Kit Name: China Pesticide Test Mix

Kit PN: G3440-85045

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

**Kit 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 of the substance/mixture and of the company/undertaking

- **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 Manufacturing GmbH & Co. KG
  Hewlett-Packard-Str.8
  76337 Waldbronn
  Germany
- **Further information obtainable from:**
  - Telephone: 0800 603 1000
  - pdl-msds_author@agilent.com
  - **Emergency telephone number:** CHEMTREC®: +(44)-870-8200418

2 Hazards identification

- **Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**

  - **GHS02 flame**
  - Flam. Liq. 2 H225 Highly flammable liquid and vapour.

  - **GHS09 environment**
  - Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.

  - **GHS07**
  - Acute Tox. 4 H302 Harmful if swallowed.
  - Eye Irrit. 2 H319 Causes serious eye irritation.

**Label elements**

**Labelling according to Regulation (EC) No 1272/2008**

The product is classified and labelled according to the CLP regulation.

**Hazard pictograms**

- GHS02
- GHS07
- GHS09

**Signal word** Danger

**Hazard-determining components of labelling:** acetonitrile
Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 08.10.2018  Revision: 08.10.2018  Version number 4

Trade name: Pesticide Standard 1

- **Hazard statements**
  H225 Highly flammable liquid and vapour.
  H302 Harmful if swallowed.
  H319 Causes serious eye irritation.
  H411 Toxic to aquatic life with long lasting effects.

- **Precautionary statements**
  P101 If medical advice is needed, have product container or label at hand.
  P102 Keep out of reach of children.
  P103 Read label before use.
  P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
  P233 Keep container tightly closed.
  P240 Ground/bond container and receiving equipment.
  P241 Use explosion-proof electrical/ventilating/lighting equipment.
  P242 Use only non-sparking tools.
  P243 Take precautionary measures against static discharge.
  P264 Wash thoroughly after handling.
  P270 Do not eat, drink or smoke when using this product.
  P273 Avoid release to the environment.
  P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
  P330 Rinse mouth.
  P303+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  P337+P313 If eye irritation persists: Get medical advice/attention.
  P370+P378 In case of fire: Use for extinction: CO2, powder or water spray.
  P391 Collect spillage.
  P403+P235 Store in a well-ventilated place. Keep cool.
  P501 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/information on ingredients

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

#### Dangerous components:

<table>
<thead>
<tr>
<th>CAS: 75-05-8</th>
<th>acetonitrile</th>
<th>99.733%</th>
</tr>
</thead>
<tbody>
<tr>
<td>EINECS: 200-835-2</td>
<td>Flam. Liq. 2, H225; Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H319</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CAS: 35554-44-0</th>
<th>imazalil (ISO)</th>
<th>0.0127%</th>
</tr>
</thead>
<tbody>
<tr>
<td>EINECS: 252-615-0</td>
<td>Acute Tox. 3, H301; Carc. 2, H351; Eye Dam. 1, H318; Aquatic Chronic 1, H410; Acute Tox. 4, H332</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CAS: 107534-96-3</th>
<th>1-(4-chlorophenyl)-4,4-dimethyl-3-(1,2,4-triazol-1-ylmethyl)pentan-3-ol</th>
<th>0.0127%</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELINCS: 403-640-2</td>
<td>Repr. 2, H361d; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Acute Tox. 4, H319</td>
<td></td>
</tr>
</tbody>
</table>
Trade name: Pesticide Standard 1

<table>
<thead>
<tr>
<th>CAS: 25311-71-1</th>
<th>isofenphos (ISO)</th>
<th>0.0127%</th>
</tr>
</thead>
<tbody>
<tr>
<td>EINECS: 246-814-1</td>
<td>Acute Tox. 3, H301; Acute Tox. 3, H311; Aquatic Acute 1, H400; Aquatic Chronic 1, H410</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CAS: 119168-77-3</th>
<th>tebufenpyrad</th>
<th>0.0127%</th>
</tr>
</thead>
<tbody>
<tr>
<td>EINECS: 25318-79-4</td>
<td>Acute Tox. 3, H301; STOT RE 2, H373; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Acute Tox. 4, H332; Skin Sens. 1B, H317</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CAS: 24151-93-7</th>
<th>piperophos (ISO)</th>
<th>0.0127%</th>
</tr>
</thead>
<tbody>
<tr>
<td>EINECS: 25318-79-4</td>
<td>Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Acute Tox. 4, H302</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CAS: 52645-53-1</th>
<th>permethrin (ISO)</th>
<th>0.0127%</th>
</tr>
</thead>
<tbody>
<tr>
<td>EINECS: 25318-79-4</td>
<td>Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Acute Tox. 4, H332; Skin Sens. 1, H317</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.
    - Indication of any immediate medical attention and special treatment needed: No further relevant information available.

### 5 Firefighting 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.

(Contd. on page 4)
· 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/personal protection

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

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Limit values at workplace</th>
</tr>
</thead>
<tbody>
<tr>
<td>75-05-8 acetonitrile</td>
<td>Short-term value: 102 mg/m³, 60 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
Trade name: Pesticide Standard 1

- 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.
- 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
  Harmful if swallowed.

- LD/LC50 values relevant for classification:

  **ATE (Acute Toxicity Estimates)**

<table>
<thead>
<tr>
<th>Route</th>
<th>LD50</th>
<th>LD50 mg/kg (rat)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
<td>1,324</td>
<td>1,324 mg/kg (rat)</td>
</tr>
<tr>
<td>75-05-8 acetonitrile</td>
<td>Oral</td>
<td>1,320</td>
</tr>
<tr>
<td>Dermal</td>
<td>&gt;2,000</td>
<td>&gt;2,000 mg/kg (rabbit)</td>
</tr>
<tr>
<td>Inhalative</td>
<td>LC50/4 h</td>
<td>3,587</td>
</tr>
<tr>
<td>35554-44-0 imazalil (ISO)</td>
<td>Oral</td>
<td>227</td>
</tr>
<tr>
<td>Dermal</td>
<td>4,200</td>
<td>4,200 mg/kg (rabbit)</td>
</tr>
<tr>
<td>107534-96-3 1-(4-chlorophenyl)-4,4-dimethyl-3-(1,2,4-triazol-1-ylmethyl)pentan-3-ol</td>
<td>Oral</td>
<td>1,700</td>
</tr>
<tr>
<td>Dermal</td>
<td>&gt;5,000</td>
<td>&gt;5,000 mg/kg (rat)</td>
</tr>
<tr>
<td>Inhalative</td>
<td>LC50/4 h</td>
<td>&gt;800</td>
</tr>
</tbody>
</table>
Trade name: Pesticide Standard 1

### 25311-71-1 isofenphos (ISO)

<table>
<thead>
<tr>
<th>Route</th>
<th>LD50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
<td>21.1 mg/kg (rat)</td>
</tr>
<tr>
<td>Dermal</td>
<td>162 mg/kg (rabbit)</td>
</tr>
<tr>
<td>Inhalative</td>
<td>144 mg/L (rat)</td>
</tr>
</tbody>
</table>

**Inhalative LC50/4 h 144 mg/L (rat)**

### 119168-77-3 tebufenpyrad

<table>
<thead>
<tr>
<th>Route</th>
<th>LD50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
<td>595 mg/kg (rat)</td>
</tr>
<tr>
<td>Dermal</td>
<td>&gt;2,000 mg/kg (rat)</td>
</tr>
</tbody>
</table>

### 24151-93-7 piperophos (ISO)

<table>
<thead>
<tr>
<th>Route</th>
<th>LD50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
<td>324 mg/kg (rat)</td>
</tr>
<tr>
<td>Dermal</td>
<td>&gt;2,150 mg/kg (rat)</td>
</tr>
</tbody>
</table>

- **Primary irritant effect:**
  - **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
  - **Serious eye damage/irritation** Causes serious eye irritation.
  - **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
  - **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)** Based on available data, the classification criteria are not met.
  - **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
  - **Carcinogenicity** Based on available data, the classification criteria are not met.
  - **Reproductive toxicity** Based on available data, the classification criteria are not met.
  - **STOT-single exposure** Based on available data, the classification criteria are not met.
  - **STOT-repeated exposure** Based on available data, the classification criteria are not met.
  - **Aspiration hazard** Based on available data, the classification criteria are not met.

### 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.
  - **Ecotoxical effects:**
  - **Remark:** Toxic for fish
  - **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.
    - Also poisonous for fish and plankton in water bodies.
    - Toxic for aquatic organisms
  - **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.

- **European waste catalogue**
  - HP 3 Flammable
  - HP 4 Irritant - skin irritation and eye damage
  - HP 6 Acute Toxicity
  - HP 14 Ecotoxic

- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

### 14 Transport information

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

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

- **Transport hazard class(es)**

  - **ADR, IMDG**
    - **Class** 3 Flammable liquids.
    - **Label** 3

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

- **Packing group**
  - ADR, IMDG, IATA II

- **Environmental hazards:**
  Product contains environmentally hazardous substances: imazalil (ISO), permethrin (ISO)

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

- **Special marking (ADR):**
  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:
  - ADR
  - Limited quantities (LQ): 1L 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 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
  - 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

· REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3


· 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.
<table>
<thead>
<tr>
<th>H302</th>
<th>Harmful if swallowed.</th>
</tr>
</thead>
<tbody>
<tr>
<td>H311</td>
<td>Toxic in contact with skin.</td>
</tr>
<tr>
<td>H312</td>
<td>Harmful in contact with skin.</td>
</tr>
<tr>
<td>H317</td>
<td>May cause an allergic skin reaction.</td>
</tr>
<tr>
<td>H318</td>
<td>Causes serious eye damage.</td>
</tr>
<tr>
<td>H319</td>
<td>Causes serious eye irritation.</td>
</tr>
<tr>
<td>H332</td>
<td>Harmful if inhaled.</td>
</tr>
<tr>
<td>H351</td>
<td>Suspected of causing cancer.</td>
</tr>
<tr>
<td>H361d</td>
<td>Suspected of damaging the unborn child.</td>
</tr>
<tr>
<td>H373</td>
<td>May cause damage to organs through prolonged or repeated exposure.</td>
</tr>
<tr>
<td>H400</td>
<td>Very toxic to aquatic life.</td>
</tr>
<tr>
<td>H410</td>
<td>Very toxic to aquatic life with long lasting effects.</td>
</tr>
</tbody>
</table>

**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
- **GHS:** Globally Harmonised System of Classification and Labelling of Chemicals
- **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. 3:** Acute toxicity – Category 3
- **Acute Tox. 4:** Acute toxicity – Category 4
- **Eye Dam. 1:** Serious eye damage/eye irritation – Category 1
- **Eye Irrit. 2:** Serious eye damage/eye irritation – Category 2
- **Skin Sens. 1:** Skin sensitisation – Category 1
- **Skin Sens. 1B:** Skin sensitisation – Category 1B
- **Carc. 2:** Carcinogenicity – Category 2
- **Repr. 2:** Reproductive toxicity – Category 2
- **STOT RE 2:** Specific target organ toxicity (repeated exposure) – Category 2
- **Aquatic Acute 1:** Hazardous to the aquatic environment - acute aquatic hazard – Category 1
- **Aquatic Chronic 1:** Hazardous to the aquatic environment - long-term aquatic hazard – Category 1
- **Aquatic Chronic 2:** Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

*Data compared to the previous version altered.*
1 Identification of the substance/mixture and of the company/undertaking

- 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 Manufacturing GmbH & Co. KG
  Hewlett-Packard-Str.8
  76337 Waldbronn
  Germany

- Further information obtainable from:
  Telephone: 0800 603 1000
  pdl-msds_author@agilent.com
  Emergency telephone number: CHEMTREC®: +(44)-870-8200418

2 Hazards identification

- Classification of the substance or mixture
- Classification according to Regulation (EC) No 1272/2008

- Label elements
- Labelling according to Regulation (EC) No 1272/2008
  The product is classified and labelled according to the CLP regulation.
- Hazard pictograms

- Signal word Danger
Trade name: Pesticide Standard 2

· **Hazard-determining components of labelling:**
  - acetonitrile

· **Hazard statements**
  - H225 Highly flammable liquid and vapour.
  - H302 Harmful if swallowed.
  - H319 Causes serious eye irritation.
  - H410 Very toxic to aquatic life with long lasting effects.

