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

- **1.1 Product identifier**
  
  **Product name:** Gold AA Standard: 1000 µg/mL Au in 20% HCl [100ml bottle]
  
- **Part number:** 5190-8282

- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
  
  No further relevant information available.

- **Application of the substance / the mixture** Reference material for laboratory use only

- **Manufacturer/Supplier:**
  
  Agilent Technologies Australia Pty Ltd  
  679 Springvale Road  
  Mulgrave  
  Victoria 3170, Australia

- **Further information obtainable from:** e-mail: pdl-msds_author@agilent.com

- **1.4 Emergency telephone number:** CHEMTREC®: +(61) - 290372994

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
  
  **Classification according to Regulation (EC) No 1272/2008**
  
  - **Corrosion**
    
    Met. Corr.1 H290 May be corrosive to metals.
  
  - **Classification according to Directive 67/548/EEC or Directive 1999/45/EC** Not applicable.
  
  - **Information concerning particular hazards for human and environment:**
    
    The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
  
  - **Classification system:**
    
    The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

- **2.2 Label elements**
  
  - **Labelling according to Regulation (EC) No 1272/2008**
    
    The product is classified and labelled according to the CLP regulation.
  
  - **Hazard pictograms**
    
    GHS05

- **Signal word** Warning

- **Hazard statements**
  
  H290 May be corrosive to metals.

- **Precautionary statements**
  
  P234 Keep only in original container.
  
  P390 Absorb spillage to prevent material damage.
  
  P406 Store in corrosive resistant container with a resistant inner liner.

- **Information concerning particular hazards for human and environment:**

- **Safety phrases:**
  
  49 Keep only in the original container.
Product name: Gold AA Standard: 1000 µg/mL Au in 20% HCl [100ml bottle]

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

SECTION 3: Composition/information on ingredients

- 3.2 Chemical characterisation: Mixtures
  - Description:
    Aqueous solution.
    Also contains substances at levels not considered to be hazardous.
  - Dangerous components:
    - CAS: 7647-01-0
    - EINECS: 231-595-7
    - RTECS: MW 962000000
    - hydrochloric acid
    - C R34; Xi R37
    - Skin Corr. 1B, H314; STOT SE 3, H335
    - < 10%
  - Additional information: For the wording of the listed risk phrases refer to section 16.

SECTION 4: First aid measures

- 4.1 Description of first aid measures
  - After inhalation: Supply fresh air; consult doctor in case of complaints.
  - After skin contact: Immediately wash with water and soap and rinse thoroughly.
  - After eye contact: Rinse opened eye for several minutes under running water.
  - After swallowing: Rinse mouth. Do not induce vomiting.
- 4.2 Most important symptoms and effects, both acute and delayed
  - No further relevant information available.
- 4.3 Indication of any immediate medical attention and special treatment needed
  - No further relevant information available.

SECTION 5: Firefighting measures

- 5.1 Extinguishing media
  - Suitable extinguishing agents:
    - CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- 5.2 Special hazards arising from the substance or mixture
  - Formation of toxic gases is possible during heating or in case of fire.
- 5.3 Advice for firefighters
  - Protective equipment: Wear self-contained respiratory protective device.

SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures
  - Wear protective clothing.
- 6.2 Environmental precautions:
  - Dilute with plenty of water.
  - Do not allow to enter sewers/ surface or ground water.
- 6.3 Methods and material for containment and cleaning up:
  - Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- 6.4 Reference to other sections
  - See Section 7 for information on safe handling.
  - See Section 8 for information on personal protection equipment.
SECTION 7: Handling and storage

7.1 Precautions for safe handling Store in cool, dry place in tightly closed receptacles.

7.2 Conditions for safe storage, including any incompatibilities

7.2.1 Storage:

- Requirements to be met by storerooms and receptacles:
  - Store in a cool location.
  - Please refer to the manufacturer's certificate for specific storage and transport temperature conditions.
  - Store only in the original receptacle.
  - Keep container in a well-ventilated place. Keep away from sources of ignition and heat.

- Information about storage in one common storage facility: Store away from foodstuffs.

- Further information about storage conditions: None.

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

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

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

8.2 Exposure controls

- Personal protective equipment:

  - General protective and hygienic measures: Wash hands before breaks and at the end of work.

  - Respiratory protection:
    - In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

  - Protection of hands:
    - Chemical-resistant, impervious gloves with an approved standards should be worn at all times.
    - The selection of the glove material is based on the penetration times, rates of diffusion and its degradation.

- Material of gloves
  - PVC gloves
  - Neoprene gloves

- Penetration time of glove material
  - The protection time of the gloves can not be accurately estimated for mixtures consisting of several substances.
  - Refer to and observe manufacturers break through times of the protective gloves.

