>
<th>Acute Tox. 4: Acute toxicity – Category 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A</td>
</tr>
</tbody>
</table>

(Contd. of page 9)
1 Identification

- Product identifier
- Trade name: Pesticide Standard 2
- Part number: AGI-P03-2
- Relevant identified uses of the substance or mixture and uses advised against
  Reagents and Standards for Analytical Chemical Laboratory Use

- Details of the supplier of the safety data sheet
- Manufacturer/Supplier:
  Agilent Technologies Australia Pty Ltd
  679 Springvale Road
  Mulgrave
  Victoria 3170, Australia

- Further information obtainable from:
  Telephone: 1800 802 402
  e-mail: pdl-msds_author@agilent.com
- Emergency telephone number: CHEMTREC®: +(61) - 290372994

2 Hazard(s) Identification

- Classification of the substance or mixture
  - flame
  Flam. Liq. 2  H225  Highly flammable liquid and vapour.

  - !
  Acute Tox. 4  H302  Harmful if swallowed.
  Eye Irrit. 2A  H319  Causes serious eye irritation.

- Label elements
- GHS label elements The product is classified and labelled according to the Globally Harmonised System (GHS).
- Hazard pictograms
  - GHS02  GHS07
  - Signal word Danger

- Hazard-determining components of labelling:
  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.

(Contd. on page 2)
Trade name: Pesticide Standard 2

Read label before use.
Keep away from heat/sparks/open flames/hot surfaces. No smoking.
Keep container tightly closed.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
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): Remove/Take off immediately all contaminated clothing. Rinse skin with water/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.
- Other hazards
- Results of PBT and vPvB assessment
- PBT: Not applicable.
- vPvB: Not applicable.

3 Composition and Information on Ingredients

- Chemical characterisation: Mixtures
- Description: Mixture of substances listed below with nonhazardous additions.

- Dangerous components:

| Acetonitrile | 99.721% |
| 75-05-8 |  |

- Additional information: For the wording of the listed hazard phrases refer to section 16.

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: Call for a doctor immediately.
- Information for doctor:
  - Most important symptoms and effects, both acute and delayed No further relevant information available.
5 Fire Fighting Measures

- Extinguishing media
- Suitable extinguishing agents: CO2, 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 product to reach sewage system or any water course.
  Inform respective authorities in case of seepage into water course or sewage system.
  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 fire - and explosion protection:
  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 container tightly sealed.
  Store in cool, dry conditions in well sealed receptacles.
- Specific end use(s) No further relevant information available.

(Contd. on page 4)
8 Exposure controls and personal protection

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

· Control parameters

· Ingredients with limit values that require monitoring at the workplace:

<table>
<thead>
<tr>
<th>75-05-8 acetonitrile</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NES</strong></td>
</tr>
<tr>
<td>Short-term value: 101 mg/m³, 60 ppm</td>
</tr>
<tr>
<td>Long-term value: 67 mg/m³, 40 ppm</td>
</tr>
<tr>
<td><strong>Sk</strong></td>
</tr>
<tr>
<td><strong>WES</strong></td>
</tr>
<tr>
<td>Short-term value: 101 mg/m³, 60 ppm</td>
</tr>
<tr>
<td>Long-term value: 67 mg/m³, 40 ppm</td>
</tr>
<tr>
<td><strong>Sk</strong></td>
</tr>
</tbody>
</table>

· Additional information: The lists valid during the making 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.

· Respiratory protection:
  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 11-13mil thickness are recommended for normal use. The breakthrough time is 1hr. For cleaning a spill where there is direct contact of the chemical, butyl rubber gloves are recommended 12-15mil 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
    - **Colour:** Colourless
    - **Odour:** Aromatic
    - **Odour threshold:** Not determined.
  - **pH-value:** Not determined.

### Change in condition
- **Melting point/freezing point:** -46 °C
- **Initial boiling point and boiling range:** 81 °C
- **Flash point:** 2 °C
- **Flammability (solid, gas):** Not applicable.
- **Ignition temperature:** 525 °C
- **Decomposition temperature:** Not determined.
- **Auto-ignition temperature:** Product is not selfigniting.

### Explosive properties
- Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
- **Explosion limits:**
  - Lower: 4.4 Vol %
  - Upper: 16 Vol %
- **Vapour pressure at 20 °C:** 0 hPa
- **Density at 20 °C:** 0.786 g/cm³
- **Relative density**
  - Not determined.
- **Vapour 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: 0.1 %
- VOC (EC): 0.05 %
- **Solids content:** 0.1 %
- **Other information**
  - No further relevant information available.

## 10 Stability and Reactivity

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

(Contd. on page 6)
Trade name: Pesticide Standard 2

- 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 relevant for classification:

<table>
<thead>
<tr>
<th>Compound</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalative LC50/4 h</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetonitrile (75-05-8)</td>
<td>1,320 mg/kg (rat)</td>
<td>&gt;2,000 mg/kg (rabbit)</td>
<td>3,587 mg/L (mouse)</td>
</tr>
<tr>
<td>Quinalphos (13593-03-8)</td>
<td>26 mg/kg (rat)</td>
<td>300 mg/kg (rat)</td>
<td>330 mg/L (mouse)</td>
</tr>
<tr>
<td>Sulfotep (3689-24-5)</td>
<td>5 mg/kg (rat)</td>
<td>20 mg/kg (rat)</td>
<td>38 mg/L (rat)</td>
</tr>
<tr>
<td>Mevinphos (7786-34-7)</td>
<td>3 mg/kg (rat)</td>
<td>4 mg/kg (rat)</td>
<td></td>
</tr>
<tr>
<td>S-tert-butylthiomethyl O,O-diethylphosphorodithioate (13071-79-9)</td>
<td>4.5 mg/kg (rat)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>trans-isopropyl-3-[[ethy lamino]-methoxyfosfinothioyl]oxy]crotonate (31218-83-4)</td>
<td>564 mg/kg (rat)</td>
<td>690 mg/L (rat)</td>
<td></td>
</tr>
<tr>
<td>Triazophos (24017-47-8)</td>
<td>57 mg/kg (rat)</td>
<td>1,100 mg/kg (rat)</td>
<td>28 mg/L (rat)</td>
</tr>
</tbody>
</table>

- Primary irritant effect:
- Skin corrosion/irritation No irritant effect.
- Serious eye damage/irritation Irritating effect.
12 Ecological Information

- **Toxicity**
  - **Aquatic toxicity**: No further relevant information available.
  - **Persistence and degradability**: No further relevant information available.
  - **Behaviour 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 (German Regulation) (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 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

- **UN-Number**
  - ADG, IMDG, IATA: UN1648
- **UN proper shipping name**
  - ADG: 1648 ACETONITRILE solution, ENVIRONMENTALLY HAZARDOUS
  - IMDG: ACETONITRILE solution, MARINE POLLUTANT
  - IATA: ACETONITRILE solution
### Transport hazard class(es)

- **Class**: 3
- **Label**: 3

### IATA

- **Class**: 3 Flammable liquids.
- **Label**: 3

### Packing group

- **ADG, IMDG, IATA**: II

### Environmental hazards:

- **Product contains environmentally hazardous substances**: methacrifos (ISO), quinalphos (ISO)
- **Marine pollutant**: Symbol (fish and tree)
- **Special marking (ADG)**: Symbol (fish and tree)

### Special precautions for user

- **Warning**: Flammable liquids.
- **Danger code (Kemler)**: 33
- **EMS Number**: F-E,S-D
- **Stowage Category**: B
- **Stowage Code**: SW2 Clear of living quarters.

### Transport in bulk according to Annex II of Marpol and the IBC Code

- **Not applicable.**

### Transport/Additional information:

#### ADG

- **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
- **Transport category**: 2
- **Tunnel restriction code**: D/E

#### 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
### 15 Regulatory information

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

- **Australian Inventory of Chemical Substances**
  - 75-05-8 acetonitrile
  - 97-17-6 dichlofenthion
  - 115-90-2 fensulfothion (ISO)
  - 29232-93-7 pirimiphos-methyl (ISO)
  - 13194-48-4 ethoprophos (ISO)
  - 19666-30-9 3-[2,4-dichloro-5-(1-methylethoxy)phenyl]-5-(1,1-dimethylethyl)-1,3,4-oxadiazol-2(3H)-one
  - 7786-34-7 mevinphos (ISO)
  - 13071-79-9 S-tert-butylthiomethyl O,O-diethylphosphorodithioate
  - 31218-83-4 trans-isopropyl-3-[[ethylamino]-methoxyf osfinothioyl]oxy]crotonate
  - 23103-98-2 pirimicarb
  - 13457-18-6 pyrazophos (ISO)
  - 66246-88-6 penconazole

- **Standard for the Uniform Scheduling of Medicines and Poisons**
  - 97-17-6 dichlofenthion S6
  - 115-90-2 fensulfothion (ISO) S7
  - 29232-93-7 pirimiphos-methyl (ISO) S6
  - 3689-24-5 sulfotep (ISO) S7
  - 62610-77-9 methacrifos (ISO) S6, S7
  - 13194-48-4 ethoprophos (ISO) S6, S7
  - 19666-30-9 3-[2,4-dichloro-5-(1-methylethoxy)phenyl]-5-(1,1-dimethylethyl)-1,3,4-oxadiazol-2(3H)-one S6
  - 7786-34-7 mevinphos (ISO) S7
  - 13071-79-9 S-tert-butylthiomethyl O,O-diethylphosphorodithioate S7
  - 31218-83-4 trans-isopropyl-3-[[ethylamino]-methoxyf osfinothioyl]oxy]crotonate S6
  - 23103-98-2 pirimicarb S5, S6
  - 13457-18-6 pyrazophos (ISO) S6
  - 66246-88-6 penconazole S5
  - 98886-44-3 fosthiazate (ISO) S7

- **Directive 2012/18/EU**
  - **Named dangerous substances - ANNEX I** None of the ingredients is listed.
  - **Seveso category**
    - E1 Hazardous to the Aquatic Environment
    - P5c FLAMMABLE LIQUIDS
  - **Qualifying quantity (tonnes) for the application of lower-tier requirements** 100 t
  - **Qualifying quantity (tonnes) for the application of upper-tier requirements** 200 t
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.

· Relevant phrases
  H225 Highly flammable liquid and vapour.
  H302 Harmful if swallowed.
  H312 Harmful in contact with skin.
  H319 Causes serious eye irritation.
  H332 Harmful if inhaled.

· Abbreviations and acronyms:
  ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
  IMDG: International Maritime Code for Dangerous Goods
  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)
  VOC: Volatile Organic Compounds (USA, EU)
  LC50: Lethal concentration, 50 percent
  LD50: Lethal dose, 50 percent
  PBT: Persistent, Bioaccumulative and Toxic
  vPvB: very Persistent and very Bioaccumulative
  Flam. Liq. 2: Flammable liquids – Category 2
  Acute Tox. 4: Acute toxicity – Category 4
  Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A
1 Identification

· Product identifier
  · Trade name: Pesticide Standard 3
  · Part number: AGI-P03-3
· Relevant identified uses of the substance or mixture and uses advised against
  Reagents and Standards for Analytical Chemical Laboratory Use
· Details of the supplier of the safety data sheet
  · Manufacturer/Supplier:
    Agilent Technologies Australia Pty Ltd
    679 Springvale Road
    Mulgrave
    Victoria 3170, Australia
  · Further information obtainable from:
    Telephone: 1800 802 402
    e-mail: pdl-msds_author@agilent.com
  · Emergency telephone number: CHEMTREC®: +(61) - 290372994

2 Hazard(s) Identification

· Classification of the substance or mixture

\[\begin{align*}
\text{flame} \quad \text{Flam. Liq. 2 H225} & \quad \text{Highly flammable liquid and vapour.} \\
\text{Eye Irrit. 2A H319} & \quad \text{Causes serious eye irritation.}
\end{align*}\]

· GHS label elements
  The product is classified and labelled according to the Globally Harmonised System (GHS).
· Hazard pictograms

\[\text{GHS02 GHS07}\]

· Signal word
  Danger

· Hazard-determining components of labelling:
  · 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.
Trade name: Pesticide Standard 3

Read label before use.
Keep away from heat/sparks/open flames/hot surfaces. No smoking.
Keep container tightly closed.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
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): Remove/Take off immediately all contaminated clothing. Rinse skin with water/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.

Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.
vPvB: Not applicable.

3 Composition and Information on Ingredients

Chemical characterisation: Mixtures

Description: Mixture of substances listed below with nonhazardous additions.

Dangerous components:

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS Number</th>
<th>PBT</th>
<th>vPvB</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>acetonitrile</td>
<td>75-05-8</td>
<td></td>
<td></td>
<td>99.708%</td>
</tr>
<tr>
<td>Flam. Liq. 2, H225; Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332; Eye Irrit. 2A, H319</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Additional information: For the wording of the listed hazard phrases refer to section 16.