· **Precautionary statements**
  - P101 If medical advice is needed, have product container or label at hand.
  - P102 Keep out of reach of children.
  - P103 Read label before use.
  - P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
  - P233 Keep container tightly closed.
  - P240 Ground/bond container and receiving equipment.
  - P241 Use explosion-proof electrical/ventilating/lighting equipment.
  - P242 Use only non-sparking tools.
  - P243 Take precautionary measures against static discharge.
  - P264 Wash thoroughly after handling.
  - P270 Do not eat, drink or smoke when using this product.
  - P273 Avoid release to the environment.
  - P280 Wear protective gloves/protective clothing/eye protection/face protection.
  - P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
  - P330 Rinse mouth.
  - P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  - P337+P313 If eye irritation persists: Get medical advice/attention.
  - P370+P378 In case of fire: Use for extinction: CO2, powder or water spray.
  - P391 Collect spillage.
  - P403+P235 Store in a well-ventilated place. Keep cool.
  - P501 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/information on ingredients

· **Chemical characterisation:** Mixtures

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

<table>
<thead>
<tr>
<th>CAS: 75-05-8</th>
<th>EINECS: 200-835-2</th>
<th>acetonitrile</th>
<th>99.721%</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS: 13593-03-8</td>
<td>EINECS: 237-031-6</td>
<td>quinalphos (ISO)</td>
<td>0.0127%</td>
</tr>
</tbody>
</table>

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

5 Firefighting 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/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>Chemical</th>
<th>WEL</th>
<th>Short-term value</th>
<th>Sk</th>
<th>Long-term value</th>
<th>Sk</th>
</tr>
</thead>
<tbody>
<tr>
<td>75-05-8 acetonitrile</td>
<td>Short-term value: 102 mg/m³, 60 ppm</td>
<td></td>
<td></td>
<td>Long-term value: 68 mg/m³, 40 ppm</td>
<td></td>
</tr>
<tr>
<td>3689-24-5 sulfotep (ISO)</td>
<td>Long-term value: 0.1 mg/m³</td>
<td></td>
<td></td>
<td></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:
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.
### Safety data sheet

**Trade name:** Pesticide Standard 2

- **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: 0.1 %
  - VOC (EC) 0.05 %
- **Solids content:** 0.1 %
- **Other information:** No further relevant information available.

### Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

### Toxicological information

- **Information on toxicological effects**
- **Acute toxicity**
  Harmful if swallowed.
- **LD/LC50 values relevant for classification:**
  - **ATE (Acute Toxicity Estimates)**
    - Oral LD50 1,324 mg/kg (rat)

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

### 75-05-8 acetonitrile
- Oral LD50: 1,320 mg/kg (rat)
- Dermal LD50: >2,000 mg/kg (rabbit)
- Inhalative LC50/4 h: 3,587 mg/L (mouse)

### 13593-03-8 quinalphos (ISO)
- Oral LD50: 26 mg/kg (rat)
- Dermal LD50: 300 mg/kg (rat)
- Inhalative LC50/4 h: 330 mg/L (mouse)

### 3689-24-5 sulfotep (ISO)
- Oral LD50: 5 mg/kg (rat)
- Dermal LD50: 20 mg/kg (rat)
- Inhalative LC50/4 h: 38 mg/L (rat)

### 7786-34-7 mevinphos (ISO)
- Oral LD50: 3 mg/kg (rat)
- Dermal LD50: 4 mg/kg (rat)

### 13071-79-9 S-tert-butylthiomethyl O,O-diethylphosphorodithioate
- Oral LD50: 4.5 mg/kg (rat)

### 31218-83-4 trans-isopropyl-3-[(ethylamino)methoxyfosfinothioyl]oxy]crotonate
- Dermal LD50: 564 mg/kg (rat)
- Inhalative LC50/4 h: 690 mg/L (rat)

### 24017-47-8 triazophos (ISO)
- Oral LD50: 57 mg/kg (rat)
- Dermal LD50: 1,100 mg/kg (rat)
- Inhalative LC50/4 h: 28 mg/L (rat)

### 23103-98-2 pirimicarb
- Oral LD50: >500 mg/kg (rat)

- **Primary irritant effect:**
- Skin corrosion/irritation: Based on available data, the classification criteria are not met.
- Serious eye damage/irritation: Causes serious eye irritation.
- Respiratory or skin sensitisation: Based on available data, the classification criteria are not met.
- CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)
- Germ cell mutagenicity: Based on available data, the classification criteria are not met.
- Carcinogenicity: Based on available data, the classification criteria are not met.
- Reproductive toxicity: Based on available data, the classification criteria are not met.
- STOT-single exposure: Based on available data, the classification criteria are not met.
- STOT-repeated exposure: Based on available data, the classification criteria are not met.
- Aspiration hazard: Based on available data, the classification criteria are not met.

### 12 Ecological information
- Toxicity
- Aquatic toxicity: No further relevant information available.
- Persistence and degradability: No further relevant information available.
47.1.11

· Behaviour in environmental systems:
· Bioaccumulative potential: No further relevant information available.
· Mobility in soil: No further relevant information available.
· Ecotoxic effects:
· Remark: Very toxic for fish
· 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.
  Also poisonous for fish and plankton in water bodies.
  Very toxic for aquatic organisms
· 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.
· European waste catalogue
  HP 3 Flammable
  HP 4 Irritant - skin irritation and eye damage
  HP 6 Acute Toxicity
  HP 14 Ecotoxic

· Uncleaned packaging:
· Recommendation: Disposal must be made according to official regulations.

14 Transport information

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

- **ADR, IMDG**

  ![Flammable液体](image)

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

- **IATA**

  ![Flammable液体](image)

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

### Packing group

- **ADR, IMDG, IATA**
  - II

### Environmental hazards:

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

- **ADR**
  - **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
Trade name: Pesticide Standard 2

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
  - 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
  - REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3

- Regulation (EU) No 649/2012
  13071-79-9 S-tert-butylthiomethyl O,O-diethylphosphorodithioate
  24017-47-8 triazophos (ISO)

- 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.
  H300 Fatal if swallowed.
  H301 Toxic if swallowed.
  H302 Harmful if swallowed.
  H310 Fatal in contact with skin.
  H311 Toxic in contact with skin.
  H312 Harmful in contact with skin.
  H317 May cause an allergic skin reaction.
  H318 Causes serious eye damage.
  H319 Causes serious eye irritation.
  H331 Toxic if inhaled.
  H332 Harmful if inhaled.
  H351 Suspected of causing cancer.
  H400 Very toxic to aquatic life.
  H410 Very toxic to aquatic life with long lasting effects.

- 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
  GHS: Globally Harmonised System of Classification and Labelling of Chemicals
  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)
| Acute Tox. 1: Acute toxicity – Category 1 |
| Acute Tox. 2: Acute toxicity – Category 2 |
| Acute Tox. 3: Acute toxicity – Category 3 |
| Acute Tox. 4: Acute toxicity – Category 4 |
| Eye Dam. 1: Serious eye damage/eye irritation – Category 1 |
| Eye Irrit. 1: Serious eye damage/eye irritation – Category 2 |
| Skin Sens. 1: Skin sensitisation – Category 1 |
| Carc. 2: Carcinogenicity – Category 2 |
| Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1 |
| Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1 |

* Data compared to the previous version altered.

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**Trade name: Pesticide Standard 2**

- 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. 2: Acute toxicity – Category 2
- Acute Tox. 3: Acute toxicity – Category 3
- Acute Tox. 4: Acute toxicity – Category 4
- Eye Dam. 1: Serious eye damage/eye irritation – Category 1
- Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
- Skin Sens. 1: Skin sensitisation – Category 1
- Carc. 2: Carcinogenicity – Category 2
- Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1
- Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1

* Data compared to the previous version altered.
1 Identification of the substance/mixture and of the company/undertaking

- **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 Manufacturing GmbH & Co. KG
  Hewlett-Packard-Str.8
  76337 Waldbronn
  Germany
- **Further information obtainable from:**
  Telephone: 0800 603 1000
  pdl-msds_author@agilent.com
  **Emergency telephone number:** CHEMTREC®: +(44)-870-8200418

2 Hazards identification

- **Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**

  - **GHS02 flame**
  Flam. Liq. 2    H225  Highly flammable liquid and vapour.
  
  - **GHS09 environment**
  Aquatic Acute 1   H400  Very toxic to aquatic life.
  Aquatic Chronic 1 H410  Very toxic to aquatic life with long lasting effects.

  - **GHS07**
  Acute Tox. 4     H302  Harmful if swallowed.
  Eye Irrit. 2     H319  Causes serious eye irritation.

  - **Label elements**
  - **Labelling according to Regulation (EC) No 1272/2008**
  The product is classified and labelled according to the CLP regulation.
  - **Hazard pictograms**
  GHS02  GHS07  GHS09

  - **Signal word** Danger

(Contd. on page 2)
Trade name: Pesticide Standard 3

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

- **Hazard statements**
  - H225 Highly flammable liquid and vapour.
  - H302 Harmful if swallowed.
  - H319 Causes serious eye irritation.
  - H410 Very toxic to aquatic life with long lasting effects.

- **Precautionary statements**
  - P101 If medical advice is needed, have product container or label at hand.
  - P102 Keep out of reach of children.
  - P103 Read label before use.
  - P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
  - P233 Keep container tightly closed.
  - P240 Ground/bond container and receiving equipment.
  - P241 Use explosion-proof electrical/ventilating/lighting equipment.
  - P242 Use only non-sparking tools.
  - P243 Take precautionary measures against static discharge.
  - P264 Wash thoroughly after handling.
  - P270 Do not eat, drink or smoke when using this product.
  - P273 Avoid release to the environment.
  - P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
  - P330 Rinse mouth.
  - P303+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  - P337+P313 If eye irritation persists: Get medical advice/attention.
  - P370+P378 In case of fire: Use for extinction: CO2, powder or water spray.
  - P391 Collect spillage.
  - P403+P235 Store in a well-ventilated place. Keep cool.
  - P501 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/information on ingredients

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

#### Dangerous components:

| CAS: 75-05-8 | acetonitrile | 99.708% |
| EINECS: 200-835-2 | | |

| CAS: 96489-71-3 | 2-tert-butyl-5-(4-tert-butylbenzylthio)-4-chloropyridazin-3(2H)-one | 0.0127% |
| ELINCS: 405-700-3 | | |

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

### 5 Firefighting 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.
Trade name: Pesticide Standard 3

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/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:
    75-05-8 acetonitrile
    WEL Short-term value: 102 mg/m³, 60 ppm
    Long-term value: 68 mg/m³, 40 ppm
  - Additional information: The lists valid during the making were used as basis.
Trade name: Pesticide Standard 3

- **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 4hrs. 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.
10 Stability and reactivity

- **Reactivity**: No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided**: No decomposition if used according to specifications.
- **Possibility of hazardous reactions**: No dangerous reactions known.
- **Conditions to avoid**: No further relevant information available.
- **Incompatible materials**: No further relevant information available.
- **Hazardous decomposition products**: No dangerous decomposition products known.

