

11/27/2023

**Kit Components**

Product code	Description
<b>AS-BR9-SET</b>	<b>Ion Chromatography &amp; Ion Selective Electrode Standards Set of 3 Solutions for Bromide</b>

Components:

AS-BR9-2Y	1000 µg/mL Bromide
AS-BR9-5Y	0.1M Sodium Bromide
IS-BUF1-500	5M Sodium Nitrate Buffer

## 1 Identification

- **Product identifier**
- **Product Name:** 1000 µg/mL Bromide
- **Part Name:**  
AS-BR9-2Y  
AS-BR9-2X
- **Application of the substance / the mixture** For Laboratory Use Only
- **Uses advised against** Not for Human or Animal Use
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Spex CertiPrep, LLC.  
203 Norcross Ave, Metuchen,  
NJ 08840 USA  
732-549-7144  
USMet-CRMSales@antylia.com
- **Information department:** product safety department
- **Emergency telephone number:**  
Emergency Phone Number (24 hours)  
CHEMTREC (800-424-9300)  
Outside US: 703-527-3887

## 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** Not Regulated
- **Hazard pictograms** Not Regulated
- **Signal word** Not Regulated
- **Hazard statements** Not Regulated
- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



- **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:** Not Regulated

### Chemical identification of the substance/preparation

7732-18-5	water, distilled, conductivity or of similar purity	99.87%
7647-15-6	sodium bromide	0.13%

## 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:** Do not give anything to eat or drink - Do not induce vomiting
- **Information for Doctor:**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.

Product Name: 1000 µg/mL Bromide

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· **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**

· **PAC-1:**

7647-15-6	sodium bromide	12 mg/m <sup>3</sup>
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· **PAC-2:**

7647-15-6	sodium bromide	130 mg/m <sup>3</sup>
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· **PAC-3:**

7647-15-6	sodium bromide	830 mg/m <sup>3</sup>
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### 7 Handling and storage

- **Handling:**
- **Precautions for safe handling**  
No special measures required.  
Follow good laboratory practices.
- **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 section 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.
- **Respiratory protection:** 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.

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Product Name: 1000 µg/mL Bromide

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### 9 Physical and chemical properties

· <b>Information on basic physical and chemical properties</b>	
· <b>General Information</b>	
· <b>Appearance:</b>	
Form:	Liquid
Color:	According to product specification
· Odor:	Characteristic
· Odour Threshold:	Not applicable.
· pH-value:	Not applicable.
· <b>Change in condition</b>	
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 applicable.
· Ignition temperature:	Product is not selfigniting.
· Danger of explosion:	Product does not present an explosion hazard.
· <b>Explosion limits:</b>	
Lower:	Not applicable.
Upper:	Not applicable.
· Vapor pressure at 20 °C (68 °F):	23 hPa (17.3 mm Hg)
· Density at 20 °C (68 °F)	0.9987 g/cm <sup>3</sup> (8.33415 lbs/gal)
· Relative density	Not applicable.
· Vapor density	Not applicable.
· Evaporation rate	Not applicable.
· <b>Solubility in / Miscibility with</b>	
Water:	Fully miscible.
· <b>Partition coefficient (n-octanol/water):</b> Not applicable.	
· <b>Viscosity:</b>	
Dynamic:	Not applicable.
Kinematic:	Not applicable.
· <b>Solvent content:</b>	
Water:	99.9 %
VOC content:	0.00 %
Solids content:	0.1 %
· 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:**
  - **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.

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Product Name: 1000 µg/mL Bromide

(Contd. of page 3)

· **Carcinogenic categories**

· <b>IARC (International Agency for Research on Cancer)</b> None of the ingredients is listed.
· <b>NTP (National Toxicology Program)</b> None of the ingredients is listed.
· <b>OSHA-Ca (Occupational Safety &amp; Health Administration)</b> 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:** 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**

· <b>UN-Number</b> · DOT, ADR, IMDG, IATA	Not Regulated
· <b>UN proper shipping name</b> · DOT, ADR, ADN, IMDG, IATA	Not Regulated
· <b>Transport hazard class(es)</b> · DOT, ADR, ADN, IMDG, IATA · Class	Not Regulated
· <b>Packing group</b> · DOT, ADR, IMDG, IATA	Not Regulated
· <b>Environmental hazards:</b>	Not applicable.
· <b>Special precautions for user</b>	Not applicable.
· <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>	Not applicable.
· <b>UN "Model Regulation":</b>	Not Regulated

**15 Regulatory information**

- **Safety, health and environmental regulations/legislation specific for the substance or mixture:** No further relevant information available.
- **Sara**

· <b>Section 313 (Specific toxic chemical listings):</b> None of the ingredients is listed.
· <b>TSCA (Toxic Substances Control Act):</b> All components have the value ACTIVE.
· <b>Hazardous Air Pollutants</b> None of the ingredients is listed.

