1 Identification

- Product identifier
  - Trade name: AGAR, POWDER, BACTERIOLOGICAL GRADE
  - Article number: 10200, 10202
  - CAS Number: 9002-18-0
  - EC number: 232-658-1
- Application of the substance / the mixture: Laboratory chemicals

- Details of the supplier of the safety data sheet
  - Manufacturer/Supplier: Electron Microscopy Sciences
    1560 Industry Road
    USA-Hatfield, PA 19440
    Tel: 215-412-8400  Fax: 215-412-8450
    email: info@emsdiasum.com
    www.emsdiasum.com
  - Information department: Product safety department
  - Emergency telephone number:
    ChemTrec 1-800-424-9300 Contract CCN7661
    1-703-527-3887

2 Hazard(s) identification

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

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

(Contd. on page 2)
Trade name: AGAR, POWDER, BACTERIOLOGICAL GRADE

3 Composition/information on ingredients

- Chemical characterization: Substances
- CAS No. Description
  9002-18-0 Agar
- Identification number(s)
- EC number: 232-658-1

4 First-aid measures

- Description of first aid measures
- General information:
  Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
  No special measures required.
- After inhalation:
  Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.
  In case of unconsciousness place patient stably in side position for transportation.
- 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:
  Immediately call a doctor.
- Information for doctor:
  Most important symptoms and effects, both acute and delayed
  No further relevant information available.
  Indication of any immediate medical attention and special treatment needed
  No further relevant information available.

5 Fire-fighting measures

- Extinguishing media
- Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- Special hazards arising from the substance or mixture
  No further relevant information available.
- Advice for firefighters
- Protective equipment: Mouth respiratory protective device.

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures
  Not required.
- Environmental precautions: No special measures required.
- Methods and material for containment and cleaning up:
  Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
  Dispose contaminated material as waste according to item 13.
  Ensure adequate ventilation.
- 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:
  Substance is not listed.
Trade name: AGAR, POWDER, BACTERIOLOGICAL GRADE

7 Handling and storage

- Handling:
  - Precautions for safe handling
    No special measures required.
    Ensure good ventilation/exhaustion at the workplace.
    Prevent formation of aerosols.
  - 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 item 7.
  - Control parameters
  - Components with limit values that require monitoring at the workplace: Not required.
  - 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.
    - Breathing equipment:
      In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
    - 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.
    - Penetration time of glove material
      The exact breakthrough time has to be found out by the manufacturer of the protective gloves and has to be observed.
  - Eye protection: Goggles recommended during refilling.
9 Physical and chemical properties

- Information on basic physical and chemical properties
  - General Information
    - Appearance:
      - Form: Powder
      - Color: Whitish
    - Odor:
      - Odor: Odorless
      - Odor threshold: Not determined.
    - pH-value: Not determined.
  - Change in condition
    - Melting point/Melting range: Undetermined.
    - Boiling point/Boiling range: Undetermined.
  - Flash point: Not applicable.
  - Flammability (solid, gaseous): Not flammable.
  - Decomposition temperature: Not determined.
  - Auto igniting: Not determined.
  - Danger of explosion: Product does not present an explosion hazard.
  - Explosion limits:
    - Lower: Not determined.
    - Upper: Not determined.
  - Vapor pressure: Not determined.
  - Density at 20 °C (68 °F): 0.55 g/cm³ (4.59875 lbs/gal)
  - Bulk density: 550 kg/m³
  - Relative density: Not determined.
  - Vapor density: Not determined.
  - Evaporation rate: Not determined.
  - Solubility in / Miscibility with Water at 60 °C (140 °F): 20 g/l
  - Partition coefficient (n-octanol/water): Not determined.
  - Viscosity:
    - Dynamic: Not determined.
    - Kinematic: Not determined.
    - VOC content: 0.00 %
    - VOC g/l / VOC lb/gal: 0.01 g/l / 0.01 lb/gal
  - Solids content: 0.0 %
  - 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.

(Contd. on page 5)
11 Toxicological information

- Information on toxicological effects
- Acute toxicity:
  - LD/LC50 values that are relevant for classification:
    9002-18-0 Agar
    Oral LD50 11,000 mg/kg (rat)

- Primary irritant effect:
  - on the skin: No irritant effect.
  - on the eye: No irritating effect.