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity**
  - Harmful if swallowed.
- **LD/LC50 values relevant for classification**
  - **ATE (Acute Toxicity Estimates)**
    - Oral LD50: 1,324 mg/kg (rat)
Trade name: Pesticide Standard 3

<table>
<thead>
<tr>
<th>Chemical ID</th>
<th>Description</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></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>96489-71-3 2-tert-butyl-5-(4-tert-butylbenzylthio)-4-chloropyridazin-3(2H)-one</td>
<td></td>
<td>205 mg/kg (mouse)</td>
<td>&gt;2,000 mg/kg (rabbit)</td>
<td>620 mg/L (rat)</td>
</tr>
<tr>
<td>52918-63-5 deltamethrin (ISO)</td>
<td></td>
<td>9.36 mg/kg (rat)</td>
<td>2,000 mg/kg (rabbit)</td>
<td></td>
</tr>
<tr>
<td>82657-04-3 bifenthrin</td>
<td></td>
<td>55 mg/kg (rat)</td>
<td>&gt;2,000 mg/kg (rabbit)</td>
<td></td>
</tr>
<tr>
<td>34256-82-1 2-chloro-N-(ethoxymethyl)-N-(2-ethyl-6-methylphenyl)acetamide</td>
<td></td>
<td>763 mg/kg (rat)</td>
<td>4,166 mg/kg (rabbit)</td>
<td></td>
</tr>
<tr>
<td>15972-60-8 alachlor (ISO)</td>
<td></td>
<td>930 mg/kg (rat)</td>
<td>3,500 mg/kg (rabbit)</td>
<td></td>
</tr>
<tr>
<td>21087-64-9 metribuzin (ISO)</td>
<td></td>
<td>1,090 mg/kg (rat)</td>
<td>&gt;20,000 mg/kg (rabbit)</td>
<td>&gt;860 mg/L (rat)</td>
</tr>
<tr>
<td>2212-67-1 molinate (ISO)</td>
<td></td>
<td>369 mg/kg (rat)</td>
<td>3,536 mg/kg (rabbit)</td>
<td></td>
</tr>
</tbody>
</table>

- **Primary irritant effect:**
- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation**
  Causes serious eye irritation.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

**Toxicity**

**Aquatic toxicity:** No further relevant information available.
47.1.11 · 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.
· Ecotoxicological effects:
· Remark: Very toxic for fish
· 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.
  Also poisonous for fish and plankton in water bodies.
  Very toxic for aquatic organisms
· 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.

<table>
<thead>
<tr>
<th></th>
<th>European waste catalogue</th>
</tr>
</thead>
<tbody>
<tr>
<td>HP 3</td>
<td>Flammable</td>
</tr>
<tr>
<td>HP 4</td>
<td>Irritant - skin irritation and eye damage</td>
</tr>
<tr>
<td>HP 6</td>
<td>Acute Toxicity</td>
</tr>
<tr>
<td>HP 14</td>
<td>Ecotoxic</td>
</tr>
</tbody>
</table>

· Uncleaned packaging:
· Recommendation: Disposal must be made according to official regulations.

14 Transport information
· UN-Number
  UN1648
· ADR, IMDG, IATA
· UN proper shipping name
  1648 ACETONITRILE solution, ENVIRONMENTALLY HAZARDOUS
· IMDG
  ACETONITRILE solution, MARINE POLLUTANT
· IATA
  ACETONITRILE solution
-trade name: Pesticide Standard 3

- Transport hazard class(es)
  - ADR, IMDG

    - Class
      - 3 Flammable liquids.
    - Label
      - 3

- IATA

    - Class
      - 3 Flammable liquids.
    - Label
      - 3

- Packing group
  - ADR, 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 (ADR):
    - 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:
  - ADR
    - Limited quantities (LQ)
      - 1L
      - Code: E2
      - Maximum net quantity per inner packaging: 30 ml
      - Maximum net quantity per outer packaging: 500 ml
    - 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
      - Code: E2
      - Maximum net quantity per inner packaging: 30 ml
      - Maximum net quantity per outer packaging: 500 ml
    - Excepted quantities (EQ)
Trade name: Pesticide Standard 3

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
  - 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
  - REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3

<table>
<thead>
<tr>
<th>Number</th>
<th>Chemical Name</th>
<th>Annex I Part</th>
<th>Annex I Part</th>
</tr>
</thead>
<tbody>
<tr>
<td>34256-82-1</td>
<td>2-chloro-N-(ethoxymethyl)-N-(2-ethyl-6-methylphenyl)acetamide</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>15972-60-8</td>
<td>alachlor (ISO)</td>
<td>1</td>
<td>3</td>
</tr>
</tbody>
</table>

- 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.
  H300 Fatal if swallowed.
  H301 Toxic if swallowed.
  H302 Harmful if swallowed.
  H312 Harmful in contact with skin.
  H315 Causes skin irritation.
  H317 May cause an allergic skin reaction.
  H319 Causes serious eye irritation.
  H331 Toxic if inhaled.
  H332 Harmful if inhaled.
  H335 May cause respiratory irritation.
  H351 Suspected of causing cancer.
  H361f Suspected of damaging fertility.
  H372 Causes damage to organs through prolonged or repeated exposure.
  H373 May cause damage to organs through prolonged or repeated exposure.
  H400 Very toxic to aquatic life.
  H410 Very toxic to aquatic life with long lasting effects.

- 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
Safety data sheet
according to 1907/2006/EC, Article 31

Trading name: Pesticide Standard 3

GHS: Globally Harmonised System of Classification and Labelling of Chemicals
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. 2: Acute toxicity – Category 2
Acute Tox. 3: Acute toxicity – Category 3
Acute Tox. 4: Acute toxicity – Category 4
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
Skin Sens. 1: Skin sensitisation – Category 1
Skin Sens. 1B: Skin sensitisation – Category 1B
Carc. 2: Carcinogenicity – Category 2
Repr. 2: Reproductive toxicity – Category 2
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1
STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2
Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1
Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1

* Data compared to the previous version altered.
1 Identification of the substance/mixture and of the company/undertaking

- 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 Manufacturing GmbH & Co. KG
  Hewlett-Packard-Str.8
  76337 Waldbronn
  Germany

- Further information obtainable from:
  Telephone: 0800 603 1000
  pdl-msds_author@agilent.com
- Emergency telephone number: CHEMTREC®: +(44)-870-8200418

2 Hazards identification

- Classification of the substance or mixture
- Classification according to Regulation (EC) No 1272/2008
  GHS02 flame
  Flam. Liq. 2  H225  Highly flammable liquid and vapour.

  GHS07
  Acute Tox. 4  H302  Harmful if swallowed.
  Eye Irrit. 2  H319  Causes serious eye irritation.

- Label elements
- Labelling according to Regulation (EC) No 1272/2008
  The product is classified and labelled according to the CLP regulation.
- Hazard pictograms

  GHS02  GHS07

- Signal word: Danger
- Hazard-determining components of labelling:
  acetonitrile
- Hazard statements
  H225  Highly flammable liquid and vapour.
  H302  Harmful if swallowed.
  H319  Causes serious eye irritation.
Trade name: Pesticide Standard 4

Precautionary statements
- P101: If medical advice is needed, have product container or label at hand.
- P102: Keep out of reach of children.
- P103: Read label before use.
- P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P233: Keep container tightly closed.
- P240: Ground/bond container and receiving equipment.
- P241: Use explosion-proof electrical/ventilating/lighting equipment.
- P242: Use only non-sparking tools.
- P243: Use precautionary measures against static discharge.
- P264: Wash thoroughly after handling.
- P270: Do not eat, drink or smoke when using this product.
- P280: Wear protective gloves/protective clothing/eye protection/face protection.
- P292: Do not breathe dust/fume/gas/mist/vapours./
- P410: Keep out of the reach of children.
- P501: Dispose of contents/container in accordance with local/regional/national/international regulations.

Other hazards
- P301+P338: If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P305+P351+P338: If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P337+P313: If eye irritation persists: Get medical advice/attention.
- P370+P378: In case of fire: Use for extinction: CO2, powder or water spray.
- P403+P235: Store in a well-ventilated place. Keep cool.
- P501: Dispose of contents/container in accordance with local/regional/national/international regulations.

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

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

Dangerous components:
- CAS: 75-05-8
- EINECS: 200-835-2
- Acetonitrile
- Flam. Liq. 2, H225; Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332; Eye Irrit. 2, H319
- 99.822%

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

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.
Trade name: Pesticide Standard 4

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

### 5 Firefighting measures

- **Extinguishing media**
  - **Suitable extinguishing agents:**
    CO2, 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.

(Contd. of page 2)
8 Exposure controls/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>Ingredient</th>
<th>WEL Short-term</th>
<th>WEL Long-term</th>
</tr>
</thead>
<tbody>
<tr>
<td>75-05-8</td>
<td>acetonitrile</td>
<td>102 mg/m³, 60 ppm</td>
<td>68 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

- **Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**
  - **Form:** Fluid
  - **Colour:** Colourless
### Trade name: Pesticide Standard 4

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Odour</td>
<td>Aromatic</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>Not determined.</td>
</tr>
<tr>
<td>pH-value</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Change in condition</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>Flash point</td>
<td>2 °C</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Ignition temperature</td>
<td>525 °C</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>Product is not selfigniting.</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>Product is not explosive.</td>
</tr>
<tr>
<td></td>
<td>However, formation of explosive air/vapour mixtures are possible.</td>
</tr>
<tr>
<td>Explosion limits</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>Vapour pressure at 20 °C</td>
<td>0 hPa</td>
</tr>
<tr>
<td>Density at 20 °C</td>
<td>0.786 g/cm³</td>
</tr>
<tr>
<td>Relative density</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Vapour density</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Solubility in / Miscibility with water</td>
<td>Not miscible or difficult to mix.</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Viscosity</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>Solvent content</td>
<td></td>
</tr>
<tr>
<td>Organic solvents</td>
<td>0.0 %</td>
</tr>
<tr>
<td>VOC (EC)</td>
<td>0.01 %</td>
</tr>
<tr>
<td>Solids content</td>
<td>0.1 %</td>
</tr>
<tr>
<td>Other information</td>
<td>No further relevant information available.</td>
</tr>
</tbody>
</table>

### 10 Stability and reactivity

- **Reactivity**: No further relevant information available.
- **Chemical stability**: No further relevant information available.
- **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.
Trade name: Pesticide Standard 4

- Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- Information on toxicological effects
  - Acute toxicity
    Harmful if swallowed.