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**Product Name: 1000 µg/mL Bromide**

(Contd. of page 4)

**· 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.

**· Carcinogenic categories**

**· EPA (Environmental Protection Agency)**

None of the ingredients is listed.

**· TLV (Threshold Limit Value)**

None of the ingredients is listed.

**· NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

· **GHS label elements** Not Regulated

· **Hazard pictograms** Not Regulated

· **Signal word** Not Regulated

· **Hazard statements** Not Regulated

· **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:** product safety department

**· Contact:**

Spex CertiPrep, LLC.

1-732-549-7144

· **Date of preparation / last revision** 11/27/2023

**· Abbreviations and acronyms:**

ADR: Accord relatif au transport international 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

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

## 1 Identification

- **Product identifier**
- **Product Name:** 0.1M Sodium Bromide
- **Part Name:**  
AS-BR9-5Y  
AS-BR9-5X
- **Application of the substance / the mixture** For Laboratory Use Only
- **Uses advised against** Not for Human or Animal Use
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Spex CertiPrep, LLC.  
203 Norcross Ave, Metuchen,  
NJ 08840 USA  
732-549-7144  
USMet-CRMSales@antylia.com
- **Information department:** product safety department
- **Emergency telephone number:**  
Emergency Phone Number (24 hours)  
CHEMTREC (800-424-9300)  
Outside US: 703-527-3887

## 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** Not Regulated
- **Hazard pictograms** Not Regulated
- **Signal word** Not Regulated
- **Hazard statements** Not Regulated
- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



- **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:** Not Regulated

### Chemical identification of the substance/preparation

7732-18-5	water, distilled, conductivity or of similar purity	98.971%
7647-15-6	sodium bromide	1.029%

## 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:** Do not give anything to eat or drink - Do not induce vomiting
- **Information for Doctor:**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.

Product Name: 0.1M Sodium Bromide

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· **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**

· **PAC-1:**

7647-15-6	sodium bromide	12 mg/m <sup>3</sup>
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· **PAC-2:**

7647-15-6	sodium bromide	130 mg/m <sup>3</sup>
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· **PAC-3:**

7647-15-6	sodium bromide	830 mg/m <sup>3</sup>
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### 7 Handling and storage

- **Handling:**
- **Precautions for safe handling**  
No special measures required.  
Follow good laboratory practices.
- **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 section 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.
- **Respiratory protection:** 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.

(Contd. on page 3)



Product Name: 0.1M Sodium Bromide

(Contd. of page 2)

### 9 Physical and chemical properties

**· Information on basic physical and chemical properties**

**· General Information**

**· Appearance:**

**Form:** Liquid  
**Color:** According to product specification

**· Odor:** Characteristic

**· Odour Threshold:** Not applicable.

**· pH-value:** Not applicable.

**· 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 applicable.

**· Ignition temperature:** Product is not selfigniting.

**· Danger of explosion:** Product does not present an explosion hazard.

**· Explosion limits:**

**Lower:** Not applicable.  
**Upper:** Not applicable.

**· Vapor pressure at 20 °C (68 °F):** 23 hPa (17.3 mm Hg)

**· Density at 20 °C (68 °F)** 0.98974 g/cm<sup>3</sup> (8.25938 lbs/gal)

**· Relative density** Not applicable.

**· Vapor density** Not applicable.

**· Evaporation rate** Not applicable.

**· Solubility in / Miscibility with**

**Water:** Fully miscible.

**· Partition coefficient (n-octanol/water):** Not applicable.

**· Viscosity:**

**Dynamic:** Not applicable.  
**Kinematic:** Not applicable.

**· Solvent content:**

**Water:** 99.0 %  
**VOC content:** 0.00 %

**Solids content:** 1.0 %

**· 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:**

**· 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.

(Contd. on page 4)

