1 Identification of the substance/mixture and of the company/undertaking

- **Product identifier**
  - **Trade name:** Custom Standard (1X1 mL)
  - **Part number:** CUS-25236
  - **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:**
  - **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**
    Eye Irrit. 2 H319 Causes serious eye irritation.
    STOT SE 3 H336 May cause drowsiness or dizziness.

- **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: Custom Standard (1X1 mL)

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

- **Hazard statements**
  - H225 Highly flammable liquid and vapour.
  - H319 Causes serious eye irritation.
  - H336 May cause drowsiness or dizziness.
  - 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.
  - 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.
  - P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
  - P264 Wash thoroughly after handling.
  - P271 Use only outdoors or in a well-ventilated area.
  - P273 Avoid release to the environment.
  - P280 Wear protective gloves/protective clothing/eye protection/face protection.
  - P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
  - P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
  - P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  - P312 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+P233 Store in a well-ventilated place. Keep container tightly closed.
  - P403+P235 Store in a well-ventilated place. Keep cool.
  - P405 Store locked up.
  - 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.
### Dangerous components:

<table>
<thead>
<tr>
<th>CAS</th>
<th>Component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>67-64-1</td>
<td>acetone</td>
<td>99.143%</td>
</tr>
<tr>
<td>74070-46-5</td>
<td>2-chloro-6-nitro-3-phenoxyaniline</td>
<td>0.0126%</td>
</tr>
<tr>
<td>33089-61-1</td>
<td>amitraz (ISO)</td>
<td>0.0126%</td>
</tr>
<tr>
<td>22781-23-3</td>
<td>bendiocarb (ISO)</td>
<td>0.0126%</td>
</tr>
<tr>
<td>28434-01-7</td>
<td>biresmethrin</td>
<td>0.0126%</td>
</tr>
<tr>
<td>63-25-2</td>
<td>carbaryl (ISO)</td>
<td>0.0126%</td>
</tr>
<tr>
<td>122453-73-0</td>
<td>chlorfenapyr</td>
<td>0.0126%</td>
</tr>
<tr>
<td>80844-07-1</td>
<td>etofenprox</td>
<td>0.0126%</td>
</tr>
<tr>
<td>72490-01-8</td>
<td>ethyl[2-(4-phenoxyphenoxy)ethyl]carbamate</td>
<td>0.0126%</td>
</tr>
<tr>
<td>120068-37-3</td>
<td>fipronil</td>
<td>0.0126%</td>
</tr>
<tr>
<td>65907-30-4</td>
<td>furathiocarb</td>
<td>0.0126%</td>
</tr>
<tr>
<td>23103-98-2</td>
<td>pirimicarb</td>
<td>0.0126%</td>
</tr>
<tr>
<td>96489-71-3</td>
<td>2-tert-butyl-5-(4-tert-butyl)benzylthio)-4-chloropyrazin-3(2H)-one</td>
<td>0.0126%</td>
</tr>
<tr>
<td>118134-30-8</td>
<td>spiroxamine</td>
<td>0.0126%</td>
</tr>
<tr>
<td>156052-68-5</td>
<td>zoxyamide</td>
<td>0.0126%</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.
- After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact: Immediately rinse with water.
- After eye contact: Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- After swallowing: If symptoms persist consult doctor.
- 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
    Ensure good ventilation/exhaustion at the workplace. Prevent formation of aerosols.
  - Information about fire - and explosion protection:
    Keep ignition sources away - Do not smoke.
Trade name: Custom Standard (1X1 mL)

- 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:
    - 67-64-1 acetone
      - WEL Short-term value: 3620 mg/m³, 1500 ppm
      - Long-term value: 1210 mg/m³, 500 ppm