- LD/LC50 values relevant for classification:
  ATE (Acute Toxicity Estimates)
  Oral LD50: 1,322 mg/kg (rat)

  75-05-8 acetonitrile
  Oral LD50: 1,320 mg/kg (rat)
  Dermal LD50: >2,000 mg/kg (rabbit)
  Inhalative LC50/4 h: 3,587 mg/L (mouse)

- Primary irritant effect:
  - Skin corrosion/irritation
    Based on available data, the classification criteria are not met.
  - Serious eye damage/irritation
    Causes serious eye irritation.
  - Respiratory or skin sensitisation
    Based on available data, the classification criteria are not met.
  - Germ cell mutagenicity
    Based on available data, the classification criteria are not met.
  - Reproductive toxicity
    Based on available data, the classification criteria are not met.
  - STOT-single exposure
    Based on available data, the classification criteria are not met.
  - Aspiration hazard
    Based on available data, the classification criteria are not met.

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.

- European waste catalogue
  HP 3 Flammable
  HP 4 Irritant - skin irritation and eye damage
  HP 6 Acute Toxicity

- Uncleaned packaging:
  Recommendation: Disposal must be made according to official regulations.

14 Transport information

- UN-Number
  ADR, IMDG, IATA UN1648

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

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

- Class
  3 Flammable liquids.

- Label
  3

- Packing group
  ADR, 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:
  ADR
  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 4

| · Transport category | 2 |
| · Tunnel restriction code | D/E |
| · IMDG | |
| · Limited quantities (LQ) | 1L |
| · Exected 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
  · 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
  · REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3
  · 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
  GHS: Globally Harmonised System of Classification and Labelling of Chemicals
  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. 2: Serious eye damage/eye irritation – Category 2

· * Data compared to the previous version altered.
1 Identification of the substance/mixture and of the company/undertaking

- **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 Manufacturing GmbH & Co. KG
  Hewlett-Packard-Str.8
  76337 Waldbronn
  Germany
- **Further information obtainable from:**
  Telephone: 0800 603 1000
  pdl-msds_author@agilent.com
- **Emergency telephone number:** CHEMTREC®: +(44)-870-8200418

2 Hazards identification

- **Classification of the substance or mixture**
  - **Classification according to Regulation (EC) No 1272/2008**
    - GHS02 flame
      Flam. Liq. 2 H225 Highly flammable liquid and vapour.
    - GHS09 environment
      Aquatic Acute 1 H400 Very toxic to aquatic life.
      Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.
    - GHS07
      Acute Tox. 4 H302 Harmful if swallowed.
      Eye Irrit. 2 H319 Causes serious eye irritation.
- **Label elements**
  - **Labelling according to Regulation (EC) No 1272/2008**
    The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms**
  - GHS02
  - GHS07
  - GHS09
- **Signal word** Danger

(Contd. on page 2)
· **Hazard-determining components of labelling:**
  acetonitrile

· **Hazard statements**
  H225 Highly flammable liquid and vapour.
  H302 Harmful if swallowed.
  H319 Causes serious eye irritation.
  H400 Very toxic to aquatic life.
  H411 Toxic to aquatic life with long lasting effects.

· **Precautionary statements**
  P101 If medical advice is needed, have product container or label at hand.
  P102 Keep out of reach of children.
  P103 Keep label before use.
  P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
  P233 Keep container tightly closed.
  P240 Ground/bond container and receiving equipment.
  P241 Use explosion-proof electrical/ventilating/lighting equipment.
  P242 Use only non-sparking tools.
  P243 Take precautionary measures against static discharge.
  P264 Wash thoroughly after handling.
  P270 Do not eat, drink or smoke when using this product.
  P273 Avoid release to the environment.
  P280 Wear protective gloves/protective clothing/eye protection/face protection.
  P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
  P337+P313 If eye irritation persists: Get medical advice/attention.
  P370+P378 In case of fire: Use for extinction: CO2, powder or water spray.
  P391 Collect spillage.
  P403+P235 Store in a well-ventilated place. Keep cool.
  P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Additional information:**
  Contains 2-chloro-6-nitro-3-phenoxyaniline. May produce an allergic reaction.

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

---

### 3 Composition/information on ingredients

· **Chemical characterisation:** Mixtures
· **Description:** Mixture of substances listed below with nonhazardous additions.
**Trade name: Pesticide Standard 5**

<table>
<thead>
<tr>
<th>Dangerous components</th>
<th>CAS: 75-05-8</th>
<th>EINECS: 200-835-2</th>
<th>acetonitrile</th>
<th>99.746%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CAS: 55-38-9</td>
<td>EINECS: 200-231-9</td>
<td>fenthion (ISO)</td>
<td>0.0127%</td>
</tr>
<tr>
<td></td>
<td>CAS: 74070-46-5</td>
<td>EINECS: 277-704-1</td>
<td>2-chloro-6-nitro-3-phenoxyaniline</td>
<td>0.0127%</td>
</tr>
<tr>
<td></td>
<td>CAS: 2104-96-3</td>
<td>EINECS: 218-277-3</td>
<td>bromophos (ISO)</td>
<td>0.0127%</td>
</tr>
<tr>
<td></td>
<td>CAS: 62-73-7</td>
<td>EINECS: 200-547-7</td>
<td>dichlorvos (ISO)</td>
<td>0.0127%</td>
</tr>
<tr>
<td></td>
<td>CAS: 78-34-2</td>
<td>EINECS: 201-107-7</td>
<td>dioxathion (ISO)</td>
<td>0.0127%</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. Indication of any immediate medical attention and special treatment needed No further relevant information available.

### 5 Firefighting 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.

(Contd. on page 4)
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/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:

    | Substance     | Short-term value | Long-term value |
    |---------------|------------------|-----------------|
    | 75-05-8 acetonitrile | 102 mg/m³, 60 ppm | 68 mg/m³, 40 ppm |

- Additional information: The lists valid during the making were used as basis.
**Trade name: Pesticide Standard 5**

- **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.
Trade name: Pesticide Standard 5

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ignition temperature</td>
<td>525 °C</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>Product is not selfigniting.</td>
</tr>
<tr>
<td>Explosion properties</td>
<td>Product is not explosive.</td>
</tr>
<tr>
<td></td>
<td>However, formation of</td>
</tr>
<tr>
<td></td>
<td>explosive air/vapour</td>
</tr>
<tr>
<td></td>
<td>mixtures are possible.</td>
</tr>
<tr>
<td>Lower limit</td>
<td>4.4 Vol %</td>
</tr>
<tr>
<td>Upper limit</td>
<td>16 Vol %</td>
</tr>
<tr>
<td>Vapour pressure at 20 °C</td>
<td>0 hPa</td>
</tr>
<tr>
<td>Density at 20 °C</td>
<td>0.786 g/cm³</td>
</tr>
<tr>
<td>Relative density</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Vapour density</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Solubility in / Miscibility with water</td>
<td>Not miscible or difficult to mix.</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Viscosity:</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>Solvent content:</td>
<td></td>
</tr>
<tr>
<td>Organic solvents:</td>
<td>0.0 %</td>
</tr>
<tr>
<td>VOC (EC)</td>
<td>0.04 %</td>
</tr>
<tr>
<td>Solids content</td>
<td>0.2 %</td>
</tr>
<tr>
<td>Other information</td>
<td>No further relevant information available.</td>
</tr>
</tbody>
</table>

10 Stability and reactivity

- Reactivity: No further relevant information available.
- Chemical stability: No decomposition if used according to specifications.
- 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: Harmful if swallowed.
- LD/LC50 values relevant for classification:

<table>
<thead>
<tr>
<th>Route</th>
<th>LD50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
<td>1,323 mg/kg (rat)</td>
</tr>
</tbody>
</table>
Trade name: Pesticide Standard 5

<table>
<thead>
<tr>
<th>75-05-8 acetonitrile</th>
<th>Oral LD50 1,320 mg/kg (rat)</th>
<th>Dermal LD50 &gt;2,000 mg/kg (rabbit)</th>
<th>Inhalative LC50/4 h 3,587 mg/L (mouse)</th>
</tr>
</thead>
<tbody>
<tr>
<td>55-38-9 fenthion (ISO)</td>
<td>Oral LD50 180 mg/kg (rat)</td>
<td>Dermal LD50 330 mg/kg (rat)</td>
<td>Inhalative LC50/4 h 800 mg/L (rat)</td>
</tr>
<tr>
<td>74070-46-5 2-chloro-6-nitro-3-phenoxyaniline</td>
<td>Oral LD50 &gt;6,500 mg/kg (rat)</td>
<td>Dermal LD50 &gt;5,000 mg/kg (rat)</td>
<td></td>
</tr>
<tr>
<td>2104-96-3 bromophos (ISO)</td>
<td>Oral LD50 1,600 mg/kg (rat)</td>
<td>Dermal LD50 2,181 mg/kg (rat)</td>
<td></td>
</tr>
<tr>
<td>62-73-7 dichlorvos (ISO)</td>
<td>Oral LD50 25 mg/kg (rat)</td>
<td>Dermal LD50 107 mg/kg (rat)</td>
<td>Inhalative LC50/4 h 15 mg/L (rat)</td>
</tr>
<tr>
<td>78-34-2 dioxathion (ISO)</td>
<td>Oral LD50 23 mg/kg (rat)</td>
<td>Dermal LD50 63 mg/kg (rat)</td>
<td>Inhalative LC50/4 h 1,398 mg/L (rat)</td>
</tr>
</tbody>
</table>

- **Primary irritant effect:**
- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation**
  Causes serious eye irritation.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

### 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.
Trade name: Pesticide Standard 5

- Ecotoxicological effects:
- Remark:
  Very toxic for fish
  Toxic for fish
- 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.
  Also poisonous for fish and plankton in water bodies.
  Very toxic for aquatic organisms
  Toxic for aquatic organisms
- 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.

  European waste catalogue

<table>
<thead>
<tr>
<th>HP 3</th>
<th>Flammable</th>
</tr>
</thead>
<tbody>
<tr>
<td>HP 4</td>
<td>Irritant - skin irritation and eye damage</td>
</tr>
<tr>
<td>HP 6</td>
<td>Acute Toxicity</td>
</tr>
<tr>
<td>HP 14</td>
<td>Ecotoxic</td>
</tr>
</tbody>
</table>

- Uncleaned packaging:
  - Recommendation: Disposal must be made according to official regulations.

