Revision Date: 08/20/2020

SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

1.1 Product Identifiers

<table>
<thead>
<tr>
<th>Catalog Number</th>
<th>Product Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>BP658 component 24351C</td>
<td>BioMag® ProMax Albumin Removal Kit (Elution buffer)</td>
</tr>
</tbody>
</table>

1.2 Relevant identified uses of substance or mixture and uses advised against

Identified uses: Lab use

1.3 Details of the supplier of the safety data sheet

Company: Bangs Laboratories / A Division of Polysciences
9025 Technology Drive
Fishers, Indiana 46038
USA
Telephone: 800-387-0672

1.4 Emergency telephone number

Emergency Phone: 317-348-1673

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

GHS Classification:
- Acute toxicity, Oral (Category 4), H302
- Eye irritation (Category 2A), H319
- Acute aquatic toxicity (Category 2), H401
- Chronic aquatic toxicity (Category 2), H411

Signal word: Warning

Pictogram:

Hazardous substance or mixture according to Regulation (EU) No. 1272/2008.
Hazardous substance or mixture according to EC-directives 67/548/EEC or 1999/45/EC.

Hazard Statement(s)

H302 Harmful if swallowed.
H319 Causes serious eye irritation.
H411 Toxic to aquatic life with long lasting effects.
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P273 Avoid release to the environment.
P280 Wear eye protection/ face protection.
P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell. Rinse mouth.
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.
P391 Collect spillage.
P501 Dispose of contents/ container to an approved waste disposal plant.
2.2 **Hazard Ratings:** These ratings are Bangs Laboratories, Inc.’s own assessments of the properties of the material using the ANSI/ NFPA 704 Standard. Additional information can be found by consulting in the NFPA published ratings lists (List 325 and List 49). If no data is listed, the information is not available.

<table>
<thead>
<tr>
<th>Health</th>
<th>Flammability</th>
<th>Reactivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

**SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS**

<table>
<thead>
<tr>
<th>Item#</th>
<th>Name</th>
<th>CAS #</th>
<th>% in Product</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Proprietary buffer</td>
<td>Proprietary</td>
<td>97.35</td>
</tr>
<tr>
<td>2</td>
<td>Ammonium chloride</td>
<td>012125029</td>
<td>2.65</td>
</tr>
</tbody>
</table>

**SECTION 4: FIRST AID MEASURES**

**General advice:** Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

**Eyes:** In case of contact, immediately flush eyes with copious amounts of water for at least 15 minutes.

**Skin:** In case of contact, immediately wash skin with copious amounts of water for at least 15 minutes.

**Ingestion:** Contact physician immediately.

**Inhalation:** Remove to fresh air if effects occur. Consult medical personnel.

**Systemic:** Human effects not established. No specific antidote. Treatment based on sound judgment of physician and the individual reactions of the patient.

**SECTION 5: FIRE FIGHTING MEASURES**

5.1 **Extinguishing Media:** Not applicable

5.2 **Special hazards arising from the substance or mixture:** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.3 **Advice for firefighters:** Wear self-contained breathing apparatus for firefighting if necessary.

5.4 **Further Information:** No data available

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

6.1 **Personal precautions, protective equipment and emergency procedures:** Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Avoid breathing dust.

6.2 **Environmental Precautions:** Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

6.3 **Methods and materials for containment and cleaning up:** Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4 **Reference to other sections:** For disposal see section 13.

**SECTION 7: HANDLING AND STORAGE**

7.1 **Precautions for safe handling**

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs.

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No.</th>
<th>Value</th>
<th>Control parameters</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonium chloride</td>
<td>12125029</td>
<td>TWA</td>
<td>10.000000 mg/m³</td>
<td>USA. ACGIH Threshold Limit Values (TLV)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Remarks</th>
<th>Value</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye &amp; Upper Respiratory Tract irritation</td>
<td>20.000000 mg/m³</td>
<td>USA. ACGIH Threshold Limit Values (TLV)</td>
</tr>
<tr>
<td>STEL</td>
<td>10.000000 mg/m³</td>
<td>USA. NIOSH Recommended Exposure Limits</td>
</tr>
<tr>
<td>TWA</td>
<td>20.000000 mg/m³</td>
<td>USA. ACGIH Threshold Limit Values (TLV)</td>
</tr>
<tr>
<td>ST</td>
<td>10.000000 mg/m³</td>
<td>USA. NIOSH Recommended Exposure Limits</td>
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<td>TWA</td>
<td>20.000000 mg/m³</td>
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</tr>
<tr>
<td>ST</td>
<td>10.000000 mg/m³</td>
<td>USA. NIOSH Recommended Exposure Limits</td>
</tr>
</tbody>
</table>

Provide appropriate exhaust ventilation at places where dust is formed.