**Product Name: 0.1M Sodium Bromide**

(Contd. of page 3)

**· Carcinogenic categories**

<b>· IARC (International Agency for Research on Cancer)</b>
None of the ingredients is listed.
<b>· NTP (National Toxicology Program)</b>
None of the ingredients is listed.
<b>· OSHA-Ca (Occupational Safety &amp; Health Administration)</b>
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:** 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**

<b>· UN-Number</b>	
<b>· DOT, ADR, IMDG, IATA</b>	Not Regulated
<b>· UN proper shipping name</b>	
<b>· DOT, ADR, IMDG, IATA</b>	Not Regulated
<b>· Transport hazard class(es)</b>	
<b>· DOT, ADR, ADN, IMDG, IATA</b>	
<b>· Class</b>	Not Regulated
<b>· Packing group</b>	
<b>· DOT, ADR, IMDG, IATA</b>	Not Regulated
<b>· Environmental hazards:</b>	Not applicable.
<b>· Special precautions for user</b>	Not applicable.
<b>· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>	Not applicable.
<b>· UN "Model Regulation":</b>	Not Regulated

**15 Regulatory information**

- **Safety, health and environmental regulations/legislation specific for the substance or mixture** No further relevant information available.
- **Sara**

<b>· Section 313 (Specific toxic chemical listings):</b>
None of the ingredients is listed.
<b>· TSCA (Toxic Substances Control Act):</b>
All components have the value ACTIVE.
<b>· Hazardous Air Pollutants</b>
None of the ingredients is listed.

(Contd. on page 5)

**Product Name: 0.1M Sodium Bromide**

(Contd. of page 4)

**· 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.

**· Carcinogenic categories**

**· EPA (Environmental Protection Agency)**

None of the ingredients is listed.

**· TLV (Threshold Limit Value)**

None of the ingredients is listed.

**· NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

**· GHS label elements** Not Regulated

**· Hazard pictograms** Not Regulated

**· Signal word** Not Regulated

**· Hazard statements** Not Regulated

**· 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:** product safety department

**· Contact:**

Spex CertiPrep, LLC.

1-732-549-7144

**· Date of preparation / last revision** 11/27/2023

**· Abbreviations and acronyms:**

ADR: Accord relatif au transport international 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

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

## 1 Identification

- **Product identifier**
- **Product Name:** 5M Sodium Nitrate Buffer
- **Part Name:** IS-BUF1-500
- **Application of the substance / the mixture** For Laboratory Use Only
- **Uses advised against** Not for Human or Animal Use
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Spex CertiPrep, LLC.  
203 Norcross Ave, Metuchen,  
NJ 08840 USA  
732-549-7144  
USMet-CRMSales@antylia.com
- **Information department:** product safety department
- **Emergency telephone number:**  
Emergency Phone Number (24 hours)  
CHEMTREC (800-424-9300)  
Outside US: 703-527-3887

## 2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS07

Eye Irritation 2A H319 Causes serious eye irritation.

- **Label elements**
- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**



GHS07

- **Signal word** Warning
- **Hazard statements**  
H319 Causes serious eye irritation.
- **Precautionary statements**  
P264 Wash thoroughly after handling.  
P280 Wear eye protection / face protection.  
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.
- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



Health = 2  
Fire = 0  
Reactivity = 0

- **HMIS-ratings (scale 0 - 4)**



HEALTH 2 Health = 2  
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.

Product Name: 5M Sodium Nitrate Buffer

(Contd. of page 1)

· <b>Dangerous components:</b>		
7631-99-4	sodium nitrate	42.5%
· <b>Chemical identification of the substance/preparation</b>		
7732-18-5	water, distilled, conductivity or of similar purity	57.5%

#### 4 First-aid measures

- **Description of first aid measures**
- **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. If symptoms persist, consult a doctor.
- **After swallowing:** Do not give anything to eat or drink - Do not induce vomiting
- **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**

· <b>PAC-1:</b>		
7631-99-4	sodium nitrate	4.1 mg/m <sup>3</sup>
· <b>PAC-2:</b>		
7631-99-4	sodium nitrate	45 mg/m <sup>3</sup>
· <b>PAC-3:</b>		
7631-99-4	sodium nitrate	270 mg/m <sup>3</sup>

#### 7 Handling and storage

- **Handling:**
- **Precautions for safe handling** No special precautions are necessary if used correctly.
- **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:** Keep receptacle tightly sealed.
- **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 section 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:**  
Keep away from foodstuffs, beverages and feed.