14 Transport information

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

*GB
## Transport hazard class(es)

- **ADR, IMDG**

<table>
<thead>
<tr>
<th>Class</th>
<th>Label</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>3</td>
<td>3 Flammable liquids.</td>
</tr>
</tbody>
</table>

- **IATA**

<table>
<thead>
<tr>
<th>Class</th>
<th>Label</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>3</td>
<td>3 Flammable liquids.</td>
</tr>
</tbody>
</table>

- **Packing group**

<table>
<thead>
<tr>
<th>Class</th>
<th>Label</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADR, IMDG, IATA</td>
<td>II</td>
<td></td>
</tr>
</tbody>
</table>

- **Environmental hazards:**

  Product contains environmentally hazardous substances: 2-chloro-6-nitro-3-phenoxyaniline, dioxathion (ISO)

- **Marine pollutant:**

  Symbol (fish and tree)

- **Special marking (ADR):**

  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:**

  - **ADR**
    - **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
Trade name: Pesticide Standard 5

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
  - 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
  - REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3

- Regulation (EU) No 649/2012
  - 55-38-9 fenthion (ISO) Annex I Part 1
    - Annex I Part 1
    - Annex I Part 2
  - 62-73-7 dichlorvos (ISO) Annex I Part 1
    - Annex I Part 1
    - Annex I Part 2

- 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.
  - H300 Fatal if swallowed.
  - H301 Toxic if swallowed.
  - H302 Harmful if swallowed.
  - H311 Toxic in contact with skin.
  - H312 Harmful in contact with skin.
  - H317 May cause an allergic skin reaction.
  - H319 Causes serious eye irritation.
  - H330 Fatal if inhaled.
  - H331 Toxic if inhaled.
  - H332 Harmful if inhaled.
  - H341 Suspected of causing genetic defects.
  - H351 Suspected of causing cancer.
  - H372 Causes damage to organs through prolonged or repeated exposure.
  - H400 Very toxic to aquatic life.
  - H410 Very toxic to aquatic life with long lasting effects.

- 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
  - GHS: Globally Harmonised System of Classification and Labelling of Chemicals
  - 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
Acute Tox. 2: Acute toxicity – Category 2
Acute Tox. 3: Acute toxicity – Category 3
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
Skin Sens. 1: Skin sensitisation – Category 1
Skin Sens. 1A: Skin sensitisation – Category 1A
Muta. 2: Germ cell mutagenicity – Category 2
Carc. 2: Carcinogenicity – Category 2
STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1
Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1
Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

* Data compared to the previous version altered.
1 Identification of the substance/mixture and of the company/undertaking

- **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 Manufacturing GmbH & Co. KG
  Hewlett-Packard-Str.8
  76337 Waldbronn
  Germany
- **Further information obtainable from:**
  Telephone: 0800 603 1000
  pdl-msds_author@agilent.com
- **Emergency telephone number:** CHEMTREC®: +44-870-8200418

2 Hazards identification

- **Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**

  - GHS02 flame
    Flam. Liq. 2 H225 Highly flammable liquid and vapour.
  - GHS09 environment
    Aquatic Acute 1 H400 Very toxic to aquatic life.
    Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects.
  - GHS07
    Acute Tox. 4 H302 Harmful if swallowed.
    Eye Irrit. 2 H319 Causes serious eye irritation.

- **Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**
  The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms**

  - GHS02
  - GHS07
  - GHS09

- **Signal word** Danger
Trade name: Pesticide Standard 6

· Hazard-determining components of labelling:
  acetonitrile

· Hazard statements
  H225 Highly flammable liquid and vapour.
  H302 Harmful if swallowed.
  H319 Causes serious eye irritation.
  H410 Very toxic to aquatic life with long lasting effects.

· Precautionary statements
  P101 If medical advice is needed, have product container or label at hand.
  P102 Keep out of reach of children.
  P103 Read label before use.
  P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
  P233 Keep container tightly closed.
  P240 Ground/bond container and receiving equipment.
  P241 Use explosion-proof electrical/ventilating/lighting equipment.
  P242 Use only non-sparking tools.
  P243 Take precautionary measures against static discharge.
  P264 Wash thoroughly after handling.
  P270 Do not eat, drink or smoke when using this product.
  P273 Avoid release to the environment.
  P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
  P330 Rinse mouth.
  P303+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  P337+P313 If eye irritation persists: Get medical advice/attention.
  P370+P378 In case of fire: Use for extinction: CO2, powder or water spray.
  P391 Collect spillage.
  P403+P235 Store in a well-ventilated place. Keep cool.
  P501 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/information on ingredients

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

<table>
<thead>
<tr>
<th>Chemical</th>
<th>CAS</th>
<th>EINECS</th>
<th>Hazard statements</th>
</tr>
</thead>
<tbody>
<tr>
<td>acetonitrile</td>
<td>75-05-8</td>
<td>200-835-2</td>
<td>Flam. Liq. 2, H225; Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332; Eye Irrit. 2, H319</td>
</tr>
<tr>
<td>chlorpyrifos-methyl</td>
<td>5598-13-0</td>
<td>227-011-5</td>
<td>Aquatic Acute 1; H400; Aquatic Chronic 1; H410; Acute Tox. 4, H302; Skin Sens. 1, H317</td>
</tr>
</tbody>
</table>
## 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.
  - **Indication of any immediate medical attention and special treatment needed** No further relevant information available.

## 5 Firefighting 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.
Trade name: Pesticide Standard 6

- 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/personal protection

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

- Control parameters

<table>
<thead>
<tr>
<th>Ingredients with limit values that require monitoring at the workplace:</th>
</tr>
</thead>
<tbody>
<tr>
<td>75-05-8 acetonitrile</td>
</tr>
<tr>
<td>WEL</td>
</tr>
<tr>
<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:
    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.

(Contd. on page 5)
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:
- 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.
Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 08.10.2018
Version number 4
Revision: 08.10.2018

Trade name: Pesticide Standard 6

· 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): 0.10 %
· Solids content: 0.2 %
· Other information: No further relevant information available.

10 Stability and reactivity

· Reactivity: No further relevant information available.
· Chemical stability
· Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
· 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
  Harmful if swallowed.
· LD/LC50 values relevant for classification:
  ATE (Acute Toxicity Estimates)
  Oral LD50 1,325 mg/kg (rat)
  75-05-8 acetonitrile
    Oral LD50 1,320 mg/kg (rat)
    Dermal LD50 >2,000 mg/kg (rabbit)
    Inhalative LC50/4 h 3,587 mg/L (mouse)
  5598-13-0 chlorpyrifos-methyl
    Oral LD50 1,828 mg/kg (rat)
    Dermal LD50 >2,000 mg/kg (rabbit)
    Inhalative LC50/4 h >670 mg/L (rat)
  563-12-2 ethion (ISO)
    Oral LD50 13 mg/kg (rat)
    Dermal LD50 62 mg/kg (rat)
Trade name: Pesticide Standard 6

<table>
<thead>
<tr>
<th>Substance</th>
<th>Inhalative LC50/4 h</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
</tr>
</thead>
<tbody>
<tr>
<td>121-75-5 malathion (ISO)</td>
<td>864 mg/L (rat)</td>
<td>1,000 mg/kg (rat)</td>
<td>8,790 mg/kg (rabbit)</td>
</tr>
<tr>
<td>38260-54-7 etrimfos</td>
<td></td>
<td>1,800 mg/kg (rat)</td>
<td>&gt;500 mg/kg (rabbit)</td>
</tr>
<tr>
<td>5915-41-3 terbuthylazine</td>
<td></td>
<td>1,845 mg/kg (rat)</td>
<td>&gt;3,000 mg/kg (rat)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&gt;3,510 mg/L (rat)</td>
<td></td>
</tr>
</tbody>
</table>

- **Primary irritant effect:**
  - **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
  - **Serious eye damage/irritation** Causes serious eye irritation.
  - **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
  - **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
  - **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
  - **Carcinogenicity** Based on available data, the classification criteria are not met.
  - **Reproductive toxicity** Based on available data, the classification criteria are not met.
  - **STOT-single exposure** Based on available data, the classification criteria are not met.
  - **STOT-repeated exposure** Based on available data, the classification criteria are not met.
  - **Aspiration hazard** Based on available data, the classification criteria are not met.

### 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.
  - **Ecotoxicological effects**:
  - **Remark**: Very toxic for fish.
  - **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.
    Also poisonous for fish and plankton in water bodies.
    Very toxic for aquatic organisms
  - **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.

- European waste catalogue
  - HP 3 Flammable
  - HP 4 Irritant - skin irritation and eye damage
  - HP 6 Acute Toxicity
  - HP 14 Ecotoxic

- Uncleaned packaging:
  - Recommendation: Disposal must be made according to official regulations.

14 Transport information

- UN-Number
  - ADR, IMDG, IATA UN1648

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

- Transport hazard class(es)
  - ADR, IMDG
    - Class 3 Flammable liquids.
    - Label 3
  - IATA
    - Class 3 Flammable liquids.
    - Label 3

- Packing group
  - ADR, IMDG, IATA II

- Environmental hazards:
  - Product contains environmentally hazardous substances: malathion (ISO), chlorpyrifos-methyl
  - Marine pollutant: Symbol (fish and tree)
  - Special marking (ADR): 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
  Not applicable.

· Transport/Additional information:
  · ADR
  · Limited quantities (LQ): 1L
  · Excluded 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
  · Excluded 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
  · 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
  · REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3

· Regulation (EU) No 649/2012
  563-12-2 ethion (ISO) Annex I Part I
  121-75-5 malathion (ISO) Annex I Part I

· 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.
<table>
<thead>
<tr>
<th>H301</th>
<th>Toxic if swallowed.</th>
</tr>
</thead>
<tbody>
<tr>
<td>H302</td>
<td>Harmful if swallowed.</td>
</tr>
<tr>
<td>H312</td>
<td>Harmful in contact with skin.</td>
</tr>
<tr>
<td>H317</td>
<td>May cause an allergic skin reaction.</td>
</tr>
<tr>
<td>H319</td>
<td>Causes serious eye irritation.</td>
</tr>
<tr>
<td>H332</td>
<td>Harmful if inhaled.</td>
</tr>
<tr>
<td>H373</td>
<td>May cause damage to organs through prolonged or repeated exposure.</td>
</tr>
<tr>
<td>H400</td>
<td>Very toxic to aquatic life.</td>
</tr>
<tr>
<td>H410</td>
<td>Very toxic to aquatic life with long lasting effects.</td>
</tr>
</tbody>
</table>

**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
- GHS: Globally Harmonised System of Classification and Labelling of Chemicals
- 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
- Flamm. Liq. 2: Flammable liquids – Category 2
- Acute Tox. 3: Acute toxicity – Category 3
- Acute Tox. 4: Acute toxicity – Category 4
- Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
- Skin Sens. 1: Skin sensitisation – Category 1
- STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2
- Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1
- Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1

*Data compared to the previous version altered.*
1 Identification of the substance/mixture and of the company/undertaking

- **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 Manufacturing GmbH & Co. KG
    - Hewlett-Packard-Str. 8
    - 76337 Waldbronn
    - Germany

- **Further information obtainable from:**
  - Telephone: 0800 603 1000
  - pdl-msds_author@agilent.com
  - **Emergency telephone number:** CHEMTREC®: +(44)-870-8200418

2 Hazards identification

- **Classification of the substance or mixture**
  - **Classification according to Regulation (EC) No 1272/2008**

  - **GHS02 flame**
    - Flam. Liq. 2  H225 Highly flammable liquid and vapour.

  - **GHS09 environment**
    - Aquatic Acute 1  H400 Very toxic to aquatic life.
    - Aquatic Chronic 1  H410 Very toxic to aquatic life with long lasting effects.

  - **GHS07**
    - Acute Tox. 4  H302 Harmful if swallowed.
    - Eye Irrit. 2  H319 Causes serious eye irritation.