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: Call for a doctor immediately.

Information for doctor:

Most important symptoms and effects, both acute and delayed No further relevant information available.

(Contd. on page 3)
5 Fire Fighting Measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
  CO2, 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 product to reach sewage system or any water course.
  Inform respective authorities in case of seepage into water course or sewage system.
  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 fire - and explosion protection:**
  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 container tightly sealed.
    Store in cool, dry conditions in well sealed receptacles.
- **Specific end use(s)** No further relevant information available.
8 Exposure controls and personal protection

- Additional information about design of technical facilities: No further data; see item 7.

- Control parameters

- Ingredients with limit values that require monitoring at the workplace:

<table>
<thead>
<tr>
<th>75-05-8 acetonitrile</th>
</tr>
</thead>
</table>
| **NIS** | Short-term value: 101 mg/m³, 60 ppm  
| Long-term value: 67 mg/m³, 40 ppm  
| Sk |
| **WES** | Short-term value: 101 mg/m³, 60 ppm  
| Long-term value: 67 mg/m³, 40 ppm  
| Sk |

- Additional information: The lists valid during the making 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.

- Respiratory protection:
  - 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 11-13mil thickness are recommended for normal use. The breakthrough time is 1hr. For cleaning a spill where there is direct contact of the chemical, butyl rubber gloves are recommended 12-15mil 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
    - **Colour:** Colourless
  - **Odour:** Aromatic
  - **Odour threshold:** Not determined.
- **pH-value:** Not determined.
- **Change in condition**
  - **Melting point/freezing point:** -46 °C
  - **Initial boiling point and boiling range:** 81 °C
- **Flash point:** 2 °C
- **Flammability (solid, gas):** Not applicable.
- **Ignition temperature:** 525 °C
- **Decomposition temperature:** Not determined.
- **Auto-ignition temperature:** Product is not self-igniting.
- **Explosive properties:** Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
- **Explosion limits:**
  - **Lower:** 4.4 Vol %
  - **Upper:** 16 Vol %
- **Vapour pressure at 20 °C:** 0 hPa
- **Density at 20 °C:** 0.786 g/cm³
- **Relative density:** Not determined.
- **Vapour 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 %
  - **VOC (EC):** 0.03 %
- **Solids content:** 0.2 %
- **Other information**
  - No further relevant information available.

**10 Stability and Reactivity**

- **Reactivity** No further relevant information available.
Trade name: Pesticide Standard 3

- 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 relevant for classification:

<table>
<thead>
<tr>
<th>Compound</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalative LC50/4 h</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetonitrile</td>
<td>1,324 mg/kg (rat)</td>
<td>&gt;2,006 mg/kg (rabbit)</td>
<td>3,598 mg/L (mouse)</td>
</tr>
<tr>
<td>2-tert-butyl-5-(4-tert-butylbenzylthio)-4-chloropyridazin-3(2H)-one</td>
<td>1,320 mg/kg (rat)</td>
<td>&gt;2,000 mg/kg (rabbit)</td>
<td>3,587 mg/L (mouse)</td>
</tr>
<tr>
<td>Deltamethrin (ISO)</td>
<td>205 mg/kg (mouse)</td>
<td>620 mg/L (rat)</td>
<td></td>
</tr>
<tr>
<td>Bifenthrin</td>
<td>9.36 mg/kg (rat)</td>
<td>2,000 mg/kg (rabbit)</td>
<td></td>
</tr>
<tr>
<td>Alachlor (ISO)</td>
<td>55 mg/kg (rat)</td>
<td>&gt;2,000 mg/kg (rabbit)</td>
<td></td>
</tr>
<tr>
<td>Metribuzin (ISO)</td>
<td>930 mg/kg (rat)</td>
<td>3,500 mg/kg (rabbit)</td>
<td></td>
</tr>
<tr>
<td>Molate (ISO)</td>
<td>1,090 mg/kg (rat)</td>
<td>&gt;20,000 mg/kg (rabbit)</td>
<td>&gt;860 mg/L (rat)</td>
</tr>
</tbody>
</table>

- Primary irritant effect:
- Skin corrosion/irritation: No irritant effect.
- Serious eye damage/irritation: Irritating effect.
Trade name: Pesticide Standard 3

- **Respiratory or skin sensitisation** No sensitising effects known.
- **Additional toxicological information:**
  The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
  - Harmful
  - Irritant

12 Ecological Information

- **Toxicity**
  - **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behaviour 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 (German Regulation) (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 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

- **UN-Number**
  - ADG, IMDG, IATA: UN1648
- **UN proper shipping name**
  - ADG: 1648 ACETONITRILE solution, ENVIRONMENTALLY HAZARDOUS
  - IMDG: ACETONITRILE solution, MARINE POLLUTANT
  - IATA: ACETONITRILE solution
### Transport hazard class(es)

- ADG, IMDG

#### Class
- 3 Flammable liquids.

#### Label
- 3

### IATA

- Class
- 3 Flammable liquids.

- Label
- 3

### Packing group

- ADG, IMDG, IATA
- II

### Environmental hazards:

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

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

#### Special marking (ADG):
- Symbol (fish and tree)

### Special precautions for user

- Warning: Flammable liquids.
- Danger code (Kemler): 33
- EMS Number: F-E,S-D
- Stowage Category: B
- Stowage Code: SW2 Clear of living quarters.

### Transport in bulk according to Annex II of Marpol and the IBC Code

- Not applicable.

### Transport/Additional information:

#### ADG

- Limited quantities (LQ): 1L
- Code: E2
  - Maximum net quantity per inner packaging: 30 ml
  - Maximum net quantity per outer packaging: 500 ml

#### IMDG

- Limited quantities (LQ): 1L
- Code: E2
  - Maximum net quantity per inner packaging: 30 ml
  - Maximum net quantity per outer packaging: 500 ml
### 15 Regulatory information

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

**Australian Inventory of Chemical Substances**

<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Chemical Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>75-05-8</td>
<td>acetonitrile</td>
</tr>
<tr>
<td>584-79-2</td>
<td>allethrin</td>
</tr>
<tr>
<td>52918-63-5</td>
<td>deltamethrin (ISO)</td>
</tr>
<tr>
<td>15972-60-8</td>
<td>alachlor (ISO)</td>
</tr>
<tr>
<td>60168-88-9</td>
<td>fenarimol (ISO)</td>
</tr>
<tr>
<td>21087-64-9</td>
<td>metribuzin (ISO)</td>
</tr>
<tr>
<td>2212-67-1</td>
<td>molinate (ISO)</td>
</tr>
<tr>
<td>42874-03-3</td>
<td>oxyfluorfen</td>
</tr>
<tr>
<td>50471-44-8</td>
<td>vinclozolin (ISO)</td>
</tr>
<tr>
<td>2303-17-5</td>
<td>tri-allate (ISO)</td>
</tr>
<tr>
<td>7696-12-0</td>
<td>tetramethrin</td>
</tr>
</tbody>
</table>

**Standard for the Uniform Scheduling of Medicines and Poisons**

<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Chemical Name</th>
<th>S5, S6</th>
</tr>
</thead>
<tbody>
<tr>
<td>96489-71-3</td>
<td>2-tert-butyl-5-(4-tert-butylbenzylthio)-4-chloropyridazin-3(2H)-one</td>
<td>S5, S6</td>
</tr>
<tr>
<td>584-79-2</td>
<td>allethrin</td>
<td>S5, S6</td>
</tr>
<tr>
<td>52918-63-5</td>
<td>deltamethrin (ISO)</td>
<td>S5, S6, S7</td>
</tr>
<tr>
<td>82657-04-3</td>
<td>bifenthrin</td>
<td>S6, S7</td>
</tr>
<tr>
<td>15972-60-8</td>
<td>alachlor (ISO)</td>
<td>S7</td>
</tr>
<tr>
<td>60168-88-9</td>
<td>fenarimol (ISO)</td>
<td>S5</td>
</tr>
<tr>
<td>51235-04-2</td>
<td>3-cyclohexyl-6-dimethylamino-1-methyl-1,2,3,4-tetrahydro-1,3,5-triazine-2,4-dione</td>
<td>S5, S6</td>
</tr>
<tr>
<td>2212-67-1</td>
<td>molinate (ISO)</td>
<td>S7</td>
</tr>
<tr>
<td>50471-44-8</td>
<td>vinclozolin (ISO)</td>
<td>S7</td>
</tr>
<tr>
<td>2303-17-5</td>
<td>tri-allate (ISO)</td>
<td>S5</td>
</tr>
<tr>
<td>7696-12-0</td>
<td>tetramethrin</td>
<td>S5</td>
</tr>
</tbody>
</table>

**Directive 2012/18/EU**

- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **Seveso category**
  - E1 Hazardous to the Aquatic Environment
  - P5c FLAMMABLE LIQUIDS
- **Qualifying quantity (tonnes) for the application of lower-tier requirements** 100 t
- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 200 t
- **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.

- Relevant phrases
  H225 Highly flammable liquid and vapour.
  H302 Harmful if swallowed.
  H312 Harmful in contact with skin.
  H319 Causes serious eye irritation.
  H332 Harmful if inhaled.
- Abbreviations and acronyms:
  ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
  IMDG: International Maritime Code for Dangerous Goods
  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)
  VOC: Volatile Organic Compounds (USA, EU)
  LC50: Lethal concentration, 50 percent
  LD50: Lethal dose, 50 percent
  PBT: Persistent, Bioaccumulative and Toxic
  vPvB: very Persistent and very Bioaccumulative
  Flam. Liq. 2: Flammable liquids – Category 2
  Acute Tox. 4: Acute toxicity – Category 4
  Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A
1 Identification

- Product identifier
  - Trade name: Pesticide Standard 4
  - Part number: AGI-P03-4
- Relevant identified uses of the substance or mixture and uses advised against
  - Reagents and Standards for Analytical Chemical Laboratory Use

- Details of the supplier of the safety data sheet
- Manufacturer/Supplier:
  - Agilent Technologies Australia Pty Ltd
  - 679 Springvale Road
  - Mulgrave
  - Victoria 3170, Australia
- Further information obtainable from:
  - Telephone: 1800 802 402
  - e-mail: pdl-msds_author@agilent.com
  - Emergency telephone number: CHEMTREC®: +(61) - 290372994

2 Hazard(s) Identification

- Classification of the substance or mixture
  - Flam. Liq. 2 H225 Highly flammable liquid and vapour.
  - Acute Tox. 4 H302 Harmful if swallowed.
  - Eye Irrit. 2A H319 Causes serious eye irritation.

- Label elements
- GHS label elements
  - The product is classified and labelled according to the Globally Harmonised System (GHS).
- Hazard pictograms
  - GHS02
  - GHS07

- Signal word
  - Danger

- Hazard-determining components of labelling:
  - 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.

(Contd. on page 2)
Trade name: Pesticide Standard 4

Read label before use.
Keep away from heat/sparks/open flames/hot surfaces. No smoking.
Keep container tightly closed.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
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): Remove/Take off immediately all contaminated clothing. Rinse skin with water/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.
- Other hazards
- Results of PBT and vPvB assessment
- PBT: Not applicable.
- vPvB: Not applicable.

3 Composition and Information on Ingredients

- Chemical characterisation: Mixtures
- Description: Mixture of substances listed below with nonhazardous additions.

- Dangerous components:

<table>
<thead>
<tr>
<th>Acetonitrile</th>
<th>99.822%</th>
</tr>
</thead>
<tbody>
<tr>
<td>75-05-8</td>
<td></td>
</tr>
<tr>
<td>Flam. Liq. 2, H225; Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332; Eye Irrit. 2A, H319</td>
<td></td>
</tr>
</tbody>
</table>

- Additional information: For the wording of the listed hazard phrases refer to section 16.

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: Call for a doctor immediately.
- Information for doctor:
- Most important symptoms and effects, both acute and delayed No further relevant information available.
Trade name: Pesticide Standard 4

- Indication of any immediate medical attention and special treatment needed
  No further relevant information available.

### 5 Fire Fighting Measures

- Extinguishing media
- Suitable extinguishing agents:
  CO2, 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 fire - and explosion protection:
  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 container tightly sealed.
  Store in cool, dry conditions in well sealed receptacles.
- Specific end use(s)
  No further relevant information available.

### 8 Exposure controls and personal protection

- Additional information about design of technical facilities:
  No further data; see item 7.
Control parameters

Ingredients with limit values that require monitoring at the workplace:

<table>
<thead>
<tr>
<th>CAS Number</th>
<th>NES Short-term</th>
<th>NES Long-term</th>
<th>Sk Short-term</th>
<th>Sk Long-term</th>
</tr>
</thead>
<tbody>
<tr>
<td>75-05-8 acetonitrile</td>
<td>101 mg/m³, 60 ppm</td>
<td>67 mg/m³, 40 ppm</td>
<td>101 mg/m³, 60 ppm</td>
<td>67 mg/m³, 40 ppm</td>
</tr>
</tbody>
</table>

Additional information: The lists valid during the making 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.

