## Product

<table>
<thead>
<tr>
<th>Item #</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EB-AGEK-Preps</td>
<td>EB Pure Agarose Gel Extraction Kit</td>
</tr>
</tbody>
</table>

## Components

<table>
<thead>
<tr>
<th>Item #</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGEK-XP2-Preps-PC</td>
<td>EB-AGEK XP2 Binding Buffer</td>
</tr>
<tr>
<td>AGEK-SPW-Preps-PC</td>
<td>EB-AGEK SPW Wash Buffer</td>
</tr>
<tr>
<td>AGEK-E-Preps-PC</td>
<td>EB-AGEK Elution Buffer</td>
</tr>
</tbody>
</table>
SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Title: EB-AGEK XP2 Binding Buffer
Item number: AGEK-XP2-Preps-PC
Document Number: PC-MSDS-045 Version 001
Relevant identified uses of the substance or mixture and uses advised against: For research use only.
Application of the substance / the mixture
Details of the supplier of the safety data sheet
Manufacturer/Supplier:
Empirical Bioscience
2007 EastCastle Dr SE
Grand Rapids, MI 49508 U.S.A.
1-877.479.9949
MSDS author; customer.service@empiricalbioscience.com

SECTION 2 — COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Hazardous Ingredients (specific)</th>
<th>%</th>
<th>CAS Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guanidine Thiocyanate</td>
<td>25-50%</td>
<td>593-84-0</td>
</tr>
</tbody>
</table>

SECTION 3 — HAZARDS IDENTIFICATION

Labeling according to Regulation (EC) No 1272/2008:

Hazard pictograms:
Signal Word: Warning
Hazard statements: H412 Harmful to aquatic life with long lasting effects.
H302 Harmful if swallowed.
H312 Harmful in contact with skin.
H332 Harmful if inhaled.
P311 Call a poison center or doctor/physician.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician.
P304 + P340 IF INHALED: Remove person to fresh air and keep in a comfortable position for breathing.

Hazard Classification:
OSHA Hazard Overview: Harmful by inhalation, harmful by ingestion, harmful in contact with skin.
Health Hazards: Acute Toxicity, oral Category 4
Acute Toxicity, inhalation Category 4
Acute Toxicity, dermal Category 4
Acute Aquatic Toxicity Category 3
Chronic Aquatic Toxicity Category 3
Potential Health Effects: Aggravated Medical Conditions: May cause nervous system disturbances
Symptoms of Overexposure:
Inhalation: Harmful if inhaled. May cause respiratory tract irritation.
Skin: Harmful if absorbed through skin. May cause skin irritation.
Eyes: May cause eye irritation.
Ingestion: Harmful if swallowed.

Carcinogenicity:
IARC: No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by IARC.
ACGIH: No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by ACGIH.
OSHA: No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by OSHA.
NTP: No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by NTP.
Product Title: EB-AGEK XP2 Binding Buffer

SECTION 4 — FIRST AID MEASURES

General information: Exit to a safe area. Consult a physician. Seek medical attention.
After inhalation: Remove to fresh air. If not breathing, give artificial respiration. Seek medical attention.
After skin contact: Exit to safe area. Remove contaminated clothing. Wash Skin with soap and copious amounts of water. Seek medical attention.
After eye contact: Flush eyes with clean water for a minimum of 15 minutes keeping eyes open. Seek medical attention.
Most important symptoms and effects, both acute and delayed: May cause pain, irritation or redness, and watering of eyes.
Indication of any immediate medical attention and special treatment needed: Treat symptomatically. Symptoms may be delayed.

SECTION 5 — FIRE FIGHTING MEASURES

Conditions of Flammability: Not flammable or combustible.
Suitable Extinguishing Agents: CO2, extinguishing powder, water spray, or alcohol resistant foam.
Hazardous Combustion Products: Carbon oxides (CO, CO₂), sulfur oxides (SOx), nitrogen oxides (NOx).
Protective Equipment for Firefighters: Wear NIOSH-approved self-contained breathing apparatus if necessary.
Further Information: Prevent firefighting water from entering surface water or groundwater.

