1 Identification

- Product identifier
  - Trade name: Bromide 1000 μg/mL in H2O
  - Article number: IC-BR-M
- Details of the supplier of the safety data sheet
  - Manufacturer/Supplier:
    High-Purity Standards
    P.O. Box 41727
    Charleston, SC 29423
    Telephone: (843) 767-7900
    FAX: (843) 767-7906
  - Information department: Product safety department
  - Emergency telephone number:
    INFOTRAC
    Emergency telephone numbers 1-800-535-5053
    Other emergency telephone numbers 1-352-323-3500

2 Hazard(s) identification

- Classification of the substance or mixture
  The product is not classified, according to the Globally Harmonized System (GHS).

- Label elements
  - GHS label elements Void
  - Hazard pictograms Void
  - Signal word Void
  - Hazard statements Void
  - Classification system:
    - NFPA ratings (scale 0 - 4)
      Health = 0
      Fire = 0
      Reactivity = 0
    - HMIS-ratings (scale 0 - 4)
      HEALTH 0  Health = 0
      FIRE 0  Fire = 0
      REACTIVITY 0  Reactivity = 0
- Other hazards
  - Results of PBT and vPvB assessment
    - PBT: Not applicable.
    - vPvB: Not applicable.

3 Composition/information on ingredients

- Chemical characterization: Mixtures
- Description: Mixture of the substances listed below with nonhazardous additions.
- Dangerous components: Void
### 4 First-aid measures

- **Description of first aid measures**
- **General information:** No special measures required.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **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 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.
- **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** Not required.
- **Environmental precautions:** Dilute with plenty of water.
- **Methods and material for containment and cleaning up:**
  Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- **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.
- **Protective Action Criteria for Chemicals**

<table>
<thead>
<tr>
<th>PAC</th>
<th>Chemical</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAC-1</td>
<td>7647-15-6 sodium bromide</td>
<td>12 mg/m³</td>
</tr>
<tr>
<td>PAC-2</td>
<td>7647-15-6 sodium bromide</td>
<td>130 mg/m³</td>
</tr>
<tr>
<td>PAC-3</td>
<td>7647-15-6 sodium bromide</td>
<td>830 mg/m³</td>
</tr>
</tbody>
</table>

(Contd. on page 3)
7 Handling and storage

· **Handling:**
· **Precautions for safe handling** No special measures required.
· **Information about protection against explosions and fires:** No special measures required.
· **Conditions for safe storage, including any incompatibilities**
· **Storage:**
· **Requirements to be met by storerooms and receptacles:** No special requirements.
· **Information about storage in one common storage facility:** Not required.
· **Further information about storage conditions:** None.
· **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

· **Additional information about design of technical systems:** No further data; see item 7.
· **Control parameters**
· **Components 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:** The lists that were valid during the creation were used as basis.
· **Exposure controls**
· **Personal protective equipment:**
· **General protective and hygienic measures:**
The usual precautionary measures for handling chemicals should be followed.
· **Breathing equipment:** Not required.
· **Protection of hands:**
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
· **Material of gloves**
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
· **Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
· **Eye protection:** Goggles recommended during refilling.

9 Physical and chemical properties

· **Information on basic physical and chemical properties**
· **General Information**
· **Appearance:**
  · **Form:** Liquid
  · **Color:** Colorless
### 47.1.4. Odor
- **Odor:** Characteristic
- **Odor threshold:** Not determined.

### pH-value
- Not determined.

### Change in condition
- **Melting point/Melting range:** Undetermined.
- **Boiling point/Boiling range:** 100 °C (212 °F)

### Flash point
- Not applicable.

### Flammability (solid, gaseous)
- Not applicable.

### Decomposition temperature
- Not determined.

### Auto igniting
- Product is not selfigniting.

### Danger of explosion
- Product does not present an explosion hazard.

### Explosion limits
- **Lower:** Not determined.
- **Upper:** Not determined.

### Vapor pressure at 20 °C (68 °F)
- 23 hPa (17.3 mm Hg)

### Density at 20 °C (68 °F)
- 0.999 g/cm³ (8.33666 lbs/gal)

### Bulk density
- 999 kg/m³

### Relative density
- Not determined.

### Vapor 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.

### Solvent content
- Water: 99.9 %
- VOC content: 0.00 %
  - 0.0 g/l / 0.00 lb/gal

### Solids content
- 0.1 %

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

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### 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.
Trade name: Bromide 1000 μg/mL in H2O