Respiratory protection:
- 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 respirator 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 11-13mil thickness are recommended for normal use. The breakthrough time is 1hr. For cleaning a spill where there is direct contact of the chemical, butyl rubber gloves are recommended 12-15mil 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
Colour: Colourless
· Odour: Aromatic
· Odour threshold: Not determined.
· pH-value: Not determined.
· Change in condition
  Melting point/freezing point: -46 °C
  Initial boiling point and boiling range: 81 °C
· Flash point: 2 °C
· Flammability (solid, gas): Not applicable.
· Ignition temperature: 525 °C
· Decomposition temperature: Not determined.
· Auto-ignition temperature: Product is not selfigniting.
· Explosion properties: Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
· Explosion limits:
  Lower: 4.4 Vol %
  Upper: 16 Vol %
· Vapour pressure at 20 °C: 0 hPa
· Density at 20 °C: 0.786 g/cm³
· Relative density: Not determined.
· Vapour 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 %
  VOC (EC) 0.01 %
· Solids content: 0.1 %
· Other information: No further relevant information available.

10 Stability and Reactivity
· Reactivity: No further relevant information available.
· Chemical stability
  · Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
  · Possibility of hazardous reactions: No dangerous reactions known.
  · Conditions to avoid: No further relevant information available.
  · Incompatible materials: No further relevant information available.
11 Toxicological Information

- Information on toxicological effects
- Acute toxicity

**11.1 LD/LC50 values relevant for classification:**

<table>
<thead>
<tr>
<th></th>
<th>LD50</th>
<th>LC50/4 h</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
<td>1,322 mg/kg</td>
<td>3,593 mg/L</td>
</tr>
<tr>
<td>Dermal</td>
<td>&gt;2,006 mg/kg</td>
<td>&gt;2,04 mg/kg</td>
</tr>
<tr>
<td>Inhalative</td>
<td>&gt;2,004 mg/kg</td>
<td>&gt;2,004 mg/kg</td>
</tr>
</tbody>
</table>

75-05-8 acetonitrile

<table>
<thead>
<tr>
<th>Test</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
<td>1,320 mg/kg</td>
</tr>
<tr>
<td>Dermal</td>
<td>&gt;2,000 mg/kg</td>
</tr>
<tr>
<td>Inhalative</td>
<td>3,587 mg/L</td>
</tr>
</tbody>
</table>

- Primary irritant effect:
  - Skin corrosion/irritation: No irritant effect.
  - Serious eye damage/irritation: Irritating effect.
  - Respiratory or skin sensitisation: No sensitising effects known.
  - Additional toxicological information:
    - The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
      - Harmful
      - Irritant

12 Ecological Information

- Toxicity
  - Aquatic toxicity: No further relevant information available.
  - Persistence and degradability: No further relevant information available.
- Behaviour 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 (German Regulation) (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 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

- **UN-Number**
  - ADG, IMDG, IATA  UN1648

- **UN proper shipping name**
  - ADG
  - IMDG, IATA
  - ACETONITRILE solution

- **Transport hazard class(es)**
  - ADG, IMDG, IATA  Class 3 Flammable liquids.

- **Packing group**
  - ADG, 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
  - **Stowage Code**: SW2 Clear of living quarters.

- **Transport in bulk according to Annex II of Marpol**
  - and the IBC Code: Not applicable.

- **Transport/Additional information:**

  - **ADG**
    - **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

  - **Transport category**: 2

  - **Tunnel restriction code**: D/E

(Contd. on page 8)
Trade name: Pesticide Standard 4

15 Regulatory information

- Australian Inventory of Chemical Substances
  - 75-05-8 acetonitrile
  - 28249-77-6 S-4-chlorobenzyl diethylthiocarbamate
  - 115-32-2 dicofol (ISO)
  - 116-29-0 tetradifon
  - 118-74-1 hexachlorobenzene
  - 314-40-9 bromacil
  - 72-20-8 endrin (ISO)
  - 139-40-2 propazine
  - 55219-65-3 alpha-tert-butyl-ß-(4-chlorophenoxy)-1H-1,2,4-triazole-1-ethanol

- Standard for the Uniform Scheduling of Medicines and Poisons
  - 28249-77-6 S-4-chlorobenzyl diethylthiocarbamate S5
  - 115-32-2 dicofol (ISO) S5
  - 116-29-0 tetradifon S6
  - 133855-98-8 Epoxiconazole S5
  - 118-74-1 hexachlorobenzene S7
  - 72-20-8 endrin (ISO) S7
  - 55219-65-3 alpha-tert-butyl-ß-(4-chlorophenoxy)-1H-1,2,4-triazole-1-ethanol S5

- Directive 2012/18/EU
  - Named dangerous substances - ANNEX I None of the ingredients is listed.
  - Seveso category P5c FLAMMABLE LIQUIDS
  - Qualifying quantity (tonnes) for the application of lower-tier requirements 5,000 t
  - Qualifying quantity (tonnes) for the application of upper-tier requirements 50,000 t
  - 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.

- Relevant phrases
  - H225 Highly flammable liquid and vapour.
  - H302 Harmful if swallowed.
  - H312 Harmful in contact with skin.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.

**Abbreviations and acronyms:**
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
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)
VOC: Volatile Organic Compounds (USA, EU)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Flam. Liq. 2: Flammable liquids – Category 2
Acute Tox. 4: Acute toxicity – Category 4
Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A
1 Identification

- **Product identifier**
  - Trade name: Pesticide Standard 5
  - Part number: AGI-P03-5
  - **Relevant identified uses of the substance or mixture and uses advised against**
    - Reagents and Standards for Analytical Chemical Laboratory Use

- **Details of the supplier of the safety data sheet**
  - **Manufacturer/Supplier:**
    - Agilent Technologies Australia Pty Ltd
    - 679 Springvale Road
    - Mulgrave
    - Victoria 3170, Australia

- **Further information obtainable from:**
  - Telephone: 1800 802 402
  - e-mail: pdl-msds_author@agilent.com
  - **Emergency telephone number:** CHEMTREC®: +(61) - 290372994

2 Hazard(s) Identification

- **Classification of the substance or mixture**
  - Flame
    - Flam. Liq. 2 H225 Highly flammable liquid and vapour.

  - !
    - Acute Tox. 4 H302 Harmful if swallowed.
    - Eye Irrit. 2A H319 Causes serious eye irritation.

- **Label elements**
  - **GHS label elements** The product is classified and labelled according to the Globally Harmonised System (GHS).
  - **Hazard pictograms**
    - GHS02
    - GHS07

- **Signal word** Danger

- **Hazard-determining components of labelling:**
  - 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.

(Contd. on page 2)
Trade name: Pesticide Standard 5

Read label before use.
Keep away from heat/sparks/open flames/hot surfaces. No smoking.
Keep container tightly closed.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
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): Remove/Take off immediately all contaminated clothing. Rinse skin with water/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.

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

3 Composition and Information on Ingredients

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

· Dangerous components:

<table>
<thead>
<tr>
<th>Acetonitrile</th>
<th>75-05-8</th>
<th>99.746%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Flam. Liq. 2, H225; Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332;</td>
<td>Eye Irrit. 2A, H319</td>
</tr>
</tbody>
</table>

· Additional information: For the wording of the listed hazard phrases refer to section 16.

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: Call for a doctor immediately.
· Information for doctor:
· Most important symptoms and effects, both acute and delayed No further relevant information available.
5 Fire Fighting Measures

- Extinguishing media
- Suitable extinguishing agents: CO2, 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 product to reach sewage system or any water course.
  Inform respective authorities in case of seepage into water course or sewage system.
  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 fire - and explosion protection:
  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 container tightly sealed.
  Store in cool, dry conditions in well sealed receptacles.
  Specific end use(s): No further relevant information available.
8 Exposure controls and personal protection

- Additional information about design of technical facilities: No further data; see item 7.

- Control parameters

- Ingredients with limit values that require monitoring at the workplace:

<table>
<thead>
<tr>
<th>75-05-8 acetonitrile</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NES</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Sk</td>
</tr>
<tr>
<td><strong>WES</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Sk</td>
</tr>
</tbody>
</table>

- Additional information: The lists valid during the making 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.

- Respiratory protection:
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 11-13mil thickness are recommended for normal use. The breakthrough time is 1hr. For cleaning a spill where there is direct contact of the chemical, butyl rubber gloves are recommended 12-15mil 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

(Contd. on page 5)
### 9 Physical and Chemical Properties

- **Information on basic physical and chemical properties**
  - **General Information**
  - **Appearance:**
    - **Form:** Fluid
    - **Colour:** Colourless
  - **Odour:** Aromatic
  - **Odour threshold:** Not determined.
  - **pH-value:** Not determined.

- **Change in condition**
  - **Melting point/freezing point:** -46 °C
  - **Initial boiling point and boiling range:** 81 °C

- **Flash point:** 2 °C

- **Flammability (solid, gas):** Not applicable.

- **Ignition temperature:** 525 °C

- **Decomposition temperature:** Not determined.

- **Auto-ignition temperature:** Product is not selfigniting.

- **Explosive properties:** Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

- **Explosion limits:**
  - **Lower:** 4.4 Vol %
  - **Upper:** 16 Vol %

- **Vapour pressure at 20 °C:** 0 hPa

- **Density at 20 °C:** 0.786 g/cm³

- **Relative density**
  - Not determined.

- **Vapour 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 %
  - **VOC (EC):** 0.04 %

- **Solids content:** 0.2 %

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

### 10 Stability and Reactivity

- **Reactivity** No further relevant information available.
11 Toxicological Information

- **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.

<table>
<thead>
<tr>
<th>75-05-8 acetonitrile</th>
<th>Oral LD50</th>
<th>1,320 mg/kg (rat)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dermal LD50</td>
<td>&gt;2,000 mg/kg (rabbit)</td>
<td></td>
</tr>
<tr>
<td>Inhalative LC50/4 h</td>
<td>3,587 mg/L (mouse)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>55-38-9 fenthion (ISO)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral LD50</td>
</tr>
<tr>
<td>Dermal LD50</td>
</tr>
<tr>
<td>Inhalative LC50/4 h</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>74070-46-5 2-chloro-6-nitro-3-phenoxyaniline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral LD50</td>
</tr>
<tr>
<td>Dermal LD50</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2104-96-3 bromophos (ISO)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral LD50</td>
</tr>
<tr>
<td>Dermal LD50</td>
</tr>
<tr>
<td>Dermal LD50</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>62-73-7 dichlorvos (ISO)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral LD50</td>
</tr>
<tr>
<td>Dermal LD50</td>
</tr>
<tr>
<td>Dermal LD50</td>
</tr>
<tr>
<td>Inhalative LC50/4 h</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>78-34-2 dioxathion (ISO)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral LD50</td>
</tr>
<tr>
<td>Dermal LD50</td>
</tr>
<tr>
<td>Inhalative LC50/4 h</td>
</tr>
</tbody>
</table>

**Homeopathic effect**
- **Primary irritant effect**
- **Skin corrosion/irritation**: No irritant effect.
- **Serious eye damage/irritation**: Irritating effect.
12 Ecological Information

- Toxicity
  - Aquatic toxicity: No further relevant information available.
- Persistence and degradability: No further relevant information available.
- Behaviour 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 (German Regulation) (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 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

- UN-Number
  - ADG, IMDG, IATA: UN1648
- UN proper shipping name
  - ADG: 1648 ACETONITRILE solution, ENVIRONMENTALLY HAZARDOUS
  - IMDG: ACETONITRILE solution, MARINE POLLUTANT
  - IATA: ACETONITRILE solution