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Personal Precautions: Wear respiratory protection when ventilation is inadequate. Avoid breathing vapors, mist, or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Keep away from heat and sources of ignition. See Section 8: Exposure Controls/Personal Protection for more details.
Environmental Precautions: Prevent further leakage if area is safe. Do not let product enter drains. Avoid discharge into the environment.
Emergency Procedures: Evacuate personnel to safe areas and follow emergency response protocols.
Methods and material for containment and cleaning up: Use inert absorbent material to soak up spill. Dispose of hazardos waste. Do not flush with water.

SECTION 7 — HANDLING AND STORAGE

Precautions for Safe Handling: Handle in accordance with good chemical hygiene and safety practices. Protect from moisture. Avoid contact with skin, eyes, and clothing. Avoid inhalation of vapors or mist.
Conditions for safe storage: Keep containers tightly closed in a dry, cool, and well-ventilated place. Protect from light and moisture. Do not store near acids.
Incompatible Products: Strong oxidizing agents, strong acids.

SECTION 8 — EXPOSURE CONTROL / PERSONAL PROTECTION

Appropriate Engineering Controls: Adequate ventilation and access to eye washing stations are required.
Personal protective equipment:
Hand Protection: Use gloves when handling this product. Inspect gloves prior to use for any visible damage. Use proper glove removal technique to prevent contact with skin. Dispose of gloves in accordance with applicable laws. Wash and dry hands after use.
Eye Protection: Wear a face shield and/or safety goggles when handling this product. Use NIOSH-approved eyewear.
Skin and Body Protection: Wear appropriate laboratory attire when handling this product, such as gloves, long pants, closed-toe shoes, and a laboratory coat.
Respiratory Protection: If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level, an approved respirator must be used.
Hygiene Measures: Avoid contact with eyes, skin, and clothing. Wash hands thoroughly after using this product. Do not eat, drink, or smoke when handling this product.
Special Requirements for PPE, Clothing, Respirators, etc: N/A
Components with Workplace Control Parameters: N/A
SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Appearance:
- Form: Liquid
- Color: Dark Yellow
- Odor: No data available
- Odor threshold: No data available
- pH-value at 20 °C (68 °F): 4.0-6.0
- Melting point/Melting range: No data available
- Boiling point/Boiling range: No data available
- Flash point: No data available
- Flammability (solid, gaseous): No data available
- Ignition temperature: No data available
- Decomposition temperature: No data available
- Auto igniting: No data available
- Danger of explosion: No data available
- Explosion limits:
  - Lower: No data available
  - Upper: No data available
- Vapor pressure at 20 °C (68 °F): No data available
- Density at 20 °C (68 °F): No data available
- Relative density: No data available
- Vapour density: No data available
- Evaporation rate: No data available
- Solubility in / Miscibility with Water: No data available
- Partition coefficient (n-octanol/water): No data available
- Viscosity: No data available
  - Dynamic: No data available
  - Kinematic: No data available
- Solvent content: No data available
- Organic Solvents: No data available
- Water: No data available
- Solids content: No data available
- Other information: No data available

SECTION 10 — STABILITY AND REACTIVITY

Reactivity: No dangerous reactions known under conditions of normal use.
Chemical stability: Stable under recommended storage conditions.
Possibility of hazardous reactions: No data available.
Conditions to avoid: Heating, flames, sparks.
Incompatible materials: Strong acids, strong oxidizing agents, cyanides
Hazardous decomposition products: Carbon oxides (CO, CO₂), sulfur oxides (SOx), nitrogen oxides (NOx).
SECTION 11 — TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure:
- Inhalation: Harmful if inhaled. May cause respiratory tract irritation.
- Ingestion: Harmful if swallowed.
- Skin: Harmful if absorbed through skin. May cause skin irritation.
- Eyes: May cause eye irritation.

Information on toxicological effects:

**Acute toxicity**
- Oral LD50: 593 mg/kg (Rat)
- Inhalation LD50: No data available
- Dermal LD50: No data available
- Other: Peritoneal LD50: 300mg/kg (Mouse)
- Skin corrosion/irritation: No data available
- Serious eye damage/irritation: No data available
- Respiratory or skin sensitization: Components of this product may be absorbed into the body through the skin. Irritating to skin and mucous membranes.
- Germ cell mutagenicity: No data available

**Carcinogenicity**
- IARC: No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by IARC.
- ACGIH: No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by ACGIH.
- OSHA: No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by OSHA.
- NTP: No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by NTP.