- **Label elements**
  - **Labelling according to Regulation (EC) No 1272/2008**
    - The product is classified and labelled according to the CLP regulation.
  - **Hazard pictograms**
    - GHS02  GHS07  GHS09

- **Signal word** Danger

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

- Hazard-determining components of labelling:
  - Acetonitrile

- Hazard statements
  - H225 Highly flammable liquid and vapour.
  - H302 Harmful if swallowed.
  - H319 Causes serious eye irritation.
  - H410 Very toxic to aquatic life with long lasting effects.

- Precautionary statements
  - P101 If medical advice is needed, have product container or label at hand.
  - P102 Keep out of reach of children.
  - P103 Read label before use.
  - P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
  - P233 Keep container tightly closed.
  - P240 Ground/bond container and receiving equipment.
  - P241 Use explosion-proof electrical/ventilating/lighting equipment.
  - P242 Use only non-sparking tools.
  - P243 Take precautionary measures against static discharge.
  - P264 Wash thoroughly after handling.
  - P270 Do not eat, drink or smoke when using this product.
  - P273 Avoid release to the environment.
  - P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
  - P330 Rinse mouth.
  - P303+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  - P337+P313 If eye irritation persists: Get medical advice/attention.
  - P370+P378 In case of fire: Use for extinction: CO2, powder or water spray.
  - P391 Collect spillage.
  - P403+P235 Store in a well-ventilated place. Keep cool.
  - P501 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/information on ingredients*

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

<table>
<thead>
<tr>
<th>Chemical</th>
<th>CAS:</th>
<th>EINECS:</th>
<th>ELINCS:</th>
<th>Hazard</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetonitrile</td>
<td>75-05-8</td>
<td>200-835-2</td>
<td>415-130-7</td>
<td>Flam. Liq. 2, H225; Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332; Eye Irrit. 2, H319</td>
<td>99.657%</td>
</tr>
<tr>
<td>Lambda-cyhalothrin</td>
<td>91465-08-6</td>
<td>415-130-7</td>
<td>415-130-7</td>
<td>Acute Tox. 3, H301; Acute Tox. 2, H330; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Acute Tox. 4, H312</td>
<td>0.0127%</td>
</tr>
</tbody>
</table>

(Contd. on page 3)
Trade name: Pesticide Standard 7

<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Chemical Name</th>
<th>Structures and Properties</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>94361-06-5</td>
<td>cyproconazole (ISO)</td>
<td>Acute Tox. 3, H301; Repr. 1B, H360D; STOT RE 2, H373; Aquatic Acute 1, H400; Aquatic Chronic 1, H410</td>
<td>0.0127%</td>
</tr>
<tr>
<td>121552-61-2</td>
<td>cyprodinil</td>
<td>Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Skin Sens. 1, H317</td>
<td>0.0127%</td>
</tr>
<tr>
<td>2642-71-9</td>
<td>azinphos-ethyl (ISO)</td>
<td>Acute Tox. 2, H300; Acute Tox. 3, H311; Aquatic Acute 1, H400; Aquatic Chronic 1, H410</td>
<td>0.0127%</td>
</tr>
<tr>
<td>41198-08-7</td>
<td>O-(4-bromo-2-chlorophenyl) O-ethyl S-propyl phosphorothioate</td>
<td>Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Acute Tox. 4, H302; Acute Tox. 4, H332</td>
<td>0.0127%</td>
</tr>
<tr>
<td>120068-37-3</td>
<td>fipronil</td>
<td>Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331; STOT RE 1, H372; Aquatic Acute 1, H400; Aquatic Chronic 1, H410</td>
<td>0.0127%</td>
</tr>
<tr>
<td>68359-37-5</td>
<td>cyfluthrin (ISO)</td>
<td>Acute Tox. 2, H300; Acute Tox. 3, H311; Aquatic Acute 1, H400; Aquatic Chronic 1, H410</td>
<td>0.0127%</td>
</tr>
<tr>
<td>834-12-8</td>
<td>ametryn (ISO)</td>
<td>Aquatic Acute 1, H400; Aquatic Chronic 1, H410</td>
<td>0.0127%</td>
</tr>
<tr>
<td>2921-88-2</td>
<td>chlorpyrifos (ISO)</td>
<td>Acute Tox. 3, H301; Acute Tox. 2, H310; Aquatic Acute 1, H400; Aquatic Chronic 1, H410</td>
<td>0.0127%</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.
  - Indication of any immediate medical attention and special treatment needed: No further relevant information available.

5 Firefighting 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

(Contd. on page 4)
Trade name: Pesticide Standard 7

### 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/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:**
    75-05-8 acetonitrile
    - WEL Short-term value: 102 mg/m³, 60 ppm
      Long-term value: 68 mg/m³, 40 ppm

(Contd. on page 5)
2921-88-2 chlorpyrifos (ISO)

<table>
<thead>
<tr>
<th>WEL</th>
<th>Short-term value: 0.6 mg/m³</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sk</td>
<td>Long-term value: 0.2 mg/m³</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 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

---

### 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.
Trade name: Pesticide Standard 7

- 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.
- 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
  Harmful if swallowed.

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

**ATE (Acute Toxicity Estimates)**

<table>
<thead>
<tr>
<th></th>
<th>Oral</th>
<th>LD50</th>
<th></th>
<th>Dermal</th>
<th>LD50</th>
<th></th>
<th>Inhalative</th>
<th>LC50/4 h</th>
</tr>
</thead>
<tbody>
<tr>
<td>acetonitrile</td>
<td></td>
<td>1,320 mg/kg (rat)</td>
<td>&gt;2,000 mg/kg (rabbit)</td>
<td>3,587 mg/L (mouse)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>lambda-cyhalothrin</td>
<td>Oral</td>
<td>56 mg/kg (rat)</td>
<td>632 mg/kg (rat)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>cyproconazole (ISO)</td>
<td>Oral</td>
<td>1,020 mg/kg (rat)</td>
<td>&gt;2,000 mg/kg (rat)</td>
<td>&gt;5,650 mg/L (rat)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>cypinil</td>
<td>Oral</td>
<td>2,796 mg/kg (rat)</td>
<td>&gt;2,000 mg/kg (rat)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>azinphos-ethyl (ISO)</td>
<td>Dermal</td>
<td>250 mg/kg (rat)</td>
<td>390 mg/L (rat)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>O-(4-bromo-2-chlorophenyl) O-ethyl S-propyl phosphorothioate</td>
<td>Oral</td>
<td>620.5 mg/kg (rat)</td>
<td>&gt;2.2 mg/L (rat)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>fipronil</td>
<td>Oral</td>
<td>97 mg/kg (rat)</td>
<td>354 mg/kg (rabbit)</td>
<td>680 mg/L (rat)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>cyfluthrin (ISO)</td>
<td>Oral</td>
<td>900 mg/kg (rat)</td>
<td>&gt;5,000 mg/kg (rat)</td>
<td>530 mg/L (rat)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ametryn (ISO)</td>
<td>Oral</td>
<td>1,626 mg/kg (rat)</td>
<td>8,160 mg/kg (rabbit)</td>
<td>&gt;2.22 mg/L (rat)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Trade name: Pesticide Standard 7

2921-88-2 chlorpyrifos (ISO)

<table>
<thead>
<tr>
<th>Route</th>
<th>LD50</th>
<th></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>LC50/4 h</td>
<td>&gt;200 mg/L (rat)</td>
</tr>
</tbody>
</table>

- Primary irritant effect:
  - Skin corrosion/irritation: Based on available data, the classification criteria are not met.
  - Serious eye damage/irritation: Causes serious eye irritation.
  - Respiratory or skin sensitisation: Based on available data, the classification criteria are not met.
  - CMR effects (carcinogenity, mutagenicity and toxicity for reproduction): Based on available data, the classification criteria are not met.
  - Germ cell mutagenicity: Based on available data, the classification criteria are not met.
  - Carcinogenicity: Based on available data, the classification criteria are not met.
  - Reproductive toxicity: Based on available data, the classification criteria are not met.
  - STOT-single exposure: Based on available data, the classification criteria are not met.
  - STOT-repeated exposure: Based on available data, the classification criteria are not met.
  - Aspiration hazard: Based on available data, the classification criteria are not met.

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.
  - Ecotoxic effects:
  - Remark: Very toxic for fish
  - 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.
    Also poisonous for fish and plankton in water bodies.
    Very toxic for aquatic organisms
  - 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.
- European waste catalogue
  HP 3 Flammable
**Trade name: Pesticide Standard 7**

<table>
<thead>
<tr>
<th>HP 4</th>
<th>Irritant - skin irritation and eye damage</th>
</tr>
</thead>
<tbody>
<tr>
<td>HP 6</td>
<td>Acute Toxicity</td>
</tr>
<tr>
<td>HP 14</td>
<td>Ecotoxic</td>
</tr>
</tbody>
</table>

- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

### 14 Transport information

- **UN-Number**
  - ADR, IMDG, IATA: UN1648

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

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

- **Packing group**
  - **ADR, IMDG, IATA**: II

- **Environmental hazards:** Product contains environmentally hazardous substances: cyfluthrin (ISO), lambda-cyhalothrin
  - **Marine pollutant:** Symbol (fish and tree)
  - **Special marking (ADR):** 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:

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

Carbonate of Magnesia: UN 1648 ACETONITRILE SOLUTION, 3, II,
ENVIRONMENTALLY HAZARDOUS

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
  - 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
  - REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3

- Regulation (EU) No 649/2012
  2642-71-9 azinphos-ethyl (ISO) Annex I Part I
  68359-37-5 cyfluthrin (ISO) Annex I Part I
  834-12-8 ametryn (ISO) Annex I Part I

- 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.
  H300 Fatal if swallowed.
  H301 Toxic if swallowed.
  H302 Harmful if swallowed.
  H310 Fatal in contact with skin.
  H311 Toxic in contact with skin.
  H312 Harmful in contact with skin.
### Trade name: Pesticide Standard 7

<table>
<thead>
<tr>
<th>H317</th>
<th>May cause an allergic skin reaction.</th>
</tr>
</thead>
<tbody>
<tr>
<td>H319</td>
<td>Causes serious eye irritation.</td>
</tr>
<tr>
<td>H330</td>
<td>Fatal if inhaled.</td>
</tr>
<tr>
<td>H331</td>
<td>Toxic if inhaled.</td>
</tr>
<tr>
<td>H332</td>
<td>Harmful if inhaled.</td>
</tr>
<tr>
<td>H360D</td>
<td>May damage the unborn child.</td>
</tr>
<tr>
<td>H372</td>
<td>Causes damage to organs through prolonged or repeated exposure.</td>
</tr>
<tr>
<td>H373</td>
<td>May cause damage to organs through prolonged or repeated exposure.</td>
</tr>
<tr>
<td>H400</td>
<td>Very toxic to aquatic life.</td>
</tr>
<tr>
<td>H410</td>
<td>Very toxic to aquatic life with long lasting effects.</td>
</tr>
</tbody>
</table>

**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 |
| GHS: Globally Harmonised System of Classification and Labelling of Chemicals |
| 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 |
| Flamm. Liq. 2: Flammable liquids – Category 2 |
| Acute Tox. 3: Acute toxicity – Category 3 |
| Acute Tox. 4: Acute toxicity – Category 4 |
| Acute Tox. 2: Acute toxicity – Category 2 |
| Eye Irrit. 2: Serious eye damage/eye irritation – Category 2 |
| Skin Sens. 1: Skin sensitisation – Category 1 |
| Repr. 1B: Reproductive toxicity – Category 1B |
| STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1 |
| STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2 |
| Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1 |
| Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1 |

* Data compared to the previous version altered.
1 Identification of the substance/mixture and of the company/undertaking

- 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 Manufacturing GmbH & Co. KG
    Hewlett-Packard-Str. 8
    76337 Waldbronn
    Germany

- Further information obtainable from:
  - Telephone: 0800 603 1000
  - pdl-msds_author@agilent.com
  - Emergency telephone number: CHEMTREC®: +(44)-870-8200418

2 Hazards identification

- Classification of the substance or mixture
  - Classification according to Regulation (EC) No 1272/2008
    - GHS02 flame
      Flam. Liq. 2 H225 Highly flammable liquid and vapour.
    - GHS09 environment
      Aquatic Acute 1 H400 Very toxic to aquatic life.
      Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.
    - GHS07
      Acute Tox. 4 H302 Harmful if swallowed.
      Eye Irrit. 2 H319 Causes serious eye irritation.