(Contd. on page 8)
Trade name: Pesticide Standard 5

<table>
<thead>
<tr>
<th>Transport hazard class(es)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ADG, IMDG</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Class</th>
<th>Label</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>IATA</th>
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</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Class</th>
<th>Label</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Packing group</th>
<th>ADG, IMDG, IATA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>II</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Environmental hazards:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Product contains environmentally hazardous substances: 2-chloro-6-nitro-3-phenoxyaniline, dioxathion (ISO)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Marine pollutant:</th>
<th>Special marking (ADG):</th>
</tr>
</thead>
<tbody>
<tr>
<td>Symbol (fish and tree)</td>
<td>Symbol (fish and tree)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Special precautions for user</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Warning: Flammable liquids.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Danger code (Kemler):</th>
<th>EMS Number:</th>
<th>Stowage Category</th>
<th>Stowage Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>33</td>
<td>F-E-S-D</td>
<td>B</td>
<td>SW2 Clear of living quarters.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Transport in bulk according to Annex II of Marpol and the IBC Code</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Not applicable.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Transport/Additional information:</th>
<th></th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>ADG</th>
<th>IMDG</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Limited quantities (LQ)</th>
<th>Excepted quantities (EQ)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1L</td>
<td>Code: E2</td>
<td></td>
</tr>
<tr>
<td>Maximum net quantity per inner packaging: 30 ml</td>
<td>Maximum net quantity per outer packaging: 500 ml</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Transport category</th>
<th>Tunnel restriction code</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>D/E</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Limited quantities (LQ)</th>
<th>Excepted quantities (EQ)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1L</td>
<td>Code: E2</td>
</tr>
<tr>
<td>Maximum net quantity per inner packaging: 30 ml</td>
<td>Maximum net quantity per outer packaging: 500 ml</td>
</tr>
</tbody>
</table>
Trade name: Pesticide Standard 5

15 Regulatory information

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

- **Australian Inventory of Chemical Substances**

<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Chemical Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>75-05-8</td>
<td>Acetonitrile</td>
</tr>
<tr>
<td>60-51-5</td>
<td>Dimethoate (ISO)</td>
</tr>
<tr>
<td>114-26-1</td>
<td>Propoxur (ISO)</td>
</tr>
<tr>
<td>51630-58-1</td>
<td>Fenvalerate</td>
</tr>
<tr>
<td>55-38-9</td>
<td>Fenthion (ISO)</td>
</tr>
<tr>
<td>18181-80-1</td>
<td>Bromopropylate</td>
</tr>
<tr>
<td>41483-43-6</td>
<td>Bupirimate</td>
</tr>
<tr>
<td>52315-07-8</td>
<td>Cypermethrin cis/trans +/−40/60</td>
</tr>
<tr>
<td>62-73-7</td>
<td>Dichlorvos (ISO)</td>
</tr>
<tr>
<td>959-98-8</td>
<td>Endosulfan I</td>
</tr>
<tr>
<td>33213-65-9</td>
<td>Endosulfan II</td>
</tr>
<tr>
<td>2540-82-1</td>
<td>Formothion (ISO)</td>
</tr>
</tbody>
</table>

- **Standard for the Uniform Scheduling of Medicines and Poisons**

<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Chemical Name</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>60-51-5</td>
<td>Dimethoate (ISO)</td>
<td>S6</td>
</tr>
<tr>
<td>114-26-1</td>
<td>Propoxur (ISO)</td>
<td>S5, S6</td>
</tr>
<tr>
<td>51630-58-1</td>
<td>Fenvalerate</td>
<td>S6</td>
</tr>
<tr>
<td>55-38-9</td>
<td>Fenthion (ISO)</td>
<td>S5, S6, S7</td>
</tr>
<tr>
<td>2104-96-3</td>
<td>Bromophos (ISO)</td>
<td>S6</td>
</tr>
<tr>
<td>52315-07-8</td>
<td>Cypermethrin cis/trans +/−40/60</td>
<td>S5, S6</td>
</tr>
<tr>
<td>62-73-7</td>
<td>Dichlorvos (ISO)</td>
<td>S5, S6, S7</td>
</tr>
<tr>
<td>2540-82-1</td>
<td>Formothion (ISO)</td>
<td>S6</td>
</tr>
</tbody>
</table>

- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **Seveso category**
  - Hazardous to the Aquatic Environment
  - P5c FLAMMABLE LIQUIDS
- **Qualifying quantity (tonnes) for the application of lower-tier requirements** 100 t
- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 200 t
- **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.
Safety Data Sheet
according to WHS Regulations

Printing date 08.10.2018
Revision: 08.10.2018
Version number 4

Trade name: Pesticide Standard 5

· Relevant phrases
  H225 Highly flammable liquid and vapour.
  H302 Harmful if swallowed.
  H312 Harmful in contact with skin.
  H319 Causes serious eye irritation.
  H332 Harmful if inhaled.

· Abbreviations and acronyms:
  ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
  IMDG: International Maritime Code for Dangerous Goods
  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)
  VOC: Volatile Organic Compounds (USA, EU)
  LC50: Lethal concentration, 50 percent
  LD50: Lethal dose, 50 percent
  PBT: Persistent, Bioaccumulative and Toxic
  vPvB: very Persistent and very Bioaccumulative
  Flam. Liq. 2: Flammable liquids – Category 2
  Acute Tox. 4: Acute toxicity – Category 4
  Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A
1 Identification

- Product identifier
- Trade name: Pesticide Standard 6
- Part number: AGI-P03-6
- Relevant identified uses of the substance or mixture and uses advised against
  Reagents and Standards for Analytical Chemical Laboratory Use
- Details of the supplier of the safety data sheet
- Manufacturer/Supplier:
  Agilent Technologies Australia Pty Ltd
  679 Springvale Road
  Mulgrave
  Victoria 3170, Australia
- Further information obtainable from:
  Telephone: 1800 802 402
  e-mail: pdl-msds_author@agilent.com
- Emergency telephone number: CHEMTREC®: +(61) - 290372994

2 Hazard(s) Identification

- Classification of the substance or mixture
  - flame
  Flam. Liq. 2  H225  Highly flammable liquid and vapour.
  Acute Tox. 4  H302  Harmful if swallowed.
  Eye Irrit. 2A  H319  Causes serious eye irritation.

- Label elements
  - GHS label elements The product is classified and labelled according to the Globally Harmonised System (GHS).
  - Hazard pictograms
    - GHS02
    - GHS07

- Signal word Danger

- Hazard-determining components of labelling:
  - 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/sparks/open flames/hot surfaces. No smoking.
Keep container tightly closed.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
Wear protective gloves/protective clothing/eye protection/face protection.
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): Remove/Take off immediately all contaminated clothing. Rinse skin with water/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.

3 Composition and Information on Ingredients

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

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>acetonitrile</td>
<td>99.644%</td>
</tr>
</tbody>
</table>

- **Dangerous components:**
- Flam. Liq. 2, H225;
- Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332;
- Eye Irrit. 2A, H319

- **Additional information:** For the wording of the listed hazard phrases refer to section 16.

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:** Call for a doctor immediately.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
5 Fire Fighting Measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
  CO2, 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 product to reach sewage system or any water course.
  Inform respective authorities in case of seepage into water course or sewage system.
  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 fire - and explosion protection:**
  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 container tightly sealed.
    Store in cool, dry conditions in well sealed receptacles.
- **Specific end use(s)** No further relevant information available.
8 Exposure controls and personal protection

- Additional information about design of technical facilities: No further data; see item 7.

- Control parameters

- Ingredients with limit values that require monitoring at the workplace:

<table>
<thead>
<tr>
<th>Substance</th>
<th>NES Short-term value</th>
<th>NES Long-term value</th>
<th>WES Short-term value</th>
<th>WES Long-term value</th>
</tr>
</thead>
<tbody>
<tr>
<td>75-05-8 acetonitrile</td>
<td>101 mg/m³, 60 ppm</td>
<td>67 mg/m³, 40 ppm</td>
<td>101 mg/m³, 60 ppm</td>
<td>67 mg/m³, 40 ppm</td>
</tr>
</tbody>
</table>

- Additional information: The lists valid during the making 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.

- Respiratory protection:
  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 11-13mil thickness are recommended for normal use. The breakthrough time is 1hr. For cleaning a spill where there is direct contact of the chemical, butyl rubber gloves are recommended 12-15mil 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

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>· Information on basic physical and chemical properties</strong></td>
<td></td>
</tr>
<tr>
<td><strong>· General Information</strong></td>
<td></td>
</tr>
<tr>
<td>Appearance:</td>
<td></td>
</tr>
<tr>
<td>Form:</td>
<td>Fluid</td>
</tr>
<tr>
<td>Colour:</td>
<td>Colourless</td>
</tr>
<tr>
<td>Odour:</td>
<td>Aromatic</td>
</tr>
<tr>
<td>Odour threshold:</td>
<td>Not determined.</td>
</tr>
<tr>
<td><strong>· pH-value</strong></td>
<td>Not determined.</td>
</tr>
<tr>
<td><strong>· Change in condition</strong></td>
<td></td>
</tr>
<tr>
<td>Melting point/freezing point:</td>
<td>-46 °C</td>
</tr>
<tr>
<td>Initial boiling point and boiling range:</td>
<td>81 °C</td>
</tr>
<tr>
<td><strong>· Flash point</strong></td>
<td>2 °C</td>
</tr>
<tr>
<td><strong>· Flammability (solid, gas)</strong></td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>· Ignition temperature</strong></td>
<td>525 °C</td>
</tr>
<tr>
<td><strong>· Decomposition temperature</strong></td>
<td>Not determined.</td>
</tr>
<tr>
<td><strong>· Auto-ignition temperature</strong></td>
<td>Product is not selfigniting.</td>
</tr>
<tr>
<td><strong>· Explosive properties</strong></td>
<td>Product is not explosive. However, formation of explosive air/vapour mixtures are possible.</td>
</tr>
<tr>
<td><strong>· Explosion limits</strong></td>
<td></td>
</tr>
<tr>
<td>Lower:</td>
<td>4.4 Vol %</td>
</tr>
<tr>
<td>Upper:</td>
<td>16 Vol %</td>
</tr>
<tr>
<td><strong>· Vapour pressure at 20 °C:</strong></td>
<td>0 hPa</td>
</tr>
<tr>
<td><strong>· Density at 20 °C:</strong></td>
<td>0.786 g/cm³</td>
</tr>
<tr>
<td><strong>· Relative density</strong></td>
<td>Not determined.</td>
</tr>
<tr>
<td><strong>· Vapour density</strong></td>
<td>Not determined.</td>
</tr>
<tr>
<td><strong>· Evaporation rate</strong></td>
<td>Not determined.</td>
</tr>
<tr>
<td><strong>· Solubility in / Miscibility with water</strong></td>
<td>Not miscible or difficult to mix.</td>
</tr>
<tr>
<td><strong>· Partition coefficient: n-octanol/water</strong></td>
<td>Not determined.</td>
</tr>
<tr>
<td><strong>· Viscosity</strong></td>
<td></td>
</tr>
<tr>
<td>Dynamic at 20 °C:</td>
<td>0.39 mPas</td>
</tr>
<tr>
<td>Kinematic:</td>
<td>Not determined.</td>
</tr>
<tr>
<td><strong>· Solvent content</strong></td>
<td></td>
</tr>
<tr>
<td>Organic solvents:</td>
<td>0.1 %</td>
</tr>
<tr>
<td>VOC (EC):</td>
<td>0.10 %</td>
</tr>
<tr>
<td><strong>· Solids content</strong></td>
<td>0.2 %</td>
</tr>
<tr>
<td><strong>· Other information</strong></td>
<td>No further relevant information available.</td>
</tr>
</tbody>
</table>

### 10 Stability and Reactivity

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>· Reactivity</strong></td>
<td>No further relevant information available.</td>
</tr>
</tbody>
</table>
### 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

<table>
<thead>
<tr>
<th>Compound</th>
<th>LD50/LC50 values relevant for classification:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ATE (Acute Toxicity Estimates)</strong></td>
<td></td>
</tr>
<tr>
<td>Oral</td>
<td>LD50 1,325 mg/kg (rat)</td>
</tr>
<tr>
<td>Dermal</td>
<td>LD50 &gt;2,007 mg/kg (rabbit)</td>
</tr>
<tr>
<td>Inhalative</td>
<td>LC50/4 h 3,600 mg/L (mouse)</td>
</tr>
<tr>
<td><strong>75-05-8 acetonitrile</strong></td>
<td></td>
</tr>
<tr>
<td>Oral</td>
<td>LD50 1,320 mg/kg (rat)</td>
</tr>
<tr>
<td>Dermal</td>
<td>LD50 &gt;2,000 mg/kg (rabbit)</td>
</tr>
<tr>
<td>Inhalative</td>
<td>LC50/4 h 3,587 mg/L (mouse)</td>
</tr>
<tr>
<td><strong>5598-13-0 chlorpyrifos-methyl</strong></td>
<td></td>
</tr>
<tr>
<td>Oral</td>
<td>LD50 1,828 mg/kg (rat)</td>
</tr>
<tr>
<td>Dermal</td>
<td>LD50 &gt;2,000 mg/kg (rabbit)</td>
</tr>
<tr>
<td>Inhalative</td>
<td>LC50/4 h &gt;670 mg/L (rat)</td>
</tr>
<tr>
<td><strong>563-12-2 ethion (ISO)</strong></td>
<td></td>
</tr>
<tr>
<td>Oral</td>
<td>LD50 13 mg/kg (rat)</td>
</tr>
<tr>
<td>Dermal</td>
<td>LD50 62 mg/kg (rat)</td>
</tr>
<tr>
<td>Inhalative</td>
<td>LC50/4 h 864 mg/L (rat)</td>
</tr>
<tr>
<td><strong>121-75-5 malathion (ISO)</strong></td>
<td></td>
</tr>
<tr>
<td>Oral</td>
<td>LD50 1,000 mg/kg (rat)</td>
</tr>
<tr>
<td>Dermal</td>
<td>LD50 8,790 mg/kg (rabbit)</td>
</tr>
<tr>
<td><strong>38260-54-7 etrimfos</strong></td>
<td></td>
</tr>
<tr>
<td>Oral</td>
<td>LD50 1,800 mg/kg (rat)</td>
</tr>
<tr>
<td>Dermal</td>
<td>LD50 &gt;500 mg/kg (rabbit)</td>
</tr>
</tbody>
</table>

#### Primary irritant effect:

- **Skin corrosion/irritation**: No irritant effect.
- **Serious eye damage/irritation**: Irritating effect.
- **Respiratory or skin sensitisation**: No sensitising effects known.