**Reproductive Toxicity:** No data available
- Teratogenicity: No data available.
- Specific Target Organ Toxicity – Single Exposure: No data available.
- Specific Target Organ Toxicity – Repeated Exposures: No data available.
- Aspiration Hazard: No data available.
- Signs and symptoms of exposure: Irritating to eyes, respiratory system, and skin.
- Synergistic effects: No data available.
- Additional information: No data available.

SECTION 12 — ECOLOGICAL INFORMATION

**Toxicity:** EC50: 42.4 mg/L – 48h (Daphnia)
**Persistence and degradability:** No data available
**Bioaccumulative potential:** No data available
**Mobility in soil:** Product is water soluble and may spread in water systems.
**Results of PBT and vPvB assessment:**
- PBT: No data available
- vPvB: No data available
- Other adverse effects: Harmful to aquatic life with long lasting effects.

SECTION 13 — DISPOSAL CONSIDERATIONS

**Product:** Disposal should be in accordance with applicable regional, national and local laws and regulations. S29 – Do not empty into drains. S57 – Use appropriate container to avoid environmental contamination. Refer to Section 7: Handling and Storage and Section 8: Exposure Control/Personal Protection for additional handling information and protection of employees.
**Contamination packaging:** Disposal must be made according to official regulations. To minimize exposure, please refer to Section 8: Exposure Control/Personal Protection of this SDS.
PRODUCT TITLE: EB-AGEK XP2 Binding Buffer

SECTION 14 — TRANSPORT INFORMATION

DOT: Not considered dangerous goods
IMDG: Not considered dangerous goods
IATA: Not considered dangerous goods

SECTION 15 — REGULATORY INFORMATION

US Federal Regulations:
- **OSHA Hazards:** Harmful by inhalation, harmful by ingestion, harmful in contact with skin.
- **Aggravated Medical Conditions:** May cause nervous system disturbances.
- **Symptoms of Overexposure:**
  - Inhalation: Harmful if inhaled. May cause respiratory irritation.
  - Skin: Harmful if absorbed through the skin. May cause skin irritation.
  - Eyes: May cause eye irritation.
- **Ingestion:** Harmful if swallowed
- **SARA 302 Components:** None present or none present in regulated quantities.
- **SARA 313 Components:** None present or none present in regulated quantities.
- **SARA 311/312 Hazards:** Acute health hazard.

US State Regulation:
- **California Prop. 65:** No ingredients regulated by CA Prop 65 present.
- **New Jersey & Community RTK:** Guanidine thiocyanate (CAS No 593-84-0), Water (CAS No 7732-18-5)
- **Massachusetts RTK:** No components are subject to the MA RTK Act.
- **Pennsylvania RTK:** Guanidine thiocyanate (CAS No 593-84-0), Water (CAS No 7732-18-5)
- **Rhode Island RTK:** Guanidine thiocyanate (CAS No 593-84-0), Water (CAS No 7732-18-5)

SECTION 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 MSDS
Empirical Bioscience
2007 Eastcastle Dr SE
Grand Rapids, MI 49508 U.S.A.
1-877-479.9949

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
- **CAS:** Chemical Abstracts Service (division of the American Chemical Society)
- **NFPA:** National Fire Protection Association (USA)
- **HMIS:** Hazardous Materials Identification System (USA)
- **LC50:** Lethal concentration, 50 percent
- **LD50:** Lethal dose, 50

* Data compared to the previous version altered.
Product Title: EB-AGEK SPW Wash Buffer

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Title: EB-AGEK SPW Wash Buffer
Item number: AGEK-SPW-Preps-PC
Document Number: PC-MSDS-046 Version 001
Relevant identified uses of the substance or mixture and uses advised against: For research use only.
Application of the substance / the mixture
Details of the supplier of the safety data sheet
Manufacturer/Supplier:
Empirical Bioscience
2007 EastCastle Dr SE
Grand Rapids, MI 49508 U.S.A.
1-877.479.9949
MSDS author; customer.service@empiricalbioscience.com