- Label elements
  - Labelling according to Regulation (EC) No 1272/2008
    The product is classified and labelled according to the CLP regulation.

- Hazard pictograms
  - GHS02
  - GHS07
  - GHS09

- Signal word Danger

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

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

- **Hazard statements**
  - H225 Highly flammable liquid and vapour.
  - H302 Harmful if swallowed.
  - H319 Causes serious eye irritation.
  - H400 Very toxic to aquatic life.
  - H411 Toxic to aquatic life with long lasting effects.

- **Precautionary statements**
  - P101 If medical advice is needed, have product container or label at hand.
  - P102 Keep out of reach of children.
  - P103 Read label before use.
  - P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
  - P233 Keep container tightly closed.
  - P240 Ground/bond container and receiving equipment.
  - P241 Use explosion-proof electrical/ventilating/lighting equipment.
  - P242 Use only non-sparking tools.
  - P243 Take precautionary measures against static discharge.
  - P264 Wash thoroughly after handling.
  - P270 Do not eat, drink or smoke when using this product.
  - P273 Avoid release to the environment.
  - P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
  - P330 Rinse mouth.
  - P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
  - P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  - P337+P313 If eye irritation persists: Get medical advice/attention.
  - P370+P378 In case of fire: Use for extinction: CO2, powder or water spray.
  - P391 Collect spillage.
  - P403+P235 Store in a well-ventilated place. Keep cool.
  - P501 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/information on ingredients

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

- **Dangerous components:**

<table>
<thead>
<tr>
<th>CAS</th>
<th>EINECS</th>
<th>Formula</th>
</tr>
</thead>
<tbody>
<tr>
<td>75-05-8</td>
<td>200-835-2</td>
<td>acetonitrile</td>
</tr>
</tbody>
</table>

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

  **99.644%**
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.
  Indication of any immediate medical attention and special treatment needed
  No further relevant information available.

5 Firefighting 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/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:**
    | 75-05-8 acetonitrile | 298-02-2 phorate (ISO) |
    |----------------------|------------------------|
    | WEL | Short-term value: 102 mg/m³, 60 ppm |
    | | Long-term value: 68 mg/m³, 40 ppm |
    | WEL | Short-term value: 0.2 mg/m³ |
    | | Long-term value: 0.05 mg/m³ |
    | 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.
Trade name: Pesticide Standard 8

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: 0.0 %
- VOC (EC): 0.04 %

### Solids content:
- 0.3 %

### Other information:
- No further relevant information available.

### Stability and reactivity

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

#### Chemical stability

#### Thermal decomposition / conditions to be avoided:
- No decomposition if used according to specifications.

#### Possibility of hazardous reactions
- No dangerous reactions known.

#### Conditions to avoid
- No further relevant information available.

#### Incompatible materials:
- No further relevant information available.

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

### Toxicological information

#### Information on toxicological effects
- **Acute toxicity**: Harmful if swallowed.

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

**ATE (Acute Toxicity Estimates)**

<table>
<thead>
<tr>
<th></th>
<th>Oral</th>
<th>LD50</th>
</tr>
</thead>
<tbody>
<tr>
<td>75-05-8 acetonitrile</td>
<td>1,320 mg/kg (rat)</td>
<td></td>
</tr>
</tbody>
</table>
Trade name: Pesticide Standard 8

<table>
<thead>
<tr>
<th></th>
<th>Dermal LD50</th>
<th>Dermal LD50</th>
<th>Inhalative LC50/4 h</th>
<th>Inhalative LC50/4 h</th>
</tr>
</thead>
<tbody>
<tr>
<td>153233-91-1 etoxazol</td>
<td>&gt;2,000 mg/kg (rabbit)</td>
<td>&gt;2,000 mg/kg (rat)</td>
<td>&gt;3,587 mg/L (mouse)</td>
<td>&gt;1.09 mg/L (rat)</td>
</tr>
<tr>
<td>298-02-2 phorate (ISO)</td>
<td>Oral LD50 1.6 mg/kg (rat)</td>
<td>Dermal LD50 2.5 mg/kg (rat)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>709-98-8 propanil (ISO)</td>
<td>Oral LD50 367 mg/kg (rat)</td>
<td>Dermal LD50 4,830 mg/kg (rabbit)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>732-11-6 phosmet (ISO)</td>
<td>Oral LD50 92.5 mg/kg (rat)</td>
<td>Dermal LD50 1,150 mg/kg (rat)</td>
<td>&gt;3,160 mg/kg (rabbit)</td>
<td>LC50/4 h 54 mg/L (rat)</td>
</tr>
<tr>
<td>300-76-5 naled (ISO)</td>
<td>Oral LD50 92 mg/kg (rat)</td>
<td>Dermal LD50 800 mg/kg (rat)</td>
<td>1,100 mg/kg (rabbit)</td>
<td></td>
</tr>
</tbody>
</table>

- **Primary irritant effect:**
  - Skin corrosion/irritation: Based on available data, the classification criteria are not met.
  - Serious eye damage/irritation: Causes serious eye irritation.
  - Respiratory or skin sensitisation: Based on available data, the classification criteria are not met.
  - CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction):
  - Germ cell mutagenicity: Based on available data, the classification criteria are not met.
  - Carcinogenicity: Based on available data, the classification criteria are not met.
  - Reproductive toxicity: Based on available data, the classification criteria are not met.
  - STOT-single exposure: Based on available data, the classification criteria are not met.
  - STOT-repeated exposure: Based on available data, the classification criteria are not met.
  - Aspiration hazard: Based on available data, the classification criteria are not met.

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.
Trade name: Pesticide Standard 8

- Ecotoxicological effects:
  - Remark:
    Very toxic for fish
    Toxic for fish
- 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.
  Also poisonous for fish and plankton in water bodies.
  Very toxic for aquatic organisms
  Toxic for aquatic organisms
- 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.
- European waste catalogue
<table>
<thead>
<tr>
<th>HP</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Flammable</td>
</tr>
<tr>
<td>4</td>
<td>Irritant - skin irritation and eye damage</td>
</tr>
<tr>
<td>6</td>
<td>Acute Toxicity</td>
</tr>
<tr>
<td>14</td>
<td>Ecotoxic</td>
</tr>
</tbody>
</table>
- Uncleaned packaging:
  - Recommendation: Disposal must be made according to official regulations.

14 Transport information

- UN-Number
  UN1648
- UN proper shipping name
  - ADR: 1648 ACETONITRILE solution, ENVIRONMENTALLY HAZARDOUS
  - IMDG: ACETONITRILE solution, MARINE POLLUTANT
  - IATA: ACETONITRILE solution
### Transport hazard class(es)
- **ADR, IMDG**
  - Class 3: Flammable liquids.
  - Label 3
- **IATA**
  - Class 3: Flammable liquids.
  - Label 3
- **Packing group**
  - ADR, IMDG, IATA II

#### Environmental hazards:
Product contains environmentally hazardous substances: benalaxyl, phorate (ISO)
- **Marine pollutant:** Symbol (fish and tree)
- **Special marking (ADR):** 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:
- **ADR**
  - 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**
  - Tunnel restriction code 2
- **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
  - 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
  - REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3

<table>
<thead>
<tr>
<th>Code</th>
<th>Name</th>
<th>Annex I Part</th>
<th>Annex I Part</th>
</tr>
</thead>
<tbody>
<tr>
<td>709-98-8</td>
<td>propanil (ISO)</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>300-76-5</td>
<td>naled (ISO)</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

- 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.
  - H300 Fatal if swallowed.
  - H302 Harmful if swallowed.
  - H310 Fatal in contact with skin.
  - H312 Harmful in contact with skin.
  - H315 Causes skin irritation.
  - H319 Causes serious eye irritation.
  - H330 Fatal if inhaled.
  - H332 Harmful if inhaled.
  - H400 Very toxic to aquatic life.
  - H410 Very toxic to aquatic life with long lasting effects.

- 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
  - GHS: Globally Harmonised System of Classification and Labelling of Chemicals
  - 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
### Trade name: Pesticide Standard 8

- **vPvB:** very Persistent and very Bioaccumulative
- **Flam. Liq. 2:** Flammable liquids – Category 2
- **Acute Tox. 2:** Acute toxicity – Category 2
- **Acute Tox. 4:** Acute toxicity – Category 4
- **Acute Tox. 1:** Acute toxicity – Category 1
- **Skin Irrit. 2:** Skin corrosion/irritation – Category 2
- **Eye Irrit. 2:** Serious eye damage/eye irritation – Category 2
- **Aquatic Acute 1:** Hazardous to the aquatic environment - acute aquatic hazard – Category 1
- **Aquatic Chronic 1:** Hazardous to the aquatic environment - long-term aquatic hazard – Category 1
- **Aquatic Chronic 2:** Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

*Data compared to the previous version altered.*
1 Identification of the substance/mixture and of the company/undertaking

· 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 Manufacturing GmbH & Co. KG
  Hewlett-Packard-Str.8
  76337 Waldbronn
  Germany
· Further information obtainable from:
  Telephone: 0800 603 1000
  pdl-msds_author@agilent.com
· Emergency telephone number: CHEMTREC®: +(44)-870-8200418

2 Hazards identification

· Classification of the substance or mixture
· Classification according to Regulation (EC) No 1272/2008
  GHS02 flame
  Flam. Liq. 2     H225     Highly flammable liquid and vapour.
  GHS09 environment
  Aquatic Chronic 2   H411     Toxic to aquatic life with long lasting effects.
  GHS07
  Acute Tox. 4     H302     Harmful if swallowed.
  Eye Irrit. 2     H319     Causes serious eye irritation.

Label elements
· Labeling according to Regulation (EC) No 1272/2008
  The product is classified and labelled according to the CLP regulation.
· Hazard pictograms
  GHS02  GHS07  GHS09

· Signal word Danger
· Hazard-determining components of labelling:
  acetonitrile

(Contd. on page 2)
Safety data sheet  
according to 1907/2006/EC, Article 31

Printing date 08.10.2018  
Revision: 08.10.2018

Version number 4

Trade name: Pesticide Standard 9

- **Hazard statements**
  - H225 Highly flammable liquid and vapour.
  - H302 Harmful if swallowed.
  - H319 Causes serious eye irritation.
  - H411 Toxic to aquatic life with long lasting effects.