#### Additional toxicological information:

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

- **Harmful**
12 Ecological Information

- **Toxicity**
- **Aquatic toxicity**: No further relevant information available.
- **Persistence and degradability**: No further relevant information available.
- **Behaviour in environmental systems**: No further relevant information available.
- **Bioaccumulative potential**: No further relevant information available.
- **Mobility in soil**: No further relevant information available.
- **Additional ecological information**:
  - **General notes**: Water hazard class 2 (German Regulation) (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 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

- **UN-Number**: UN1648
- **UN proper shipping name**
  - ADG: 1648 ACETONITRILE solution, ENVIRONMENTALLY HAZARDOUS
  - IMDG: ACETONITRILE solution, MARINE POLLUTANT
  - IATA: ACETONITRILE solution
- **Transport hazard class(es)**
  - ADG, IMDG
  - **Class**: 3 Flammable liquids.
Trade name: Pesticide Standard 6

| · Label | 3 |
| · IATA | |

- **Class**: 3 Flammable liquids.
- **Label**: 3

- **Packing group**: ADG, IMDG, IATA
- **Class**: II

- **Environmental hazards**: Product contains environmentally hazardous substances: malathion (ISO), chlorpyrifos-methyl
- **Special marking (ADG)**: Symbol (fish and tree)

- **Special precautions for user**: Warning: Flammable liquids.
- **Danger code (Kemler)**: 33
- **EMS Number**: F-E,S-D
- **Stowage Category**: B
- **Stowage Code**: SW2 Clear of living quarters.

- **Transport in bulk according to Annex II of Marpol and the IBC Code**: Not applicable.

- **Transport/Additional information**:
  - **ADG**
    - **Limited quantities (LQ)**: 1L
    - **Excepted quantities (EQ)**: Code: E2
  - **IMDG**
    - **Limited quantities (LQ)**: 1L
    - **Excepted quantities (EQ)**: Code: E2
  - **UN "Model Regulation"**: UN 1648 ACETONITRILE SOLUTION, 3, II, ENVIRONMENTALLY HAZARDOUS

<table>
<thead>
<tr>
<th>· Australian Inventory of Chemical Substances</th>
</tr>
</thead>
<tbody>
<tr>
<td>75-05-8 acetonitrile</td>
</tr>
<tr>
<td>122-14-5 fenitrothion (ISO)</td>
</tr>
<tr>
<td>470-90-6 chlorfenvinphos (ISO)</td>
</tr>
</tbody>
</table>

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- **Australian Inventory of Chemical Substances**
### Trade name: Pesticide Standard 6

<table>
<thead>
<tr>
<th>CAS number</th>
<th>Chemical name</th>
<th>S6</th>
<th>S7</th>
<th>S3, S5, S6</th>
</tr>
</thead>
<tbody>
<tr>
<td>5598-13-0</td>
<td>chlorpyrifos-methyl</td>
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<tr>
<td>52-85-7</td>
<td>famphur</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>34643-46-4</td>
<td>tokuthion</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>563-12-2</td>
<td>ethion (ISO)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>299-84-3</td>
<td>fenchlorphos (ISO)</td>
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<tr>
<td>121-75-5</td>
<td>malathion (ISO)</td>
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<td>4824-78-6</td>
<td>bromophos-ethyl(ISO)</td>
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<tr>
<td>333-41-5</td>
<td>diazinon (ISO)</td>
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<td></td>
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</tr>
<tr>
<td>141-66-2</td>
<td>(E)-3-(dimethylamino)-1-methyl-3-oxoprop-1-enyl dimethyl phosphate</td>
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<td></td>
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<tr>
<td>38260-54-7</td>
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<tr>
<td>42509-80-8</td>
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<tr>
<td>950-37-8</td>
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<td></td>
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<tr>
<td>40596-69-8</td>
<td>isopropyl(2E,4E)-11-methoxy-3,7,11-trimethyldodeca-2,4-dienoate</td>
<td>S6</td>
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<td></td>
</tr>
<tr>
<td>40487-42-1</td>
<td>pendimethalin (ISO)</td>
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<tr>
<td>23950-58-5</td>
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<tr>
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<tr>
<td>5915-41-3</td>
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<td>57018-04-9</td>
<td>tolclofos-methyl</td>
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<tr>
<td>22248-79-9</td>
<td>tetrachlorvinphos</td>
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<tr>
<td>122-14-5</td>
<td>fenitrothion (ISO)</td>
<td>S6</td>
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<tr>
<td>470-90-6</td>
<td>chlorfenvinphos (ISO)</td>
<td>S7</td>
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<tr>
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<td>chlorpyrifos-methyl</td>
<td>S6</td>
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<tr>
<td>121-75-5</td>
<td>malathion (ISO)</td>
<td>S3, S5, S6</td>
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<tr>
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</tr>
<tr>
<td>5915-41-3</td>
<td>terbutylazine</td>
<td>S6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>57018-04-9</td>
<td>tolclofos-methyl</td>
<td>S5</td>
<td></td>
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</tr>
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<td>24353-61-5</td>
<td>isocarbophos</td>
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<tr>
<td>22248-79-9</td>
<td>tetrachlorvinphos</td>
<td>S5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
Trade name: Pesticide Standard 6

- **Seveso category**
  - E1 Hazardous to the Aquatic Environment
  - P5c FLAMMABLE LIQUIDS

- **Qualifying quantity (tonnes) for the application of lower-tier requirements** 100 t

- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 200 t

- **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.

- **Relevant phrases**
  - H225 Highly flammable liquid and vapour.
  - H302 Harmful if swallowed.
  - H312 Harmful in contact with skin.
  - H319 Causes serious eye irritation.
  - H332 Harmful if inhaled.

- **Abbreviations and acronyms:**
  - ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
  - IMDG: International Maritime Code for Dangerous Goods
  - 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)
  - VOC: Volatile Organic Compounds (USA, EU)
  - LC50: Lethal concentration, 50 percent
  - LD50: Lethal dose, 50 percent
  - PBT: Persistent, Bioaccumulative and Toxic
  - vPvB: very Persistent and very Bioaccumulative
  - Flam. Liq. 2: Flammable liquids – Category 2
  - Acute Tox. 4: Acute toxicity – Category 4
  - Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A
1 Identification

- **Product identifier**
- **Trade name**: Pesticide Standard 7
- **Part number**: AGI-P03-7
- **Relevant identified uses of the substance or mixture and uses advised against**
  Reagents and Standards for Analytical Chemical Laboratory Use
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
  Agilent Technologies Australia Pty Ltd
  679 Springvale Road
  Mulgrave
  Victoria 3170, Australia
- **Further information obtainable from:**
  Telephone: 1800 802 402
  e-mail: pdl-msds_author@agilent.com
- **Emergency telephone number:** CHEMTREC®: +(61) - 290372994

2 Hazard(s) Identification

- **Classification of the substance or mixture**
  ![flame](image)
  Flam. Liq. 2 H225 Highly flammable liquid and vapour.

  ![exclamation](image)
  Acute Tox. 4 H302 Harmful if swallowed.
  Eye Irrit. 2A H319 Causes serious eye irritation.

- **Label elements**
- **GHS label elements** The product is classified and labelled according to the Globally Harmonised System (GHS).
- **Hazard pictograms**
  ![flame](image) ![exclamation](image)
  GHS02 GHS07

- **Signal word** Danger
- **Hazard-determining components of labelling:**
  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.

(Contd. on page 2)
Trade name: Pesticide Standard 7

Read label before use.
Keep away from heat/sparks/open flames/hot surfaces. No smoking.
Keep container tightly closed.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
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): Remove/Take off immediately all contaminated clothing. Rinse skin with water/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.
- Other hazards
- Results of PBT and vPvB assessment
- PBT: Not applicable.
- vPvB: Not applicable.

3 Composition and Information on Ingredients

- Chemical characterisation: Mixtures
- Description: Mixture of substances listed below with nonhazardous additions.

- Dangerous components:

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>acetonitrile</td>
<td>99.657%</td>
</tr>
</tbody>
</table>

○ Flam. Liq. 2, H225; ○ Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332;
Eye Irrit. 2A, H319

- Additional information: For the wording of the listed hazard phrases refer to section 16.

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: Call for a doctor immediately.
- Information for doctor:
- Most important symptoms and effects, both acute and delayed No further relevant information available.

(Contd. on page 3)
47.1.11 · Indication of any immediate medical attention and special treatment needed
No further relevant information available.

5 Fire Fighting Measures

· Extinguishing media
· Suitable extinguishing agents: CO2, 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 product to reach sewage system or any water course.
  Inform respective authorities in case of seepage into water course or sewage system.
  Do not allow to enter sewers/s 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 fire - and explosion protection:
  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 container tightly sealed.
  Store in cool, dry conditions in well sealed receptacles.
· Specific end use(s) No further relevant information available.
8 Exposure controls and personal protection

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

· Control parameters

· Ingredients with limit values that require monitoring at the workplace:

<table>
<thead>
<tr>
<th>75-05-8 acetonitrile</th>
</tr>
</thead>
<tbody>
<tr>
<td>NES Short-term value: 101 mg/m³, 60 ppm</td>
</tr>
<tr>
<td>Long-term value: 67 mg/m³, 40 ppm</td>
</tr>
<tr>
<td>Sk</td>
</tr>
<tr>
<td>WES Short-term value: 101 mg/m³, 60 ppm</td>
</tr>
<tr>
<td>Long-term value: 67 mg/m³, 40 ppm</td>
</tr>
<tr>
<td>Sk</td>
</tr>
</tbody>
</table>

· Additional information: The lists valid during the making 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.

· Respiratory protection:
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 11-13mil thickness are recommended for normal use. The breakthrough time is 1hr. For cleaning a spill where there is direct contact of the chemical, butyl rubber gloves are recommended 12-15mil 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
    - Colour: Colourless
  - **Odour:** Aromatic
  - **Odour threshold:** Not determined.
- **pH-value:** Not determined.
- **Change in condition**
  - **Melting point/freezing point:** -46 °C
  - **Initial boiling point and boiling range:** 81 °C
- **Flash point:** 2 °C
- **Flammability (solid, gas):** Not applicable.
- **Ignition temperature:** 525 °C
- **Decomposition temperature:** Not determined.
- **Auto-ignition temperature:** Product is not selfigniting.
- **Explosive properties:** Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
- **Explosion limits:**
  - **Lower:** 4.4 Vol %
  - **Upper:** 16 Vol %
- **Vapour pressure at 20 °C:** 0 hPa
- **Density at 20 °C:** 0.786 g/cm³
- **Relative density**
  - Not determined.
- **Vapour 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:**
  - VOC (EC): 0.00 %
- **Solids content:** 0.3 %
- **Other information**
  - No further relevant information available.