SECTION 2 — COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Ingredients (specific) % CAS Number
Mixture of Non-Hazardous Substances

SECTION 3 — HAZARDS IDENTIFICATION

Labeling according to Regulation (EC) No 1272/2008: Void
Hazard pictograms: Not Applicable
Signal Word: Not Applicable
Hazard statements: Not Applicable.
Precautionary Statements: Not Applicable.
Hazard Classification:
  OSHA Hazard Overview: Not Applicable
  Health Hazards: Not Applicable
Potential Health Effects: Not Applicable
Symptoms of Overexposure:
  Inhalation: Not Applicable.
  Skin: Not Applicable.
  Eyes: Not Applicable.
  Ingestion: Not Applicable.

Carcinogenicity:
  IARC: No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by IARC.
  ACGIH: No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by ACGIH.
  OSHA: No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by OSHA.
  NTP: No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by NTP.

SECTION 4 — FIRST AID MEASURES

Description of first aid measures
General information: Wear protective gloves/protective clothing/eye protection/face protection.
After inhalation: If not breathing, give artificial respiration.
After skin contact: Wash Skin with soap and water.
After eye contact: Remove contact lenses, if present and easy to do. Continue rinsing.
After swallowing: N/A
Most important symptoms and effects, both acute and delayed: N/A
Indication of any immediate medical attention and special treatment needed: Treat symptomatically. Symptoms may be delayed.
SECTION 5 — FIRE FIGHTING MEASURES

Conditions of Flammability: Not flammable or combustible.
Suitable Extinguishing Agents: CO2, extinguishing powder, water spray, or alcohol resistant foam.
Hazardous Combustion Products: Not Applicable.
Protective Equipment for Firefighters: Wear NIOSH-approved self-contained breathing apparatus if necessary.
Further Information: Prevent firefighting water from entering surface water or groundwater.

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Personal Precautions: Avoid breathing vapors or mist. See Section 8: Exposure Controls/Personal Protection for more details.
Environmental Precautions: N/A
Emergency Procedures: Evacuate personnel to safe areas and follow emergency response protocols.
Methods and material for containment and cleaning up: Use inert absorbent material to soak up spill.

SECTION 7 — HANDLING AND STORAGE

Precautions for Safe Handling: Handle in accordance with good chemical hygiene and safety practices. Protect from moisture. Avoid contact with skin and eyes. Avoid inhalation of vapors or mist.
Conditions for safe storage: Keep container tightly closed in a dry, well-ventilated place.
Incompatible Products: N/A

SECTION 8 — EXPOSURE CONTROL / PERSONAL PROTECTION

Appropriate Engineering Controls: Adequate ventilation and access to eye washing stations are required.
Personal protective equipment:
Hand Protection: Use gloves when handling this product. Inspect gloves prior to use for any visible damage. Use proper glove removal technique to prevent contact with skin. Dispose of gloves in accordance with applicable laws. Wash and dry hands after use.
Eye Protection: Wear a face shield and/or safety goggles when handling this product. Use NIOSH-approved eyewear.
Skin and Body Protection: Wear appropriate laboratory attire when handling this product, such as gloves, long pants, closed-toe shoes, and a laboratory coat.
Respiratory Protection: If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level, an approved respirator must be used.
Hygiene Measures: Avoid contact with eyes, skin, and clothing. Wash hands thoroughly after using this product. Do not eat, drink, or smoke when handling this product.
Special Requirements for PPE, Clothing, Respirators, etc: N/A
Components with Workplace Control Parameters: N/A
SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Appearance:
- Form: Liquid
- Color: Colorless
- Odor: No data available
- Odor threshold: No data available
- pH-value at 20 °C (68 °F): 5.0-7.0
- Melting point/Melting range: No data available
- Boiling point/Boiling range: No data available
- Flash point: No data available
- Flammability (solid, gaseous): No data available
- Ignition temperature: No data available
- Decomposition temperature: No data available
- Auto igniting: No data available
- Danger of explosion: No data available
- Explosion limits:
  - Lower: No data available
  - Upper: No data available
- Vapor pressure at 20 °C (68 °F): No data available
- Density at 20 °C (68 °F): No data available
- Relative density: No data available
- Vapour density: No data available
- Evaporation rate: No data available
- Solubility in / Miscibility with Water: No data available
- Partition coefficient (n-octanol/water): No data available
- Viscosity: No data available
  - Dynamic: No data available
  - Kinematic: No data available
- Solvent content: No data available
- Organic Solvents: No data available
- Water: No data available
- Solids content: No data available
- Other information: No data available

