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>MFY0002</td>
<td>Magnefy™ - Carboxyl</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: Non-Hazardous

Pictogram: NONE

Not a hazardous substance or mixture according to Regulation (EU) No. 1272/2008.
Not a hazardous substance or mixture according to EC-directives 67/548/EEC or 1999/45/EC.

Hazard Statement(s)

- H000 Low hazard for normal industrial use
- P302+P352 IF ON SKIN: Wash with plenty of soap and water.
- P305B IF IN EYES: Separate eyelids with fingertips.
- P313 Get medical advice/attention
- H313 May be harmful in contact with skin
- H320 Causes eye irritation
- H335 May cause respiratory irritation
- P351 Rinse cautiously with water for several minutes.

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>1</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>Water</td>
<td>007732185</td>
<td>&lt;95</td>
</tr>
<tr>
<td>2</td>
<td>Solid polymer microspheres composed of:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Proprietary polymer</td>
<td>Proprietary</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Iron Oxide (Fe₃O₄)</td>
<td>001317619</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Sodium azide (NaN₃)</td>
<td>026628228</td>
<td>0.05</td>
</tr>
</tbody>
</table>
SECTION 4: FIRST AID MEASURES

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

**Skin:** May cause irritation. May be harmful in contact with skin. In case of contact, immediately wash skin with copious amounts of water for at least 15 minutes.

**Ingestion:** Contact physician immediately. May be harmful if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

**Inhalation:** Remove to fresh air if effects occur. Consult medical personnel. May cause irritation of respiratory tract. May be harmful if inhaled.

**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:** Suspended material is not flammable. Sodium azide is known to form explosive compounds when it is combined with metal halides and many heavy metals, such as lead, copper, gold, & silver.

5.3 **Advice for firefighters:** Not applicable

5.4 **Further Information:** No data available

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 **Personal precautions, protective equipment and emergency procedures**

Any information given below is considered to be in addition to internal guidelines for isolation of spill, containment of spill, removal of ignition source from immediate area, and collection for disposal of spill by trained, properly protected clean up personnel. Wear vinyl gloves, soak up spill in paper toweling, and rinse area with water. Put all generated waste into an approved container and dispose of as waste. Observe all applicable federal, state, and local disposal laws.

6.2 **Environmental Precautions:** Should not be released into the environment

6.3 **Methods and materials for containment and cleaning up:** Soak up with inert absorbent material. Keep in suitable and closed containers for disposal. Do not flush down the drain. Sodium azide may react with plumbing systems to form highly explosive compounds.

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

SECTION 7: HANDLING AND STORAGE

7.1 **Precautions for safe handling**

Ensure adequate ventilation. Wear personal protective equipment. Do not breathe vapors or spray mist. Do not get in eyes, on skin, or on clothing. Do not flush down the drain. Sodium azide may react with plumbing systems to form highly explosive compounds.

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

Ventilation: Good room ventilation is adequate for most operations.

Respiratory Protection: None normally needed. In cases where there is a likelihood of inhalation exposure to dried particles, wear a NIOSH-approved dust respirator.


SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

8.1 **Control parameters:** Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.

Respiratory Protection: None normally needed.

Wash / Hygienic Practices: Wash with soap and water when leaving work area and before eating, smoking, and using restroom facilities.

8.2 **Exposure Controls:** None Indicated

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. 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
- **Density (particles):** No Information Available
- **Solubility:** dispersible in water
- **Appearance:** brown liquid suspension that may stratify

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: Product may irreversibly aggregate if frozen. Avoid excess heat.
10.5 Incompatible materials: No dangerous reaction known under conditions of normal use.
10.6 Hazardous decomposition products: Do not flush down the drain. Sodium azide may react with plumbing systems to form highly explosive compounds. Sodium azide is known to form explosive compounds when it is combined with metal halides and many heavy metals, such as lead, copper, gold, & silver.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects: To the best of our knowledge, the chemical, physical, and toxic properties of this product have not been thoroughly investigated. Sodium azide is known to be highly toxic.

Acute Effects: Sodium azide may result in eye and skin irritation. Ingestion may result in nausea, headache, and vomiting.
Chronic Effects: Sodium azide can cause cancer, or alter genetic material. Target organs include heart, nerves, and brain.

SECTION 12: ECOLOGICAL INFORMATION

No Data

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>007732185</td>
<td>not listed</td>
<td>not listed</td>
</tr>
<tr>
<td>001317619</td>
<td>not listed</td>
<td>not listed</td>
</tr>
<tr>
<td>026628228</td>
<td>P105</td>
<td>Sodium azide</td>
</tr>
</tbody>
</table>

SECTION 14: TRANSPORT INFORMATION

DOT - Not dangerous goods
IMDG - Not dangerous goods
IATA - Not dangerous goods

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>007732185</td>
<td>no</td>
<td>no</td>
</tr>
<tr>
<td>001317619</td>
<td>no</td>
<td>no</td>
</tr>
<tr>
<td>026628228</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>007732185</td>
<td>not listed</td>
<td>not listed</td>
<td>not listed</td>
</tr>
<tr>
<td>001317619</td>
<td>not listed</td>
<td>not listed</td>
<td>not listed</td>
</tr>
<tr>
<td>026628228</td>
<td>Sodium azide</td>
<td>1.0</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>007732185</td>
<td>not listed</td>
<td>not listed</td>
<td>not listed</td>
</tr>
<tr>
<td>001317619</td>
<td>not listed</td>
<td>not listed</td>
<td>not listed</td>
</tr>
<tr>
<td>026628228</td>
<td>Sodium azide (NaN₃)</td>
<td>500</td>
<td>1,000</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