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

- Exposure controls
  - Personal protective equipment:
    - General protective and hygienic measures:
      - Keep away from foodstuffs, beverages and feed.
      - Immediately remove all soiled and contaminated clothing
      - Wash hands before breaks and at the end of work.
      - Avoid contact with the eyes.
      - Avoid contact with the eyes and skin.
    - Respiratory protection:
      - When used as intended with Agilent instruments the use of the product under normal laboratory conditions and
        with standard practices does not result in significant airborne exposures and therefore respiratory protection is not
        needed.
      - Under an emergency condition where a respirator is deemed necessary, use a NIOSH or equivalent approved
        device equipment with appropriate organic or acid gas cartridge.
    - Protection of hands:
      - Although not recommended for constant contact with the chemicals or for clean up, nitrile gloves 11-13mil
        thickness are recommended for normal use. The breakthrough time is 1 hr. For cleaning a spill where there is direct
        contact of the chemical, butyl rubber gloves are recommended 12-15mil thickness with breakthrough times
        exceeding 4 hrs. Supplier recommendations should be followed.
    - Material of gloves
      - For normal use: nitrile rubber, 11-13 mil thickness
      - For direct contact with the chemical: butyl rubber, 12-15 mil thickness
    - Penetration time of glove material
      - For normal use: nitrile rubber: 1 hour
      - For direct contact with the chemical: butyl rubber: > 4 hours

(Contd. of page 4)
48.1.26

- **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:** Characteristic
  - **Odour threshold:** Not determined.
- **pH-value:** Not determined.

- **Change in condition**
  - **Melting point/freezing point:** -94.7 °C
  - **Initial boiling point and boiling range:** 55.8-56.6 °C

- **Flash point:** -17 °C

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

- **Ignition temperature:** 465 °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:** 2.6 Vol %
  - **Upper:** 13 Vol %

- **Vapour pressure at 20 °C:** 245.3 hPa

- **Density at 20 °C:** 0.791 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:** 32 mPas
  - **Kinematic:** Not determined.

- **Solvent content:**
  - **Organic solvents:** 99.2 %
Trade name: Custom Standard (1X1 mL)

<table>
<thead>
<tr>
<th>VOC (EC)</th>
<th>99.18 %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solids content:</td>
<td>0.0 %</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 dangerous reactions known.
- **Possibility of hazardous reactions**: No further relevant information available.
- **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**: Based on available data, the classification criteria are not met.

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

  **67-64-1 acetone**
  - Oral LD50: 5,800 mg/kg (rat)
  - Dermal LD50: 20,000 mg/kg (rabbit)

  **74070-46-5 2-chloro-6-nitro-3-phenoxyaniline**
  - Oral LD50: >6,500 mg/kg (rat)
  - Dermal LD50: >5,000 mg/kg (rat)

  **33089-61-1 amitraz (ISO)**
  - Oral LD50: 800 mg/kg (rat)
  - Dermal LD50: >200 mg/kg (rabbit)
  - Inhalative LC50/4 h: 65,000 mg/L (rat)

  **22781-23-3 bendiocarb (ISO)**
  - Oral LD50: 40 mg/kg (rat)
  - Dermal LD50: 566 mg/kg (rat)

  **28434-01-7 bioresmethrin**
  - Oral LD50: 1,244 mg/kg (rat)
  - Dermal LD50: 10,000 mg/kg (rat)
  - Inhalative LC50/4 h: 5,200 mg/L (rat)

  **63-25-2 carbaryl (ISO)**
  - Oral LD50: 230 mg/kg (rat)
  - Dermal LD50: >2,000 mg/kg (rabbit)

  **122453-73-0 chlorfenapyr**
  - Oral LD50: 441 mg/kg (rat)
  - Dermal LD50: >2,000 mg/kg (rabbit)
Trade name: Custom Standard (1X1 mL)