11 Toxicological information

- Information on toxicological effects
  - Acute toxicity:
    - Primary irritant effect:
      - on the skin: No irritant effect.
      - on the eye: No irritating effect.
    - Sensitization: No sensitizing effects known.
  - Additional toxicological information:
    - The product is not subject to classification according to internally approved calculation methods for preparations:
      - When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

- Carcinogenic categories
  - IARC (International Agency for Research on Cancer)
    - None of the ingredients is listed.
  - NTP (National Toxicology Program)
    - None of the ingredients is listed.
  - OSHA-Ca (Occupational Safety & Health Administration)
    - None of the ingredients is listed.

12 Ecological information

- Toxicity
  - Aquatic toxicity: No further relevant information available.
  - Persistence and degradability: No further relevant information available.
  - Behavior in environmental systems:
  - Bioaccumulative potential: No further relevant information available.
  - Mobility in soil: No further relevant information available.
  - Additional ecological information:
  - General notes: Generally not hazardous for water
  - 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: Smaller quantities can be disposed of with household waste.
- Uncleaned packagings:
  - Recommendation: Disposal must be made according to official regulations.
· Recommended cleansing agent: Water, if necessary with cleansing agents.

14 Transport information

· UN-Number
  · DOT, ADR, IMDG, IATA: not regulated

· UN proper shipping name
  · DOT, ADR, IMDG, IATA: not regulated

· Transport hazard class(es)
  · DOT, ADR, IMDG, IATA
    · Class: not regulated

· Packing group
  · DOT, ADR, IMDG, IATA: not regulated

· Environmental hazards:
  Not applicable.

· Special precautions for user:
  Not applicable.

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

· UN "Model Regulation": not regulated

15 Regulatory information

· Safety, health and environmental regulations/legislation specific for the substance or mixture
  · Sara
    · Section 355 (extremely hazardous substances):
      None of the ingredients is listed.
    · Section 313 (Specific toxic chemical listings):
      None of the ingredients is listed.
    · TSCA (Toxic Substances Control Act):
      All ingredients are listed.
    · Proposition 65
      · Chemicals known to cause cancer:
        None of the ingredients is listed.
      · Chemicals known to cause reproductive toxicity for females:
        None of the ingredients is listed.
      · Chemicals known to cause reproductive toxicity for males:
        None of the ingredients is listed.
      · Chemicals known to cause developmental toxicity:
        None of the ingredients is listed.
Trade name: Bromide 1000 μg/mL in H2O

- Carcinogenic categories

  - EPA (Environmental Protection Agency) (Substances not listed)
    7647-15-6 sodium bromide
    7732-18-5 water, distilled, conductivity or of similar purity
  
  - TLV (Threshold Limit Value established by ACGIH)
    None of the ingredients is listed.
  
  - NIOSH-Ca (National Institute for Occupational Safety and Health)
    None of the ingredients is listed.

- GHS label elements: Void

- Hazard pictograms: Void

- Signal word: Void

- Hazard statements: Void

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

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- Department issuing SDS: Environment protection department.

- Contact:
  High-Purity Standards
  Tel: 843-767-7900
  Fax: 843-767-7906

- Date of preparation / last revision: 12/12/2018 / -

- 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
  DOT: US Department of Transportation
  IATA: International Air Transport Association
  ACGIH: American Conference of Governmental Industrial Hygienists
  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)
  NFPA: National Fire Protection Association (USA)
  HMIS: Hazardous Materials Identification System (USA)
  VOC: Volatile Organic Compounds (USA, EU)
  PBT: Persistent, Bioaccumulative and Toxic
  vPvB: very Persistent and very Bioaccumulative
  NIOSH: National Institute for Occupational Safety
  OSHA: Occupational Safety & Health
  TLV: Threshold Limit Value
  PEL: Permissible Exposure Limit
  REL: Recommended Exposure Limit