SECTION 10 — STABILITY AND REACTIVITY

Reactivity: No dangerous reactions known under conditions of normal use.
Chemical stability: Stable under recommended storage conditions.
Possibility of hazardous reactions: No data available.
Conditions to avoid: No data available.
Incompatible materials: No data available
Hazardous decomposition products: No data available
SECTION 11 — TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure:
- Inhalation: No data available.
- Ingestion: No data available.
- Skin: No data available.
- Eyes: No data available.

Information on toxicological effects:

- Acute toxicity:
  - Oral LD50: No data available
  - Inhalation LD50: No data available
  - Dermal LD50: No data available
  - Other: Peritoneal LD50: No data available

- Skin corrosion/irritation: No data available
- Serious eye damage/irritation: No data available
- Respiratory or skin sensitization: No data available
- Germ cell mutagenicity: No data available

Carcinogenicity:
- IARC: No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by IARC.
- ACGIH: No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by ACGIH.
- OSHA: No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by OSHA.
- NTP: No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by NTP.

Reproductive Toxicity: No data available
Teratogenicity: No data available
Specific Target Organ Toxicity – Single Exposure: No data available
Specific Target Organ Toxicity – Repeated Exposures: No data available
Aspiration Hazard: No data available
Signs and symptoms of exposure: No data available
Synergistic effects: No data available
Additional information: No data available

SECTION 12 — ECOLOGICAL INFORMATION

Toxicity: No data available
Persistence and degradability: No data available
Bioaccumulative potential: No data available
Mobility in soil: No data available
Results of PBT and vPvB assessment:
- PBT: No data available
- vPvB: No data available
Other adverse effects: No data available

SECTION 13 — DISPOSAL CONSIDERATIONS

Product: Disposal should be in accordance with applicable regional, national and local laws and regulations. S29 – Do not empty into drains. S57 – Use appropriate container to avoid environmental contamination. Refer to Section 7: Handling and Storage and Section 8: Exposure Control/Personal Protection for additional handling information and protection of employees.

Contamination packaging: Disposal must be made according to official regulations. To minimize exposure, please refer to Section 8: Exposure Control/Personal Protection of this SDS.
Product Title: EB-AGEK SPW Wash Buffer

SECTION 14 — TRANSPORT INFORMATION

DOT: Not considered dangerous goods
IMDG: Not considered dangerous goods
IATA: Not considered dangerous goods

SECTION 15 — REGULATORY INFORMATION

US Federal Regulations

OSHA Hazards: No data available.
Aggravated Medical Conditions: No data available.
Symptoms of Overexposure:
  Inhalation: No data available.
  Skin: No data available.
  Eyes: No data available.
Ingestion: No data available
SARA 302 Components: None present or none present in regulated quantities.
SARA 313 Components: None present or none present in regulated quantities.
SARA 311/312 Hazards: No data available.

US State Regulation:

California Prop. 65: No ingredients regulated by CA Prop 65 present.
New Jersey & Community RTK: Component (Water); CAS No (7732-18-5)
Massachusetts RTK: No ingredients regulated by MS Right to Know Act present.
Pennsylvania RTK: Component (Water); CAS No (7732-18-5)
Rhode Island RTK: No ingredients regulated by RI Right to Know Act present

SECTION 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 MSDS
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IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50
* Data compared to the previous version altered.
Product Title: EB-AGEK Elution Buffer

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Title: EB-AGEK Elution Buffer
Item number: AGEK-E-Preps-PC
Document Number: PC-MSDS-047 Version 001
Relevant identified uses of the substance or mixture and uses advised against: For research use only.
Application of the substance / the mixture
Details of the supplier of the safety data sheet
Manufacturer/Supplier:
Empirical Bioscience
2007 EastCastle Dr SE
Grand Rapids, MI 49508 U.S.A.
1-877-479.9949
MSDS author; customer.service@empiricalbioscience.com

