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

1.1 Product identifier

Product name: Boron AA Standard: 1000 µg/mL B in H2O [100ml bottle]

Part number: 5190-8268

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 Manufacturing GmbH & Co. KG                      Tel: 0800 603 1000
Hewlett-Packard-Str. 8
76337 Waldbronn
Germany

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

1.4 Emergency telephone number:
CHEMTREC®: +(44)-870-8200418

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008
The product is not classified according to the CLP regulation.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC Not applicable.

Information concerning particular hazards for human and environment:
The product does not have 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 Not applicable

Hazard pictograms: Not applicable
Signal word: Not applicable
Hazard statements: Not applicable
Additional information:
Safety data sheet available on request.

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.
This product is not hazardous but contains hazardous components.

Dangerous components: Not applicable

SVHC

10043-35-3 Boric acid

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

(Contd. on page 2)
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.
- 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.
  See Section 13 for disposal information.

SECTION 7: Handling and storage

- 7.1 Precautions for safe handling: Store in cool, dry place in tightly closed receptacles.
- Information about fire - and explosion protection: No special measures required.
- 7.2 Conditions for safe storage, including any incompatibilities
  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

- Additional information about design of technical facilities: No further data; see item 7.
### 8.1 Control parameters
- **Ingredients with limit values that require monitoring at the workplace:**
  The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** Lists used were valid at the time of SDS preparation.

### 8.2 Exposure controls
- **Personal protective equipment:**
  - **General protective and hygienic measures:**
    The usual precautionary measures are to be adhered to when handling chemicals.
  - **Respiratory protection:** Not required.
- **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

### 9.1 Information on basic physical and chemical properties
- **General Information**
  - **Appearance:**
    - Form: Liquid
    - Colour: Colourless
  - **Odour:** Odourless
  - **Odour threshold:** Not determined.
  - **pH-value:** Not determined.
- **Change in condition**
  - **Melting point/Melting range:** 0 °C
  - **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 selfigniting.
- **Danger of explosion:** Not determined.
- **Explosion limits**
  - **Lower:** Not determined.
**Product name:** Boron AA Standard: 1000 µg/mL B in H2O [100ml bottle]

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Upper:</strong></td>
<td></td>
</tr>
<tr>
<td>Vapour pressure at 20 °C:</td>
<td>23 hPa</td>
</tr>
<tr>
<td>Density at 20 °C:</td>
<td>1 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>Fully miscible.</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:</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Kinematic:</td>
<td>Not determined.</td>
</tr>
</tbody>
</table>

**SECTION 10: Stability and reactivity**

- **10.1 Reactivity** Stable under normal conditions.
- **10.2 Chemical stability** Stable under normal conditions.
- **Thermal decomposition / conditions to be avoided:**
  - Formation of toxic gases is possible during heating or in case of fire.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** Heat.
- **10.5 Incompatible materials:** Strong oxidizing agents.
- **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.
  - Additional toxicological information:
    - The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.
    - When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.

**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: Generally not hazardous for water

(Contd. on page 5)
Product name: Boron AA Standard: 1000 µg/mL B in H2O [100ml bottle]

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.

13.2 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
- ADR, ADN, IMDG, IATA: Not applicable
- ADR, ADN, IMDG, IATA: Not applicable

14.3 Transport hazard class(es)
- ADR, ADN, IMDG, IATA: Not applicable
- Class: Not applicable

14.4 Packing group
- ADR, IMDG, IATA: Not applicable

14.5 Environmental hazards:
- Marine pollutant: No

14.6 Special precautions for user
- Not applicable.

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

Transport/Additional information: Not dangerous according to the above specifications.

UN "Model Regulation": -

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
  None of the ingredients is listed.
### 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.

- **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)

- **Sources**