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- 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:** Not required.
- **Protection of hands:**



Protective gloves

- 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:**



Tightly sealed goggles

9 Physical and chemical properties

· Information on basic physical and chemical properties

· General Information

· Appearance:

- **Form:** Liquid
- **Color:** According to product specification
- **Odor:** Characteristic
- **Odour Threshold:** Not applicable.

· **pH-value:** Not applicable.

· 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 applicable.

· **Ignition temperature:** Product is not selfigniting.

· **Danger of explosion:** Product does not present an explosion hazard.

· Explosion limits:

- **Lower:** Not applicable.
- **Upper:** Not applicable.

· **Vapor pressure at 20 °C (68 °F):** 23 hPa (17.3 mm Hg)

· **Density at 20 °C (68 °F)** 1.5355 g/cm<sup>3</sup> (12.81375 lbs/gal)

· **Relative density** Not applicable.

· **Vapor density** Not applicable.

· **Evaporation rate** Not applicable.

· Solubility in / Miscibility with

· **Water:** Fully miscible.

· **Partition coefficient (n-octanol/water):** Not applicable.

· Viscosity:

- **Dynamic:** Not applicable.
- **Kinematic:** Not applicable.

· Solvent content:

- **Water:** 57.5 %
- **VOC content:** 0.00 %

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Solids content:	42.5 %
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:**
- **Primary irritant effect:**
- **on the eye:** Irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**  
The product shows the following dangers according to internally approved calculation methods for preparations:  
Irritant
- **Carcinogenic categories**

· <b>IARC (International Agency for Research on Cancer)</b> None of the ingredients is listed.
· <b>NTP (National Toxicology Program)</b> None of the ingredients is listed.
· <b>OSHA-Ca (Occupational Safety &amp; Health Administration)</b> 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:** 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:** Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

### 14 Transport information

· <b>UN-Number</b> · <b>DOT, ADR, ADN, IMDG, IATA</b>	Not Regulated
· <b>UN proper shipping name</b> · <b>DOT, ADR, ADN, IMDG, IATA</b>	Not Regulated

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· <b>Transport hazard class(es)</b>	
· <b>DOT, ADR, ADN, IMDG, IATA</b>	
· <b>Class</b>	Not Regulated
· <b>Packing group</b>	
· <b>DOT, ADR, IMDG, IATA</b>	Not Regulated
· <b>Environmental hazards:</b>	Not applicable.
· <b>Special precautions for user</b>	Not applicable.
· <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>	Not applicable.
· <b>UN "Model Regulation":</b>	Not Regulated

### 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture** No further relevant information available.
- **Sara**

· <b>Section 313 (Specific toxic chemical listings):</b>
None of the ingredients is listed.

· <b>TSCA (Toxic Substances Control Act):</b>
All components have the value ACTIVE.

· <b>Hazardous Air Pollutants</b>
None of the ingredients is listed.

· <b>Proposition 65</b>
· <b>Chemicals known to cause cancer:</b>
None of the ingredients is listed.

· <b>Chemicals known to cause reproductive toxicity for females:</b>
None of the ingredients is listed.

· <b>Chemicals known to cause reproductive toxicity for males:</b>
None of the ingredients is listed.

· <b>Chemicals known to cause developmental toxicity:</b>
None of the ingredients is listed.

· <b>Carcinogenic categories</b>
· <b>EPA (Environmental Protection Agency)</b>
None of the ingredients is listed.

· <b>TLV (Threshold Limit Value)</b>
None of the ingredients is listed.

· <b>NIOSH-Ca (National Institute for Occupational Safety and Health)</b>
None of the ingredients is listed.

- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**



GHS07

- **Signal word** Warning
- **Hazard statements**  
H319 Causes serious eye irritation.
- **Precautionary statements**  
P264 Wash thoroughly after handling.  
P280 Wear eye protection / face protection.  
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.
- **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:** product safety department

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· **Contact:**

Spex CertiPrep, LLC.  
1-732-549-7144

· **Date of preparation / last revision 11/27/2023**

· **Abbreviations and acronyms:**

ADR: Accord relatif au transport international 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

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)

HMS: 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

Eye Irritation 2A: Serious eye damage/eye irritation – Category 2A

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