- Eye protection: Safety glasses

See Section 13 for disposal information.

(Contd. from page 2)
SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties
- General Information
  - Appearance:
    - Form: Liquid
    - Colour: Colourless
  - Odour: Odourless
  - Odour threshold: Not determined.
- pH-value at 20 °C: < 1.5
- Change in condition
  - Melting point/Melting range: Not determined.
  - Boiling point/Boiling range: 100 °C
- Flash point: Not applicable.
- Flammability (solid, gaseous): Not determined.
- Ignition temperature:
  - Decomposition temperature: Not determined.
- Self-igniting: Product is not self-igniting.
- Danger of explosion: Not determined.
- Explosion limits:
  - Lower: Not determined.
  - Upper: Not determined.
- Vapour pressure at 20 °C: 23 hPa
- Density at 20 °C: 1.0111 g/cm³
- Relative density: Not determined.
- Vapour density: Not determined.
- Evaporation rate: Not determined.
- Solubility in / Miscibility with water: Fully miscible.
- Partition coefficient (n-octanol/water): Not determined.
- Viscosity:
  - Dynamic: Not determined.
  - Kinematic: Not determined.

9.2 Other information
- No further relevant information available.

SECTION 10: Stability and reactivity

10.1 Reactivity
- Stable under normal conditions.

10.2 Chemical stability
- Stable under normal conditions.

10.3 Possibility of hazardous reactions
- No dangerous reactions known.

10.4 Conditions to avoid Heat.

10.5 Incompatible materials:
- Strong oxidizing agents.
**Product name:** Gold AA Standard: 1000 µg/mL Au in 20% HCl [100ml bottle]

- **10.6 Hazardous decomposition products:**
  Formation of toxic gases is possible during heating or in case of fire.

**SECTION 11: Toxicological information**

- **11.1 Information on toxicological effects**
  - Acute toxicity:
  - Primary irritant effect:
    - on the skin: No irritating effect.
    - on the eye: No irritating effect.
  - Sensitisation: No sensitising effects known.

**SECTION 12: Ecological information**

- **12.1 Toxicity**
  - Aquatic toxicity: No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Additional ecological information:**
  - General notes:
    Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
    Do not allow undiluted product to reach ground water, water course or sewage system.
- **12.5 Results of PBT and vPvB assessment**
  - PBT: Not applicable.
  - vPvB: Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

**SECTION 13: Disposal considerations**

- **13.1 Waste treatment methods**
  - Recommendation
    Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
  - European waste catalogue
    Waste disposal key numbers from EWC have to be assigned depending on origin and processing.
  - Uncleaned packaging:
    - Recommendation: Dispose of in accordance with national regulations.
    - Recommended cleansing agents: Water, if necessary together with cleansing agents.

**SECTION 14: Transport information**

- **14.1 UN-Number**
  - ADG, IMDG, IATA UN1789
  - IMDG 1789 HYDROCHLORIC ACID solution
  - IATA HYDROCHLORIC ACID solution

(Contd. on page 6)
### 14.3 Transport hazard class(es)
- ADG, IMDG, IATA

<table>
<thead>
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<th>Class</th>
<th>Label</th>
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### 14.4 Packing group
- ADG, IMDG, IATA

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<tr>
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</tbody>
</table>

### 14.5 Environmental hazards:
- Marine pollutant: No

### 14.6 Special precautions for user
- Warning: Corrosive substances.

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<th>EMS Number:</th>
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<tr>
<td>80</td>
<td>F-A,S-B</td>
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</table>

### 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
- Not applicable.

### Transport/Additional information:
- ADG
- Limited quantities (LQ): 1L
- Transport category: 2
- Tunnel restriction code: E

<table>
<thead>
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<th>UN &quot;Model Regulation&quot;:</th>
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<tbody>
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<td>UN1789, HYDROCHLORIC ACID solution, 8, II</td>
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## SECTION 15: Regulatory information

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- Philippines Inventory of Chemicals and Chemical Substances
  
  All ingredients are listed.

- Australian Inventory of Chemical Substances
  
  All ingredients are listed.

- Standard for the Uniform Scheduling of Medicines and Poisons
  
  7647-01-0 hydrochloric acid S5, S6

### 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

## SECTION 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
  
  H314 Causes severe skin burns and eye damage.
  H335 May cause respiratory irritation.
  R34 Causes burns.
  R37 Irritating to respiratory system.
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)
Met. Corr.1: Corrosive to metals, Hazard Category 1
Skin Corr. 1B: Skin corrosion/irritation, Hazard Category 1B
STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3
Sources