- **Precautionary statements**
  - P101 If medical advice is needed, have product container or label at hand.
  - P102 Keep out of reach of children.
  - P103 Read label before use.
  - P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
  - P233 Keep container tightly closed.
  - P240 Ground/bond container and receiving equipment.
  - P241 Use explosion-proof electrical/ventilating/lighting equipment.
  - P242 Use only non-sparking tools.
  - P243 Take precautionary measures against static discharge.
  - P264 Wash thoroughly after handling.
  - P270 Do not eat, drink or smoke when using this product.
  - P273 Avoid release to the environment.
  - P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
  - P330 Rinse mouth.
  - P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
  - P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  - P337+P313 If eye irritation persists: Get medical advice/attention.
  - P370+P378 In case of fire: Use for extinction: CO2, powder or water spray.
  - P391 Collect spillage.
  - P403+P325 Store in a well-ventilated place. Keep cool.
  - P501 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/information on ingredients

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

#### Dangerous components:

<table>
<thead>
<tr>
<th>CAS: 75-05-8</th>
<th>Acetonitrile</th>
<th>99.746%</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>CAS: 2310-17-0</th>
<th>Phosalone</th>
<th>0.0127%</th>
</tr>
</thead>
<tbody>
<tr>
<td>EINECS: 218-996-2</td>
<td>Acute Tox. 3, H301, Aquatic Acute 1, H400, Aquatic Chronic 1, H410, Acute Tox. 4, H312, Acute Tox. 4, H332, Skin Sens. 1, H317</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.
  **Indication of any immediate medical attention and special treatment needed** No further relevant information available.

5 Firefighting 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.
Trade name: Pesticide Standard 9

- 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/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>WEL</td>
</tr>
<tr>
<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:
  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

(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 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:**
  - VOC (EC): 0.00 %
10 Stability and reactivity

- **Reactivity**: No further relevant information available.
- **Chemical stability**: No decomposition if used according to specifications.
- **Thermal decomposition / conditions to be avoided**: No further relevant information available.
- **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**
  Harmful if swallowed.
  - **ATE (Acute Toxicity Estimates)**
  - **Oral LD50** 1,323 mg/kg (rat)
  - **75-05-8 acetonitrile**
    - Oral LD50 1,320 mg/kg (rat)
    - Dermal LD50 >2,000 mg/kg (rabbit)
    - Inhalative LC50/4 h 3,587 mg/L (mouse)
  - **2310-17-0 phosalone**
    - Oral LD50 85 mg/kg (rat)
    - Dermal LD50 1,000 mg/kg (rabbit)

- **Primary irritant effect**
- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation** Causes serious eye irritation.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

12 Ecological information

- **Toxicity**
- **Aquatic toxicity**: No further relevant information available.
Trade name: Pesticide Standard 9

- **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.
- **Ecotoxicological effects:**
- **Remark:** Toxic for fish
- **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.
  Also poisonous for fish and plankton in water bodies.
  Toxic for aquatic organisms
- **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.

<table>
<thead>
<tr>
<th>European waste catalogue</th>
</tr>
</thead>
<tbody>
<tr>
<td>HP 3</td>
</tr>
<tr>
<td>HP 4</td>
</tr>
<tr>
<td>HP 6</td>
</tr>
<tr>
<td>HP 14</td>
</tr>
</tbody>
</table>

- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

### 14 Transport information

<table>
<thead>
<tr>
<th>UN-Number</th>
<th>ADR, IMDG, IATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN1648</td>
<td>UN1648</td>
</tr>
</tbody>
</table>

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

(Contd. on page 8)
### Transport hazard class(es)

- **ADR, IMDG**
  - Class 3 Flammable liquids.
  - Label 3

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

- **Packing group**
  - **ADR, 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 (ADR):** 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:

- **ADR**
  - **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**
  - **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
Trade name: Pesticide Standard 9

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
  - 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
  - REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3

- Regulation (EU) No 649/2012
  - 2310-17-0 phosalone
  - Annex I Part 1
  - Annex I Part 2

- 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.
  - H317 May cause an allergic skin reaction.
  - H319 Causes serious eye irritation.
  - H332 Harmful if inhaled.
  - H400 Very toxic to aquatic life.
  - H410 Very toxic to aquatic life with long lasting effects.

- 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
  - GHS: Globally Harmonised System of Classification and Labelling of Chemicals
  - 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. 3: Acute toxicity – Category 3
  - Acute Tox. 4: Acute toxicity – Category 4
  - Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
Trade name: Pesticide Standard 9

Skin Sens. 1: Skin sensitisation – Category 1
Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1
Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1
Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

* Data compared to the previous version altered.
1 Identification of the substance/mixture and of the company/undertaking

- **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 Manufacturing GmbH & Co. KG
  Hewlett-Packard-Str. 8
  76337 Waldbronn
  Germany
- **Further information obtainable from:**
  Telephone: 0800 603 1000
  pdl-msds_author@agilent.com
- **Emergency telephone number:** CHEMTREC®: +(44)-870-8200418

2 Hazards identification

- **Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**

  - GHS02 flame
  - Flam. Liq. 2  H225  Highly flammable liquid and vapour.

  - GHS07
  - Acute Tox. 4  H302  Harmful if swallowed.
  - Eye Irrit. 2  H319  Causes serious eye irritation.

- **Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**
  The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms**

  - GHS02
  - GHS07

- **Signal word** Danger
- **Hazard-determining components of labelling:**
  acetonitrile
  heptachlor epoxide - isomer B
- **Hazard statements**
  H225 Highly flammable liquid and vapour.
  H302 Harmful if swallowed.
  H319 Causes serious eye irritation.

(Contd. on page 2)
Trade name: Pesticide Standard 10

- Precautionary statements
  P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P103 Read label before use.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233 Keep container tightly closed.
P240 Ground/bond container and receiving equipment.
P241 Use explosion-proof electrical/ventilating/lighting equipment.
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
P264 Wash thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
P330 Rinse mouth.
P303+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 If eye irritation persists: Get medical advice/attention.
P370+P378 In case of fire: Use for extinction: CO2, powder or water spray.
P403+P235 Store in a well-ventilated place. Keep cool.
P501 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/information on ingredients

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

- Dangerous components:

<table>
<thead>
<tr>
<th>CAS:</th>
<th>EINECS:</th>
<th>Hazard phrases</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>75-05-8</td>
<td>200-835-2</td>
<td>Flam. Liq. 2, H225; Acute Tox. 4, H302; Acute Tox. 4, H332; Eye Irrit. 2, H319</td>
<td>99.873%</td>
</tr>
<tr>
<td>1024-57-3</td>
<td>213-831-0</td>
<td>Acute Tox. 3, H301; Carc. 2, H351; STOT RE 2, H373; Aquatic Acute 1, H400; Aquatic Chronic 1, H410</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.
47.1.11

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

5 Firefighting 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.

(Contd. on page 2)
8 Exposure controls/personal protection

· Specific end use(s) No further relevant information available.

<table>
<thead>
<tr>
<th>75-05-8 acetonitrile</th>
</tr>
</thead>
<tbody>
<tr>
<td>WEL Short-term value: 102 mg/m³, 60 ppm</td>
</tr>
<tr>
<td>Long-term value: 68 mg/m³, 40 ppm</td>
</tr>
</tbody>
</table>

- 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:

- 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

- 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:** 0.1 %
  - **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.
47.1.11 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

Harmful if swallowed.

· LD/LC50 values relevant for classification:

<table>
<thead>
<tr>
<th></th>
<th>Oral</th>
<th>Dermal</th>
<th>Inhalative</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATE (Acute Toxicity Estimates)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>1,188 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>
<th></th>
<th>Oral</th>
<th>Dermal</th>
<th>Inhalative</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50</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>

1024-57-3 heptachlor epoxide - isomer B

<table>
<thead>
<tr>
<th></th>
<th>Oral</th>
<th>Dermal</th>
<th>Inhalative</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50</td>
<td>15 mg/kg (rat)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

· Primary irritant effect:

· Skin corrosion/irritation Based on available data, the classification criteria are not met.

· Serious eye damage/irritation

Causes serious eye irritation.

· Respiratory or skin sensitisation Based on available data, the classification criteria are not met.

· CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)

· Germ cell mutagenicity Based on available data, the classification criteria are not met.

· Carcinogenicity Based on available data, the classification criteria are not met.

· Reproductive toxicity Based on available data, the classification criteria are not met.

· STOT-single exposure Based on available data, the classification criteria are not met.

· STOT-repeated exposure Based on available data, the classification criteria are not met.

· Aspiration hazard Based on available data, the classification criteria are not met.

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.
**Trade name: Pesticide Standard 10**

- **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.

- **European waste catalogue**
  
<table>
<thead>
<tr>
<th>HP 3</th>
<th>Flammable</th>
</tr>
</thead>
<tbody>
<tr>
<td>HP 4</td>
<td>Irritant - skin irritation and eye damage</td>
</tr>
<tr>
<td>HP 6</td>
<td>Acute Toxicity</td>
</tr>
</tbody>
</table>

- **Uncleaned packaging:**
  - **Recommendation:** Disposal must be made according to official regulations.

### 14 Transport information

- **UN-Number**
  - ADR, IMDG, IATA: UN1648

- **UN proper shipping name**
  - ADR, IMDG, IATA: ACETONITRILE solution

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

- **Packing group**
  - ADR, 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.
Trade name: Pesticide Standard 10

- Transport/Additional information:
  - ADR
  - Limited quantities (LQ): 1L
  - Exempted 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
  - Exempted 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
  - 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
  - REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3
  - 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.
  - H400 Very toxic to aquatic life.
  - H410 Very toxic to aquatic life with long lasting effects.

- 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
  - GHS: Globally Harmonised System of Classification and Labelling of Chemicals
  - EINECS: European Inventory of Existing Commercial Chemical Substances
Trade name: Pesticide Standard 10

<table>
<thead>
<tr>
<th>ELINCS: European List of Notified Chemical Substances</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS: Chemical Abstracts Service (division of the American Chemical Society)</td>
</tr>
<tr>
<td>VOC: Volatile Organic Compounds (USA, EU)</td>
</tr>
<tr>
<td>LC50: Lethal concentration, 50 percent</td>
</tr>
<tr>
<td>LD50: Lethal dose, 50 percent</td>
</tr>
<tr>
<td>PBT: Persistent, Bioaccumulative and Toxic</td>
</tr>
<tr>
<td>vPvB: very Persistent and very Bioaccumulative</td>
</tr>
<tr>
<td>Flam. Liq. 2: Flammable liquids – Category 2</td>
</tr>
<tr>
<td>Acute Tox. 3: Acute toxicity – Category 3</td>
</tr>
<tr>
<td>Acute Tox. 4: Acute toxicity – Category 4</td>
</tr>
<tr>
<td>Eye Irrit. 2: Serious eye damage/eye irritation – Category 2</td>
</tr>
<tr>
<td>Carc. 2: Carcinogenicity – Category 2</td>
</tr>
<tr>
<td>STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2</td>
</tr>
<tr>
<td>Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1</td>
</tr>
<tr>
<td>Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1</td>
</tr>
</tbody>
</table>

* Data compared to the previous version altered.