### 10 Stability and Reactivity

- **Reactivity** No further relevant information available.
Trade name: Pesticide Standard 7

- 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

<table>
<thead>
<tr>
<th>Chemical</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalative LC50/4 h</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATE (Acute Toxicity Estimates)</td>
<td>1,325 mg/kg (rat)</td>
<td>&gt;2,007 mg/kg (rabbit)</td>
<td>3,599 mg/L (mouse)</td>
</tr>
<tr>
<td>75-05-8 acetonitrile</td>
<td>1,320 mg/kg (rat)</td>
<td>&gt;2,000 mg/kg (rabbit)</td>
<td>3,587 mg/L (mouse)</td>
</tr>
<tr>
<td>91465-08-6 lambda-cyhalothrin</td>
<td>56 mg/kg (rat)</td>
<td>632 mg/kg (rat)</td>
<td></td>
</tr>
<tr>
<td>121552-61-2 cyprodinil</td>
<td>2,796 mg/kg (rat)</td>
<td>&gt;2,000 mg/kg (rat)</td>
<td></td>
</tr>
<tr>
<td>2642-71-9 azinphos-ethyl (ISO)</td>
<td>250 mg/kg (rat)</td>
<td>390 mg/L (rat)</td>
<td></td>
</tr>
<tr>
<td>41198-08-7 O-(4-bromo-2-chlorophenyl) O-ethyl S-propyl phosphorothioate</td>
<td>620.5 mg/kg (rat)</td>
<td>&gt;2.2 mg/L (rat)</td>
<td></td>
</tr>
<tr>
<td>120068-37-3 fipronil</td>
<td>97 mg/kg (rat)</td>
<td>354 mg/kg (rabbit)</td>
<td>680 mg/L (rat)</td>
</tr>
<tr>
<td>68359-37-5 cyfluthrin (ISO)</td>
<td>900 mg/kg (rat)</td>
<td>&gt;5,000 mg/kg (rat)</td>
<td>530 mg/L (rat)</td>
</tr>
<tr>
<td>834-12-8 ametryn (ISO)</td>
<td>1,626 mg/kg (rat)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Trade name: Pesticide Standard 7

<table>
<thead>
<tr>
<th>Route</th>
<th>LD50</th>
<th>LC50/4 h</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dermal</td>
<td>8,160 mg/kg (rabbit)</td>
<td>&gt;2.22 mg/L (rat)</td>
</tr>
<tr>
<td>Inhalative</td>
<td>&gt;200 mg/L (rat)</td>
<td></td>
</tr>
</tbody>
</table>

2921-88-2 chlorpyrifos (ISO)

<table>
<thead>
<tr>
<th>Route</th>
<th>LD50</th>
<th>LC50/4 h</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
<td>60 mg/kg (mouse)</td>
<td>135 mg/kg (rat)</td>
</tr>
<tr>
<td>Dermal</td>
<td>120 mg/kg (mouse)</td>
<td>202 mg/kg (rat)</td>
</tr>
<tr>
<td>Inhalative</td>
<td>&gt;200 mg/L</td>
<td></td>
</tr>
</tbody>
</table>

- **Primary irritant effect:**
- **Skin corrosion/irritation** No irritant effect.
- **Serious eye damage/irritation** Irritating effect.
- **Respiratory or skin sensitisation** No sensitising effects known.
- **Additional toxicological information:**
  The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
  - Harmful
  - Irritant

12 Ecological Information

- **Toxicity**
  - Aquatic toxicity: No further relevant information available.
  - Persistence and degradability: No further relevant information available.
- **Behaviour 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 (German Regulation) (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 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

<table>
<thead>
<tr>
<th><strong>UN-Number</strong></th>
<th>UN1648</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>UN proper shipping name</strong></td>
<td>1648 ACETONITRILE solution, ENVIRONMENTALLY HAZARDOUS</td>
</tr>
<tr>
<td><strong>IMDG</strong></td>
<td>ACETONITRILE solution, MARINE POLLUTANT</td>
</tr>
<tr>
<td><strong>IATA</strong></td>
<td>ACETONITRILE solution</td>
</tr>
</tbody>
</table>

#### Transport hazard class(es)

- ADG, IMDG
  - **Class** | 3 Flammable liquids. |
  - **Label** | 3 |

- IATA
  - **Class** | 3 Flammable liquids. |
  - **Label** | 3 |

- **Packing group**
  - ADG, IMDG, IATA
  - **Packing group** | II |

#### Environmental hazards:

Product contains environmentally hazardous substances:
- cyfluthrin (ISO), lambda-cyhalothrin
- Symbol (fish and tree)
- Symbol (fish and tree)

#### Special precautions for user

- **Warning:** Flammable liquids.
- **Danger code (Kemler):** 33
- **EMS Number:** F-E,S-D
- **Stowage Category** | B |
- **Stowage Code** | SW2 Clear of living quarters. |

#### Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable.

#### Transport/Additional information:

- **ADG**
  - **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

- **Transport category** | 2 |
- **Tunnel restriction code** | D/E |
Trade name: Pesticide Standard 7

- 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

  - Australian Inventory of Chemical Substances
    75-05-8 acetonitrile
    91465-08-6 lambda-cyhalothrin
    94361-06-5 cyproconazole(ISO)
    2642-71-9 azinphos-ethyl (ISO)
    56-72-4 coumaphos (ISO)
    41198-08-7 O-(4-bromo-2-chlorophenyl) O-ethyl S-propyl phosphorothioate
    68359-37-5 cyfluthrin (ISO)
    834-12-8 ametryn (ISO)
    1912-24-9 atrazine (ISO)
    2921-88-2 chlorpyrifos (ISO)
    101-21-3 chlorpropham
    36734-19-7 iprodione (ISO)
    7287-19-6 prometryn
    886-50-0 terbutryn
    122-34-9 simazine (ISO)
    60207-90-1 propiconazole

  - Standard for the Uniform Scheduling of Medicines and Poisons
    91465-08-6 lambda-cyhalothrin S5, S6, S7
    94361-06-5 cyproconazole(ISO) S5
    121552-61-2 cyprodinil S5
    114369-43-6 4-(4-chlorophenyl)-2-phenyl-2-[(1H-1,2,4-triazol-1-yl)butanenitrile S5
    136426-54-5 3-(2,4-dichlorophenyl)-6-fluoro-2-(1 H -1,2,4-triazol-1-yl)quinazolin-4-(3 H )-one S6
    79983-71-4 (RS)-2-(2,4-dichlorophenyl)-1-(1H-1,2,4-triazol-1-yl)hexan-2-ol S5
    112281-77-3 (+/-)-2-(2,4-dichlorophenyl)-3-(1 H -1,2,4-triazol-1-yl)propyl-1,1,2,2-tetrafluoroethylether S5, S6
    2642-71-9 azinphos-ethyl (ISO) S7

(Contd. on page 10)
Trade name: Pesticide Standard 7

56-72-4 coumaphos (ISO) S6, S7
41198-08-7 O-(4-bromo-2-chlorophenyl) O-ethyl S-propyl phosphorothioate S6
120068-37-3 fipronil S5, S6
68359-37-5 cyfluthrin (ISO) S5, S6, S7
834-12-8 ametryn (ISO) S5
1912-24-9 atrazine (ISO) S5
2921-88-2 chlorpyrifos (ISO) S5, S6
101-21-3 chlorpropham S5
7287-19-6 prometryn S5
886-50-0 terbutryn S5
60207-90-1 propiconazole S5, S6

- Directive 2012/18/EU
- Named dangerous substances - ANNEX I None of the ingredients is listed.
- Seveso category
  E1 Hazardous to the Aquatic Environment
  P5c FLAMMABLE LIQUIDS
- Qualifying quantity (tonnes) for the application of lower-tier requirements 100 t
- Qualifying quantity (tonnes) for the application of upper-tier requirements 200 t
- 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.

- Relevant phrases
  H225 Highly flammable liquid and vapour.
  H302 Harmful if swallowed.
  H312 Harmful in contact with skin.
  H319 Causes serious eye irritation.
  H332 Harmful if inhaled.

- Abbreviations and acronyms:
  ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
  IMDG: International Maritime Code for Dangerous Goods
  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)
  VOC: Volatile Organic Compounds (USA, EU)
  LCS0: Lethal concentration, 50 percent
  LD50: Lethal dose, 50 percent
  PBT: Persistent, Bioaccumulative and Toxic
  vPvB: very Persistent and very Bioaccumulative
  Flam. Liq. 2: Flammable liquids – Category 2
  Acute Tox. 4: Acute toxicity – Category 4
  Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A
1 Identification

· Product identifier
· Trade name: Pesticide Standard 8
· Part number: AGI-P03-8
· Relevant identified uses of the substance or mixture and uses advised against
Reagents and Standards for Analytical Chemical Laboratory Use
· Details of the supplier of the safety data sheet
· Manufacturer/Supplier:
  Agilent Technologies Australia Pty Ltd
  679 Springvale Road
  Mulgrave
  Victoria 3170, Australia
· Further information obtainable from:
  Telephone: 1800 802 402
  e-mail: pdl-msds_author@agilent.com
· Emergency telephone number: CHEMTREC®: +(61) - 290372994

2 Hazard(s) Identification

· Classification of the substance or mixture
  !
  Flamm. Liq. 2  H225  Highly flammable liquid and vapour.
  Flame

  !
  Acute Tox. 4  H302  Harmful if swallowed.
  Eye Irrit. 2A  H319  Causes serious eye irritation.

· Label elements
  · GHS label elements The product is classified and labelled according to the Globally Harmonised System (GHS).
  · Hazard pictograms

      GHS02  !
      GHS07

· Signal word Danger

· Hazard-determining components of labelling:
  · 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.

(Contd. on page 2)
Trade name: Pesticide Standard 8

Read label before use.
Keep away from heat/sparks/open flames/hot surfaces. No smoking.
Keep container tightly closed.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
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): Remove/Take off immediately all contaminated clothing. Rinse skin with water/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.
- Other hazards
- Results of PBT and vPvB assessment
- PBT: Not applicable.
- vPvB: Not applicable.

3 Composition and Information on Ingredients

- Chemical characterisation: Mixtures
- Description: Mixture of substances listed below with nonhazardous additions.

- Dangerous components:

<table>
<thead>
<tr>
<th>75-05-8 acetonitrile</th>
<th>99.644%</th>
</tr>
</thead>
</table>

- Flam. Liq. 2, H225; Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332; Eye Irrit. 2A, H319 |
- Additional information: For the wording of the listed hazard phrases refer to section 16.

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: Call for a doctor immediately.
- Information for doctor:
  Most important symptoms and effects, both acute and delayed No further relevant information available.
Safety Data Sheet
according to WHS Regulations

Trade name: Pesticide Standard 8

- Indication of any immediate medical attention and special treatment needed
  No further relevant information available.

5 Fire Fighting Measures

- Extinguishing media
  Suitable extinguishing agents:
  CO2, 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 product to reach sewage system or any water course.
  Inform respective authorities in case of seepage into water course or sewage system.
  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 fire - and explosion protection:
  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 container tightly sealed.
  Store in cool, dry conditions in well sealed receptacles.
  Specific end use(s) No further relevant information available.
8 Exposure controls and personal protection

- Additional information about design of technical facilities: No further data; see item 7.

- Control parameters

- Ingredients with limit values that require monitoring at the workplace:

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Short-term value</th>
<th>Long-term value</th>
</tr>
</thead>
<tbody>
<tr>
<td>75-05-8 acetonitrile</td>
<td>101 mg/m³, 60 ppm</td>
<td>67 mg/m³, 40 ppm</td>
</tr>
</tbody>
</table>

- Additional information: The lists valid during the making 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.

  - Respiratory protection:
    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 11-13mil thickness are recommended for normal use. The breakthrough time is 1hr. For cleaning a spill where there is direct contact of the chemical, butyl rubber gloves are recommended 12-15mil 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

(Contd. on page 5)
### 9 Physical and Chemical Properties

- **Information on basic physical and chemical properties**
  - **General Information**
    - **Appearance:**
      - Form: Fluid
      - Colour: Colourless
    - **Odour:** Aromatic
    - **Odour threshold:** Not determined.
  - **pH-value:** Not determined.

- **Change in condition**
  - **Melting point/freezing point:** -46 °C
  - **Initial boiling point and boiling range:** 81 °C
  - **Flash point:** 2 °C

- **Flammability (solid, gas):** Not applicable.

- **Ignition temperature:** 525 °C

- **Decomposition temperature:** Not determined.

- **Auto-ignition temperature:** Product is not selfigniting.