7.2 **Conditions for safe storage, including any incompatibilities**

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

8.1 Control parameters

8.2 Exposure Controls: Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided. The use of eye protection in the form of safety glasses with side shields and the use of skin protection for hands in the form of gloves are considered minimum and non-discretionary in work places and laboratories. Any recommended personal protection equipment or environmental equipment is to be considered as additional to safety glasses and gloves. Chemical-resistant gloves should be worn whenever this material is handled. The glove material has to be impermeable and resistant to the product. Gloves should be removed and replaced immediately if there is any indication of degradation or chemical breakthrough. Rinse and remove gloves immediately after use. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash hands with soap and water. All glove recommendations presume that the risk of exposure is through splash and not internal immersion of the hands into the product. Since glove permeation data does not exist for this material, no recommendation for the glove material can be given for the product. Permeation data must be obtained from the glove manufacturer to determine if the glove is suitable for the task.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Boiling Point: 100°C / 212°F
Solubility: complete
Appearance: clear colorless liquid

9.2 Other safety information: None

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity: No data available

10.2 Chemical Stability: Stable under recommended storage conditions

10.3 Possibility of hazardous reactions: No data available

10.4 Conditions to avoid: Exposure to moisture may affect product quality.

10.5 Incompatible materials: Strong acids, Strong bases, Strong oxidizing agents.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects: Acute toxicity: LD50 Oral-Rat-1,650 mg/kg Serious eye damage/eye irritation: Eyes - Rabbit Result: Eye irritation Additional Information: RTECS: BP4550000

SECTION 12: ECOLOGICAL INFORMATION

Toxicity to fish: LC50-Cyprinus carpio (Carp) - 209.00 mg/l - 96 h LC50-Oncorhynchus mykiss (rainbow trout) - 3.98 mg/l - 96 h NOEC: Oncorhynchus mykiss (rainbow trout) - 57 mg/l - 48 h Growth inhibition NOEC: Daphnia magna (Water flea) - 0.1 mg/l - 216 h

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Toxic to aquatic life.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods: The following chart lists the status of the chemical and its components in reference to 40 CFR Part 261.33. If the product is listed by code number, the substance may be subject to special federal and state disposal regulations. If no codes are listed, the material must be disposed of in compliance with all Federal, State, and Local Regulations. Bangs Laboratories disposes of polymer-based microparticles through our standard chemical waste disposal program, which is performed by a licensed provider in a safe, compliant, and environmentally-conscious manner.

<table>
<thead>
<tr>
<th>CAS #</th>
<th>Waste Code</th>
<th>Regulated Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>012125029</td>
<td>not listed</td>
<td>not listed</td>
</tr>
</tbody>
</table>

SECTION 14: TRANSPORT INFORMATION

Refer to bill of lading or container label for DOT or other transportation hazard classification, if any.

SECTION 15: REGULATORY INFORMATION

All components of this product are on the TSCA public inventory.

Prop 65: Column A identifies those items which are known to the State of California to cause cancer. Column B identifies those which are known to the State of California to cause reproductive toxicity.

<table>
<thead>
<tr>
<th>CAS #</th>
<th>Column A</th>
<th>Column B</th>
</tr>
</thead>
<tbody>
<tr>
<td>012125029</td>
<td>no</td>
<td>no</td>
</tr>
</tbody>
</table>
**SARA Toxic Release Chemicals** *(as defined in Section 313 of SARA Title III):* This list identifies the toxic chemicals, including their de minimis concentrations for which reporting is required under Section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA). This list is also referred to as the Toxic Release Inventory (TRI) List.

<table>
<thead>
<tr>
<th>CAS #</th>
<th>Regulated Name</th>
<th>de minimis conc %</th>
<th>Rep. Thres.</th>
</tr>
</thead>
<tbody>
<tr>
<td>012125029</td>
<td>not listed</td>
<td>not listed</td>
<td>not listed</td>
</tr>
</tbody>
</table>

**SARA Extremely Hazardous Substances and TPQs:** This list identifies hazardous substances regulated under Section 302 of SARA Title III with their TPQs (in pounds), as listed in 40 CFR 355, Appendices A and B.

<table>
<thead>
<tr>
<th>CAS #</th>
<th>Regulated Name</th>
<th>TPQ (pounds)</th>
<th>EHS-RQ (pounds)</th>
</tr>
</thead>
<tbody>
<tr>
<td>012125029</td>
<td>not listed</td>
<td>not listed</td>
<td>not listed</td>
</tr>
</tbody>
</table>

**SECTION 16: OTHER INFORMATION**

BANGS LABORATORIES, INC. provides the information contained herein in good faith, but makes no representation as to its comprehensiveness or accuracy. Individuals receiving this information must exercise their independent judgment in determining its appropriateness for a particular purpose.

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Preparation Information:
Bangs Laboratories, Inc.
1-800-387-0672

**END OF SDS**