SECTION 2 — COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Ingredients (specific) % CAS Number
Mixture of Non-Hazardous Substances

SECTION 3 — HAZARDS IDENTIFICATION

Labeling according to Regulation (EC) No 1272/2008: Void
Hazard pictograms: Not Applicable
Signal Word: Not Applicable
Hazard statements: Not Applicable.
Precautionary Statements: Not Applicable.
Hazard Classification:
OSHA Hazard Overview: Not Applicable
Health Hazards: Not Applicable
Potential Health Effects: Not Applicable
Symptoms of Overexposure:
Inhalation: Not Applicable.
Skin: Not Applicable.
Eyes: Not Applicable.
Ingestion: Not Applicable.
Carcinogenicity:
IARC: No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by IARC.
ACGIH: No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by ACGIH.
OSHA: No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by OSHA.
NTP: No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by NTP.

SECTION 4 — FIRST AID MEASURES

Description of first aid measures
General information: Wear protective gloves/protective clothing/eye protection/face protection.
After inhalation: If not breathing, give artificial respiration.
After skin contact: Wash Skin with soap and water.
After eye contact: Remove contact lenses, if present and easy to do. Continue rinsing.
After swallowing: N/A
Most important symptoms and effects, both acute and delayed: N/A
Indication of any immediate medical attention and special treatment needed: Treat symptomatically. Symptoms may be delayed.
SECTION 5 — FIRE FIGHTING MEASURES

**Conditions of Flammability:** Not flammable or combustible.

**Suitable Extinguishing Agents:** CO2, extinguishing powder, water spray, or alcohol resistant foam.

**Hazardous Combustion Products:** Not Applicable.

**Protective Equipment for Firefighters:** Wear NIOSH-approved self-contained breathing apparatus if necessary.

**Further Information:** Prevent firefighting water from entering surface water or groundwater.

SECTION 6 — ACCIDENTAL RELEASE MEASURES

**Personal Precautions:** Avoid breathing vapors or mist. See Section 8: Exposure Controls/Personal Protection for more details.

**Environmental Precautions:** N/A

**Emergency Procedures:** Evacuate personnel to safe areas and follow emergency response protocols.

**Methods and material for containment and cleaning up:** Use inert absorbent material to soak up spill.

SECTION 7 — HANDLING AND STORAGE

**Precautions for Safe Handling:** Handle in accordance with good chemical hygiene and safety practices. Protect from moisture. Avoid contact with skin and eyes. Avoid inhalation of vapors or mist.

**Conditions for safe storage:** Keep container tightly closed in a dry, well-ventilated place.

**Incompatible Products:** N/A

SECTION 8 — EXPOSURE CONTROL / PERSONAL PROTECTION

**Appropriate Engineering Controls:** Adequate ventilation and access to eye washing stations are required.

**Personal protective equipment:**

- **Hand Protection:** Use gloves when handling this product. Inspect gloves prior to use for any visible damage.
- **Eye Protection:** Wear a face shield and/or safety goggles when handling this product. Use NIOSH-approved eyewear.
- **Skin and Body Protection:** Wear appropriate laboratory attire when handling this product, such as gloves, long pants, closed-toe shoes, and a laboratory coat.
- **Respiratory Protection:** If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level, an approved respirator must be used.
- **Hygiene Measures:** Avoid contact with eyes, skin, and clothing. Wash hands thoroughly after using this product. Do not eat, drink, or smoke when handling this product.