- Sensitization: No sensitizing effects known.

- Additional toxicological information:
  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.
  The substance is not subject to classification.

- Carcinogenic categories
  - IARC (International Agency for Research on Cancer)
    Substance is not listed.
  - NTP (National Toxicology Program)
    Substance is not listed.
  - OSHA-Ca (Occupational Safety Health Administration)
    Substance is not 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.
### 14 Transport information

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>UN-Number</strong></td>
<td>Void</td>
</tr>
<tr>
<td>DOT, ADR, IMDG, IATA</td>
<td></td>
</tr>
<tr>
<td><strong>UN proper shipping name</strong></td>
<td>Void</td>
</tr>
<tr>
<td>DOT, ADR, IMDG, IATA</td>
<td></td>
</tr>
<tr>
<td><strong>Transport hazard class(es)</strong></td>
<td>Void</td>
</tr>
<tr>
<td>DOT, ADR, ADN, IMDG, IATA</td>
<td></td>
</tr>
<tr>
<td><strong>Class</strong></td>
<td>Void</td>
</tr>
<tr>
<td>DOT, ADR, IMDG, IATA</td>
<td></td>
</tr>
<tr>
<td><strong>Environmental hazards</strong></td>
<td>Not applicable.</td>
</tr>
<tr>
<td><strong>Special precautions for user</strong></td>
<td>Not applicable.</td>
</tr>
<tr>
<td><strong>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</strong></td>
<td>Not applicable.</td>
</tr>
<tr>
<td><strong>UN &quot;Model Regulation&quot;</strong></td>
<td>Void</td>
</tr>
</tbody>
</table>

### 15 Regulatory information

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Safety, health and environmental regulations/legislation specific for the substance or mixture</strong></td>
<td>No further relevant information available.</td>
</tr>
<tr>
<td><strong>Sara</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Section 355 (extremely hazardous substances):</strong></td>
<td>Substance is not listed.</td>
</tr>
<tr>
<td><strong>Section 313 (Specific toxic chemical listings):</strong></td>
<td>Substance is not listed.</td>
</tr>
<tr>
<td><strong>TSCA (Toxic Substances Control Act):</strong></td>
<td>ACTIVE</td>
</tr>
<tr>
<td><strong>Hazardous Air Pollutants</strong></td>
<td>Substance is not listed.</td>
</tr>
<tr>
<td><strong>Proposition 65</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Chemicals known to cause cancer:</strong></td>
<td>Substance is not listed.</td>
</tr>
<tr>
<td><strong>Chemicals known to cause reproductive toxicity for females:</strong></td>
<td>Substance is not listed.</td>
</tr>
<tr>
<td><strong>Chemicals known to cause reproductive toxicity for males:</strong></td>
<td>Substance is not listed.</td>
</tr>
<tr>
<td><strong>Chemicals known to cause developmental toxicity:</strong></td>
<td>Substance is not listed.</td>
</tr>
</tbody>
</table>
Safety Data Sheet  
acc. to OSHA HCS

Printing date 11/15/2022  
Reviewed on 11/15/2022

**Trade name: AGAR, POWDER, BACTERIOLOGICAL GRADE**

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<tr>
<td>· EPA (Environmental Protection Agency)</td>
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<td>Substance is not listed.</td>
</tr>
<tr>
<td>· TLV (Threshold Limit Value)</td>
</tr>
<tr>
<td>Substance is not listed.</td>
</tr>
<tr>
<td>· NIOSH-Ca (National Institute for Occupational Safety and Health)</td>
</tr>
<tr>
<td>Substance is not listed.</td>
</tr>
</tbody>
</table>

| · GHS label elements Void                     |
| · Hazard pictograms Void                      |
| · Signal word Void                            |
| · Hazard statements Void                      |
| · Chemical safety assessment: A Chemical Safety Assessment has not been carried out. |

### 16 Other information

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

| · Contact:                                    |
| · Date of preparation / last revision 11/15/2022 / - |

| · 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 |
| 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)     |
| LC50: Lethal concentration, 50 percent        |
| LD50: Lethal dose, 50 percent                 |
| 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               |