<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>etofenprox</td>
<td>1,900 mg/L (rat)</td>
<td>&gt;42,800 mg/kg (rat)</td>
<td>&gt;2,140 mg/kg (rat)</td>
</tr>
<tr>
<td>ethyl[2-(4-phenoxyphenoxy)ethyl]carbamate</td>
<td>&gt;480 mg/L (rat)</td>
<td>16,800 mg/kg (rat)</td>
<td>&gt;2,140 mg/kg (rabbit)</td>
</tr>
<tr>
<td>fipronil</td>
<td>680 mg/L (rat)</td>
<td>620 mg/L (rat)</td>
<td>620 mg/L (rat)</td>
</tr>
<tr>
<td>furathiocarb</td>
<td>&gt;500 mg/kg (rabbit)</td>
<td>354 mg/kg (rabbit)</td>
<td>680 mg/L (rat)</td>
</tr>
<tr>
<td>pirimicarb</td>
<td>205 mg/kg (mouse)</td>
<td>620 mg/L (rat)</td>
<td>620 mg/L (rat)</td>
</tr>
<tr>
<td>spiroxamine</td>
<td>&gt;500 mg/kg (rat)</td>
<td>&gt;2,000 mg/kg (rabbit)</td>
<td>&gt;2,000 mg/kg (rabbit)</td>
</tr>
<tr>
<td>zoxamide</td>
<td>&gt;2,000 mg/kg (rat)</td>
<td>&gt;2,000 mg/kg (rat)</td>
<td>&gt;2,000 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 (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**
    May cause drowsiness or dizziness.
  - **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.
48.1.26<br><br>· Behaviour in environmental systems:<br>· Bioaccumulative potential No further relevant information available.<br>· Mobility in soil No further relevant information available.<br>· Ecotoxicological effects:<br>· Remark: Very toxic for fish<br>· Additional ecological information:<br>· General notes:<br>Water hazard class 3 (German Regulation) (Self-assessment): extremely hazardous for water<br>Do not allow product to reach ground water, water course or sewage system, even in small quantities.<br>Also poisonous for fish and plankton in water bodies.<br>Very toxic for aquatic organisms<br>· Results of PBT and vPvB assessment<br>· PBT: Not applicable.<br>· vPvB: Not applicable.<br>· Other adverse effects No further relevant information available.<br><br>13 Disposal considerations<br><br>· Waste treatment methods<br>· Recommendation<br>Must not be disposed together with household garbage. Do not allow product to reach sewage system.<br><br>· European waste catalogue<br>HP 3  Flammable<br>HP 4  Irritant - skin irritation and eye damage<br>HP 5  Specific Target Organ Toxicity (STOT)/Aspiration Toxicity<br>HP 14 Ecotoxic<br><br>· Uncleaned packaging:<br>· Recommendation: Disposal must be made according to official regulations.<br><br>14 Transport information<br><br>· Not Regulated, De minimus Quantities<br><br>· UN-Number<br>· ADR, IMDG, IATA  UN1090<br><br>· UN proper shipping name<br>· ADR  1090 ACETONE, ENVIRONMENTALLY HAZARDOUS<br>· IMDG  ACETONE, MARINE POLLUTANT<br>· IATA  ACETONE
Trade name: Custom Standard (1X1 mL)

### 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:**
  - acibenzolar-S-methyl benzo[1,2,3]thiadiazole-7-carbothioic acid S-methyl ester, bioresmethrin
- **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** E

### 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
- **Transport category** 2
- **Tunnel restriction code** D/E
- **IMDG**
  - **Limited quantities (LQ):** 1L
  - **Excepted quantities (EQ):** Code: E2
  - **Maximum net quantity per inner packaging:** 30 ml
  - **Maximum net quantity per outer packaging:** 500 ml
15 Regulatory information

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

<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Substance</th>
<th>Annex I Part 1</th>
<th>Annex I Part 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>33089-61-1</td>
<td>amitraz (ISO)</td>
<td>Annex I Part 1</td>
<td>Annex I Part 2</td>
</tr>
<tr>
<td>63-25-2</td>
<td>carbaryl (ISO)</td>
<td>Annex I Part 1</td>
<td>Annex I Part 2</td>
</tr>
<tr>
<td>122453-73-0</td>
<td>chlorfenapyr</td>
<td>Annex I Part 1</td>
<td>Annex I Part 2</td>
</tr>
<tr>
<td>65907-30-4</td>
<td>furathiocarb</td>
<td>Annex I Part 1</td>
<td></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.
  - H311 Toxic in contact with skin.
  - H312 Harmful in contact with skin.
  - H315 Causes skin irritation.
  - H317 May cause an allergic skin reaction.
  - H319 Causes serious eye irritation.
  - H330 Fatal if inhaled.
  - H331 Toxic if inhaled.
  - H332 Harmful if inhaled.
  - H336 May cause drowsiness or dizziness.
  - H351 Suspected of causing cancer.
  - H361d Suspected of damaging the unborn child.
  - 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.

(Contd. of page 10)
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. 2: Acute toxicity – Category 2
- Acute Tox. 4: Acute toxicity – Category 4
- Acute Tox. 3: Acute toxicity – Category 3
- 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. 1A: Skin sensitisation – Category 1A
- Care. 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