- **Explosive properties:** Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

- **Explosion limits:**
  - Lower: 4.4 Vol %
  - Upper: 16 Vol %

- **Vapour pressure at 20 °C:** 0 hPa

- **Density at 20 °C:** 0.786 g/cm³
  - **Relative density:** Not determined.
  - **Vapour 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 %
  - **VOC (EC):** 0.04 %

- **Solids content:** 0.3 %

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

### 10 Stability and Reactivity

- **Reactivity** No further relevant information available.
### 11 Toxicological Information

**Information on toxicological effects**

**Acute toxicity**

**LD/LC50 values relevant for classification:**

<table>
<thead>
<tr>
<th>ATE (Acute Toxicity Estimates)</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalative LC50/4 h</th>
</tr>
</thead>
<tbody>
<tr>
<td>75-05-8 acetonitrile</td>
<td>1,320 mg/kg (rat)</td>
<td>&gt;2,000 mg/kg (rabbit)</td>
<td>3,587 mg/L (mouse)</td>
</tr>
<tr>
<td>153233-91-1 etoxazol</td>
<td>&gt;5,000 mg/kg (rat)</td>
<td>&gt;2,000 mg/kg (rat)</td>
<td>&gt;1.09 mg/L (rat)</td>
</tr>
<tr>
<td>298-02-2 phorate (ISO)</td>
<td>1.6 mg/kg (rat)</td>
<td>2.5 mg/kg (rat)</td>
<td></td>
</tr>
<tr>
<td>732-11-6 phosmet (ISO)</td>
<td>92.5 mg/kg (rat)</td>
<td>1,150 mg/kg (rat)</td>
<td>&gt;3,160 mg/kg (rabbit)</td>
</tr>
<tr>
<td>300-76-5 naled (ISO)</td>
<td>92 mg/kg (rat)</td>
<td>800 mg/kg (rat)</td>
<td>1,100 mg/kg (rabbit)</td>
</tr>
<tr>
<td>113614-08-7 beflubutamid</td>
<td>&gt;5,000 mg/kg (rat)</td>
<td>&gt;2,000 mg/kg (rat)</td>
<td></td>
</tr>
</tbody>
</table>

**Primary irritant effect:**

- **Skin corrosion/irritation** No irritant effect.
- **Serious eye damage/irritation** Irritating effect.
- **Respiratory or skin sensitisation** No sensitising effects known.
### 47.1.11 Additional toxicological information:

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

- **Harmful**
- **Irritant**

---

### 12 Ecological Information

#### Toxicity

- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behaviour 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 (German Regulation) (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 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

- **UN-Number**
  - **ADG, IMDG, IATA** UN1648
- **UN proper shipping name**
  - **ADG** 1648 ACETONITRILE solution, ENVIRONMENTALLY HAZARDOUS
  - **IMDG** ACETONITRILE solution, MARINE POLLUTANT
  - **IATA** ACETONITRILE solution
### Transport hazard class(es)
- ADG, IMDG

#### Environmental hazards:
Product contains environmentally hazardous substances: benalaxyl, phorate (ISO)

- Marine pollutant:
  - Symbol (fish and tree)
- Special marking (ADG):
  - Symbol (fish and tree)

#### Special precautions for user
- Warning: Flammable liquids.
- Danger code (Kemler): 33
- EMS Number: F-E,S-D
- Stowage Category: B
- Stowage Code: SW2 Clear of living quarters.

#### Transport in bulk according to Annex II of Marpol and the IBC Code
Not applicable.

### Transport/Additional information:

<table>
<thead>
<tr>
<th>ADG</th>
<th>IMDG</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Limited quantities (LQ)</strong></td>
<td>1L</td>
</tr>
<tr>
<td><strong>Excepted quantities (EQ)</strong></td>
<td>Code: E2</td>
</tr>
<tr>
<td><strong>Maximum net quantity per inner packaging:</strong></td>
<td>30 ml</td>
</tr>
<tr>
<td><strong>Maximum net quantity per outer packaging:</strong></td>
<td>500 ml</td>
</tr>
</tbody>
</table>

| **Transport category** | 2 |
| **Tunnel restriction code** | D/E |

**Transport in bulk according to Annex II of Marpol and the IBC Code**
Not applicable.

| **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 |
Trade name: Pesticide Standard 8

15 Regulatory information

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

- Australian Inventory of Chemical Substances

<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Substance Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>75-05-8</td>
<td>acetonitrile</td>
</tr>
<tr>
<td>26225-79-6</td>
<td>ethofumesate (ISO)</td>
</tr>
<tr>
<td>76738-62-0</td>
<td>paclobutrazole</td>
</tr>
<tr>
<td>298-02-2</td>
<td>phorate (ISO)</td>
</tr>
<tr>
<td>1563-66-2</td>
<td>carbofuran (ISO)</td>
</tr>
<tr>
<td>709-98-8</td>
<td>propanil (ISO)</td>
</tr>
<tr>
<td>732-11-6</td>
<td>phosmet (ISO)</td>
</tr>
<tr>
<td>300-76-5</td>
<td>naled (ISO)</td>
</tr>
<tr>
<td>51338-27-3</td>
<td>methyl 2-(4-(2,4-dichlorophenoxy)phenoxy)propionate</td>
</tr>
<tr>
<td>15299-99-7</td>
<td>napropamide</td>
</tr>
<tr>
<td>32809-16-8</td>
<td>procymidone</td>
</tr>
<tr>
<td>77732-09-3</td>
<td>acetamide, N-(2,6-dimethylphenyl)-2-methoxy-N-(2-oxo-3-o xazolidinyl)-</td>
</tr>
<tr>
<td>1113-02-6</td>
<td>omethoate</td>
</tr>
<tr>
<td>69806-50-4</td>
<td>fluazifop-butyl (ISO)</td>
</tr>
</tbody>
</table>

- Standard for the Uniform Scheduling of Medicines and Poisons

<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Substance Name</th>
<th>Schedule</th>
</tr>
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<tbody>
<tr>
<td>26225-79-6</td>
<td>ethofumesate (ISO)</td>
<td>S5</td>
</tr>
<tr>
<td>298-02-2</td>
<td>phorate (ISO)</td>
<td>S7</td>
</tr>
<tr>
<td>1563-66-2</td>
<td>carbofuran (ISO)</td>
<td>S7</td>
</tr>
<tr>
<td>709-98-8</td>
<td>propanil (ISO)</td>
<td>S5</td>
</tr>
<tr>
<td>732-11-6</td>
<td>phosmet (ISO)</td>
<td>S5, S6</td>
</tr>
<tr>
<td>300-76-5</td>
<td>naled (ISO)</td>
<td>S5, S6</td>
</tr>
<tr>
<td>71626-11-4</td>
<td>benalaxyl</td>
<td>S5</td>
</tr>
<tr>
<td>51338-27-3</td>
<td>methyl 2-(4-(2,4-dichlorophenoxy)phenoxy)propionate</td>
<td>S6</td>
</tr>
<tr>
<td>1113-02-6</td>
<td>omethoate</td>
<td>S5, S6, S7</td>
</tr>
<tr>
<td>69806-50-4</td>
<td>fluazifop-butyl (ISO)</td>
<td>S6</td>
</tr>
<tr>
<td>88671-89-0</td>
<td>myclobutanil</td>
<td>S5</td>
</tr>
<tr>
<td>947-02-4</td>
<td>phosfolan (ISO)</td>
<td>S7</td>
</tr>
</tbody>
</table>

- Directive 2012/18/EU
- Named dangerous substances - ANNEX I None of the ingredients is listed.
- Seveso category
  - E1 Hazardous to the Aquatic Environment
  - P5c FLAMMABLE LIQUIDS
- Qualifying quantity (tonnes) for the application of lower-tier requirements 100 t
- Qualifying quantity (tonnes) for the application of upper-tier requirements 200 t
Trade name: Pesticide Standard 8

- **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.

- **Relevant phrases**
  - H225 Highly flammable liquid and vapour.
  - H302 Harmful if swallowed.
  - H312 Harmful in contact with skin.
  - H319 Causes serious eye irritation.
  - H332 Harmful if inhaled.

- **Abbreviations and acronyms**:
  - ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
  - IMDG: International Maritime Code for Dangerous Goods
  - 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)
  - VOC: Volatile Organic Compounds (USA, EU)
  - LC50: Lethal concentration, 50 percent
  - LD50: Lethal dose, 50 percent
  - PBT: Persistent, Bioaccumulative and Toxic
  - vPvB: very Persistent and very Bioaccumulative
  - Flam. Liq. 2: Flammable liquids – Category 2
  - Acute Tox. 4: Acute toxicity – Category 4
  - Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A
1 Identification

- Product identifier
- Trade name: Pesticide Standard 9
- Part number: AGI-P03-9
- Relevant identified uses of the substance or mixture and uses advised against
  Reagents and Standards for Analytical Chemical Laboratory Use
- Details of the supplier of the safety data sheet
- Manufacturer/Supplier:
  Agilent Technologies Australia Pty Ltd
  679 Springvale Road
  Mulgrave
  Victoria 3170, Australia
- Further information obtainable from:
  Telephone: 1800 802 402
  e-mail: pdl-msds_author@agilent.com
- Emergency telephone number: CHEMTREC®: +(61) - 290372994

2 Hazard(s) Identification

- Classification of the substance or mixture
  
  ![Flame Icon]
  Flam. Liq. 2 H225 Highly flammable liquid and vapour.

  ![Exclamation Mark Icon]
  Acute Tox. 4 H302 Harmful if swallowed.
  Eye Irrit. 2A H319 Causes serious eye irritation.

- Label elements
  - GHS label elements The product is classified and labelled according to the Globally Harmonised System (GHS).
  - Hazard pictograms
    
    ![Flame Icon]
    ![Exclamation Mark Icon]
    GHS02 GHS07

- Signal word Danger

- Hazard-determining components of labelling:
  - 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.

(Contd. on page 2)
Trade name: Pesticide Standard 9

Read label before use.
Keep away from heat/sparks/open flames/hot surfaces. No smoking.
Keep container tightly closed.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
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): Remove/Take off immediately all contaminated clothing. Rinse skin with water/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.

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

3 Composition and Information on Ingredients

- Chemical characterisation: Mixtures
- Description: Mixture of substances listed below with nonhazardous additions.

- Dangerous components:

<table>
<thead>
<tr>
<th>75-05-8 acetonitrile</th>
<th>99.746%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flam. Liq. 2, H225;</td>
<td></td>
</tr>
<tr>
<td>Acute Tox. 4, H302;</td>
<td></td>
</tr>
<tr>
<td>Acute Tox. 4, H312;</td>
<td></td>
</tr>
<tr>
<td>Acute Tox. 4, H332;</td>
<td></td>
</tr>
<tr>
<td>Eye Irrit. 2A, H319</td>
<td></td>
</tr>
</tbody>
</table>

- Additional information: For the wording of the listed hazard phrases refer to section 16.

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: Call for a doctor immediately.
- Information for doctor:
  Most important symptoms and effects, both acute and delayed No further relevant information available.

(Contd. on page 3)
5 Fire Fighting Measures

- Extinguishing media
  - Suitable extinguishing agents: CO2, 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 product to reach sewage system or any water course.
  - Inform respective authorities in case of seepage into water course or sewage system.
  - 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 fire - and explosion protection:
  - 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 container tightly sealed.
    - Store in cool, dry conditions in well sealed receptacles.
  - Specific end use(s) No further relevant information available.
8 Exposure controls and personal protection

- Additional information about design of technical facilities: No further data; see item 7.

- Control parameters

- Ingredients with limit values that require monitoring at the workplace:

<table>
<thead>
<tr>
<th></th>
<th>NES</th>
<th>Long-term value: 67 mg/m³, 40 ppm</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sk</td>
<td></td>
</tr>
<tr>
<td>Short-term value:</td>
<td>101 mg/m³, 60 ppm</td>
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<td>WES</td>
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<td>Short-term value:</td>
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<td>Long-term value:</td>
<td>67 mg/m³, 40 ppm</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sk</td>
<td></td>
</tr>
</tbody>
</table>

- Additional information: The lists valid during the making were used as basis.

- Exposure controls

- Personal protective equipment:

- General protective and hygienic measures:
  - 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.

- Respiratory protection:
  - 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 11-13mil thickness are recommended for normal use. The breakthrough time is 1hr. For cleaning a spill where there is direct contact of the chemical, butyl rubber gloves are recommended 12-15mil 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
      - Colour: Colourless
      - Odour: Aromatic
      - Odour threshold: Not determined.
    - pH-value: Not determined.

- Change in condition
  - Melting point/freezing point: -46 °C
  - Initial boiling point and boiling range: 81 °C
  - Flash point: 2 °C
  - Flammability (solid, gas): Not applicable.
  - Ignition temperature: 525 °C
  - Decomposition temperature: Not determined.
  - Auto-ignition temperature: Product is not selfigniting.

- Explosive properties: Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

- Explosion limits:
  - Lower: 4.4 Vol %
  - Upper: 16 Vol %

- Vapour pressure at 20 °C: 0 hPa

- Density at 20 °C: 0.786 g/cm³
  - Relative density: Not determined.
  - Vapour 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:
  - VOC (EC): 0.00 %

- Solids content: 0.2 %

- Other information: No further relevant information available.

10 Stability and Reactivity

- Reactivity No further relevant information available.
11 Toxicological Information

- Information on toxicological effects

  - Acute toxicity

  - LD/LC50 values relevant for classification:

    **ATE (Acute Toxicity Estimates)**

    | Route   | LD50/LC50  |
    |---------|------------|
    | Oral    | 1,323 mg/kg (rat) |
    | Dermal  | >2,005 mg/kg (rabbit) |
    | Inhalative | 3.596 mg/L (mouse) |

    **75-05-8 acetonitrile**

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

    **2310-17-0 phosalone**

    | Route   | LD50/LC50  |
    |---------|------------|
    | Oral    | 85 mg/kg (rat) |
    | Dermal  | 1,000 mg/kg (rabbit) |

- Primary irritant effect:
  - Skin corrosion/irritation No irritant effect.
  - Serious eye damage/irritation Irritating effect.
  - Respiratory or skin sensitisation No sensitising effects known.