**Special Requirements for PPE, Clothing, Respirators, etc:** N/A

**Components with Workplace Control Parameters:** N/A
Product Title: EB-AGEK Elution Buffer

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Appearance:
- Form: Liquid
- Color: Colorless
- Odor: No data available
- Odor threshold: No data available
- pH-value at 20 °C (68 °F): 8.0-9.0
- Melting point/Melting range: No data available
- Boiling point/Boiling range: No data available
- Flash point: No data available
- Flammability (solid, gaseous): No data available
- Ignition temperature: No data available
- Decomposition temperature: No data available
- Auto igniting: No data available
- Danger of explosion: No data available
- Explosion limits:
  - Lower: No data available
  - Upper: No data available
- Vapor pressure at 20 °C (68 °F): No data available
- Density at 20 °C (68 °F): No data available
- Relative density: No data available
- Vapour density: No data available
- Evaporation rate: No data available
- Solubility in / Miscibility with Water: No data available
- Partition coefficient (n-octanol/water): No data available
- Viscosity: No data available
- Dynamic: No data available
- Kinematic: No data available
- Solvent content: No data available
- Organic Solvents: No data available
- Water: No data available
- Solids content: No data available
- Other information: No data available

SECTION 10 — STABILITY AND REACTIVITY

Reactivity: No dangerous reactions known under conditions of normal use.
- Chemical stability: Stable under recommended storage conditions.
- Possibility of hazardous reactions: No data available.
- Conditions to avoid: No data available.
- Incompatible materials: No data available
- Hazardous decomposition products: No data available
SECTION 11 — TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure:
- Inhalation: No data available.
- Ingestion: No data available.
- Skin: No data available.
- Eyes: No data available.

Information on toxicological effects:
**Acute toxicity**
- Oral LD50: No data available
- Inhalation LD50: No data available
- Dermal LD50: No data available
- Other: Peritoneal LD50: No data available

**Skin corrosion/irritation:** No data available

**Serious eye damage/irritation:** No data available

**Respiratory or skin sensitization:** No data available

**Germ cell mutagenicity:** No data available

**Carcinogenicity**
- IARC: No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by IARC.
- ACGIH: No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by ACGIH.
- OSHA: No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by OSHA.
- NTP: No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by NTP.

**Reproductive Toxicity:** No data available

**Teratogenicity:** No data available.

**Specific Target Organ Toxicity – Single Exposure:** No data available.

**Aspiration Hazard:** No data available.

**Signs and symptoms of exposure:** No data available.

**Synergistic effects:** No data available.

**Additional information:** No data available.

SECTION 12 — ECOLOGICAL INFORMATION

**Toxicity:** No data available

**Persistence and degradability:** No data available

**Bioaccumulative potential:** No data available

**Mobility in soil:** No data available

**Results of PBT and vPvB assessment:**
- PBT: No data available
- vPvB: No data available

**Other adverse effects** No data available.

SECTION 13 — DISPOSAL CONSIDERATIONS

**Product:** Disposal should be in accordance with applicable regional, national and local laws and regulations. S29 – Do not empty into drains. S57 – Use appropriate container to avoid environmental contamination. Refer to Section 7: Handling and Storage and Section 8: Exposure Control/Personal Protection for additional handling information and protection of employees.

**Contamination packaging:** Disposal must be made according to official regulations. To minimize exposure, please refer to Section 8: Exposure Control/Personal Protection of this SDS.
SECTION 14 — TRANSPORT INFORMATION

DOT: Not considered dangerous goods
IMDG: Not considered dangerous goods
IATA: Not considered dangerous goods

SECTION 15 — REGULATORY INFORMATION

US Federal Regulations
- OSHA Hazards: No data available.
- Aggravated Medical Conditions: No data available.
- Symptoms of Overexposure:
  - Inhalation: No data available.
  - Skin: No data available.
  - Eyes: No data available.
- Ingestion: No data available.
- SARA 302 Components: None present or none present in regulated quantities.
- SARA 313 Components: None present or none present in regulated quantities.
- SARA 311/312 Hazards: No data available.

US State Regulation:
- California Prop. 65: No ingredients regulated by CA Prop 65 present.
- New Jersey & Community RTK: Component (Water); CAS No (7732-18-5)
- Massachusetts RTK: No ingredients regulated by MS Right to Know Act present.
- Pennsylvania RTK: Component (Water); CAS No (7732-18-5)
- Rhode Island RTK: No ingredients regulated by RI Right to Know Act present

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 MSDS
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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
- CAS: Chemical Abstracts Service (division of the American Chemical Society)
- NFPA: National Fire Protection Association (USA)
- HMIS: Hazardous Materials Identification System (USA)
- LC50: Lethal concentration, 50 percent
- LD50: Lethal dose, 50

* Data compared to the previous version altered.