- Additional toxicological information:
  The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
  Harmful
  Irritant

12 Ecological Information

- Toxicity
  - Aquatic toxicity: No further relevant information available.
  - Persistence and degradability No further relevant information available.

- Behaviour 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 (German Regulation) (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.
47.1.11 · 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 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
· UN-Number
  · ADG, IMDG, IATA
  UN1648
· UN proper shipping name
  · ADG
  1648 ACETONITRILE solution, ENVIRONMENTALLY HAZARDOUS
  · IMDG
  ACETONITRILE solution, MARINE POLLUTANT
  · IATA
  ACETONITRILE solution
· Transport hazard class(es)
  · ADG, IMDG
  · Class
  3 Flammable liquids.
  · Label
  3
· IATA
  · Class
  3 Flammable liquids.
  · Label
  3
· Packing group
  · ADG, IMDG, IATA
  II
· Environmental hazards:
  Product contains environmentally hazardous substances: alpha-cyano-3-phenoxybenzyl 2,2,3,3-tetramethylcyclopropanecarboxylate, phosalone
· Marine pollutant:
  Symbol (fish and tree)
· Special marking (ADG):
  Symbol (fish and tree)
### 47.1.11 Special precautions for user

- **Warning:** Flammable liquids.
- **Danger code (Kemler):** 33
- **EMS Number:** F-E,S-D
- **Stowage Category:** B
- **Stowage Code:** SW2 Clear of living quarters.

#### Transport in bulk according to Annex II of Marpol and the IBC Code

- **Transport/Additional information:** Not applicable.
- **ADG**
  - **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
- **Transport category:** 2
- **Tunnel restriction code:** D/E

#### 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

- **Australian Inventory of Chemical Substances**
  - 75-05-8 acetonitrile
  - 21609-90-5 leptophos (ISO)
  - 2593-15-9 5-ethoxy-3-trichloromethyl-1,2,4-thiadiazole
  - 92-52-4 biphenyl
  - 122-39-4 diphenylamine
  - 82-68-8 quintozene (ISO)
  - 1861-40-1 benfluralin
  - 72-43-5 methoxychlor
  - 2310-17-0 phosalone

- **Standard for the Uniform Scheduling of Medicines and Poisons**
  - 131341-86-1 1H-pyrrole-3-carbonitrile, 4-(2,2-difluoro-1,3-benzodioxol-4-yl)- S5
  - 80-33-1 chlorfenson (ISO) S5
  - 21609-90-5 leptophos (ISO) S7
  - 2593-15-9 5-ethoxy-3-trichloromethyl-1,2,4-thiadiazole S5
  - 82-68-8 quintozene (ISO) S5

(Contd. on page 9)
Trade name: Pesticide Standard 9

<table>
<thead>
<tr>
<th>Number</th>
<th>Name</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>72-43-5</td>
<td>methoxychlor</td>
<td>S5</td>
</tr>
<tr>
<td>2310-17-0</td>
<td>phosalone</td>
<td>S6</td>
</tr>
</tbody>
</table>

- Directive 2012/18/EU
- Named dangerous substances - ANNEX I None of the ingredients is listed.
- Seveso category
  - E2 Hazardous to the Aquatic Environment
  - P5c FLAMMABLE LIQUIDS
- Qualifying quantity (tonnes) for the application of lower-tier requirements 200 t
- Qualifying quantity (tonnes) for the application of upper-tier requirements 500 t
- 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.

- Relevant phrases
  - H225 Highly flammable liquid and vapour.
  - H302 Harmful if swallowed.
  - H312 Harmful in contact with skin.
  - H319 Causes serious eye irritation.
  - H332 Harmful if inhaled.
- Abbreviations and acronyms:
  - ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
  - IMDG: International Maritime Code for Dangerous Goods
  - 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)
  - VOC: Volatile Organic Compounds (USA, EU)
  - LC50: Lethal concentration, 50 percent
  - LD50: Lethal dose, 50 percent
  - PBT: Persistent, Bioaccumulative and Toxic
  - vPvB: very Persistent and very Bioaccumulative
  - Flam. Liq. 2: Flammable liquids – Category 2
  - Acute Tox. 4: Acute toxicity – Category 4
  - Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A
1 Identification

- **Product identifier**
- **Trade name**: Pesticide Standard 10
- **Part number**: AGI-P03-10
- **Relevant identified uses of the substance or mixture and uses advised against**
  Reagents and Standards for Analytical Chemical Laboratory Use
- **Details of the supplier of the safety data sheet**
  **Manufacturer/Supplier:**
  Agilent Technologies Australia Pty Ltd
  679 Springvale Road
  Mulgrave
  Victoria 3170, Australia
  **Further information obtainable from:**
  Telephone: 1800 802 402
  e-mail: pdl-msds_author@agilent.com
  **Emergency telephone number:** CHEMTREC®: +(61) - 290372994

2 Hazard(s) Identification

- **Classification of the substance or mixture**
  - [flammable](#) icon
    Flam. Liq. 2  H225  Highly flammable liquid and vapour.
  - [caution](#) icon
    Acute Tox. 4  H302  Harmful if swallowed.
    Eye Irrit. 2A  H319  Causes serious eye irritation.

- **Label elements**
  - **GHS label elements** The product is classified and labelled according to the Globally Harmonised System (GHS).
  - **Hazard pictograms**
    - [flame](#) icon
      GHS02
    - [caution](#) icon
      GHS07

- **Signal word** Danger

- **Hazard-determining components of labelling:**
  - acetonitrile
  - heptachlor epoxide - isomer B
- **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.

(Contd. on page 2)
Safety Data Sheet  
according to WHS Regulations

Printing date 08.10.2018  
Revision: 08.10.2018  
Version number 4

Trade name: Pesticide Standard 10

Keep out of reach of children.  
Read label before use.  
Keep away from heat/sparks/open flames/hot surfaces. No smoking.  
Keep container tightly closed.  
Ground/bond container and receiving equipment.  
Use explosion-proof electrical/ventilating/lighting equipment.  
Use only non-sparking tools.  
Take precautionary measures against static discharge.  
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): Remove/Take off immediately all contaminated clothing. Rinse skin with water/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.

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

### 3 Composition and Information on Ingredients

- Chemical characterisation: Mixtures  
- Description: Mixture of substances listed below with nonhazardous additions.

#### Dangerous components:

<table>
<thead>
<tr>
<th>Chemical</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>acetonitrile</td>
<td>99.873%</td>
</tr>
<tr>
<td>heptachlor epoxide - isomer B</td>
<td>0.127%</td>
</tr>
</tbody>
</table>

- Additional information: For the wording of the listed hazard phrases refer to section 16.

### 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: Call for a doctor immediately.
47.1.11

- Information for doctor:
  - Most important symptoms and effects, both acute and delayed: No further relevant information available.
  - Indication of any immediate medical attention and special treatment needed: No further relevant information available.

5 Fire Fighting Measures

- Extinguishing media
  - Suitable extinguishing agents: CO2, 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 fire - and explosion protection:
  - 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 container tightly sealed.
  - Store in cool, dry conditions in well sealed receptacles.
  - Specific end use(s): No further relevant information available.
8 Exposure controls and personal protection

- Additional information about design of technical facilities: No further data; see item 7.
- Control parameters
  - Ingredients with limit values that require monitoring at the workplace:
    |   | Short-term value | Long-term value |
    |----|-----------------|----------------|
    | 75-05-8 acetonitrile | 101 mg/m³, 60 ppm | 67 mg/m³, 40 ppm |
  - Additional information: The lists valid during the making 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.
  - Respiratory protection:
    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 11-13mil 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 12-15mil 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
  - Colour: Colourless
  - Odour: Aromatic
  - Odour threshold: Not determined.
- pH-value: Not determined.

- Change in condition
  - Melting point/freezing point: -46 °C
  - Initial boiling point and boiling range: 81 °C
- Flash point: 2 °C
- Flammability (solid, gas): Not applicable.
- Ignition temperature: 525 °C
- Decomposition temperature: Not determined.
- Auto-ignition temperature: Product is not selfigniting.
- Explosive properties: Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

- Explosion limits:
  - Lower: 4.4 Vol %
  - Upper: 16 Vol %
- Vapour pressure at 20 °C: 0 hPa
- Density at 20 °C: 0.786 g/cm³
- Relative density: Not determined.
- Vapour 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: 0.1 %
  - VOC (EC): 0.13 %
- Solids content: 0.1 %
- Other information: No further relevant information available.

10 Stability and Reactivity

- Reactivity: No further relevant information available.
11 Toxicological Information

- Information on toxicological effects
- Acute toxicity

- LD/LC50 values relevant for classification:

<table>
<thead>
<tr>
<th>ATE (Acute Toxicity Estimates)</th>
<th>Oral</th>
<th>Dermal</th>
<th>Inhalative</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50</td>
<td>1,188 mg/kg (rat)</td>
<td>&gt;2,003 mg/kg (rabbit)</td>
<td>3,592 mg/L (mouse)</td>
</tr>
<tr>
<td>LC50/4 h</td>
<td>1,320 mg/kg (rat)</td>
<td>&gt;2,000 mg/kg (rabbit)</td>
<td>3,587 mg/L (mouse)</td>
</tr>
</tbody>
</table>

75-05-8 acetonitrile

<table>
<thead>
<tr>
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<th>Dermal</th>
<th>Inhalative</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50</td>
<td>&gt;2,003 mg/kg (rabbit)</td>
<td>3,592 mg/L (mouse)</td>
</tr>
</tbody>
</table>

1024-57-3 heptachlor epoxide - isomer B

<table>
<thead>
<tr>
<th>Oral</th>
<th>LD50</th>
<th>15 mg/kg (rat)</th>
</tr>
</thead>
</table>

- Primary irritant effect:
  - Skin corrosion/irritation: No irritant effect.
  - Serious eye damage/irritation: Irritating effect.
  - Respiratory or skin sensitisation: No sensitising effects known.
  - Additional toxicological information:
    The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
    Harmful
    Irritant

12 Ecological Information

- Toxicity
- Aquatic toxicity: No further relevant information available.
- Persistence and degradability: No further relevant information available.
- Behaviour 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 (German Regulation) (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.
Trade name: Pesticide Standard 10

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

13 Disposal considerations

- Waste treatment methods
- Recommendation
  Must not be disposed 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

- UN-Number
  - ADG, IMDG, IATA
  - UN1648

- UN proper shipping name
  - ADG
  - IMDG, IATA
  - 1648 ACETONITRILE solution

- Transport hazard class(es)
  - ADG, IMDG, IATA

  - Class
  - 3 Flammable liquids.
  - Label
  - 3

- Packing group
  - ADG, 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
- Stowage Code
  - SW2 Clear of living quarters.

- Transport in bulk according to Annex II of Marpol and the IBC Code
  - Not applicable.

- Transport/Additional information:

  - ADG
    - 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
  - Transport category
Trade name: Pesticide Standard 10

- Tunnel restriction code: D/E
- 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
- Australian Inventory of Chemical Substances
  All ingredients are listed.
- Standard for the Uniform Scheduling of Medicines and Poisons
  None of the ingredients is listed.
- Directive 2012/18/EU
  - Named dangerous substances - ANNEX I
    - Seveso category: P5c FLAMMABLE LIQUIDS
  - Qualifying quantity (tonnes) for the application of lower-tier requirements: 5,000 t
  - Qualifying quantity (tonnes) for the application of upper-tier requirements: 50,000 t
- 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.

- Relevant phrases
  - H225 Highly flammable liquid and vapour.
  - H301 Toxic if swallowed.
  - H302 Harmful if swallowed.
  - H312 Harmful in contact with skin.
  - H319 Causes serious eye irritation.
  - H332 Harmful if inhaled.
  - H351 Suspected of causing cancer.
  - H373 May cause damage to organs through prolonged or repeated exposure.
- Abbreviations and acronyms:
  - ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
  - IMDG: International Maritime Code for Dangerous Goods
  - 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)
  - VOC: Volatile Organic Compounds (USA, EU)
  - LC50: Lethal concentration, 50 percent
  - LD50: Lethal dose, 50 percent
  - PBT: Persistent, Bioaccumulative and Toxic
  - vPvB: very Persistent and very Bioaccumulative
  - Flam. Liq. 2: Flammable liquids – Category 2
Trade name: Pesticide Standard 10

- Acute Tox. 3: Acute toxicity – Category 3
- Acute Tox. 4: Acute toxicity – Category 4
- Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A
- Carc. 2: Carcinogenicity – Category 2
- STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2