1 Identification

- **Product identifier**
  - **Trade name:** POLYETHYLENE GLYCOL 1450
  - **Article number:** 19750
  - **CAS Number:** 25322-68-3
  - **NLP Number:** 500-038-2

- **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**
  - Eye Irritation 2B H320 Causes eye irritation.

- **Label elements**
  - **GHS label elements** The substance is classified and labeled according to the Globally Harmonized System (GHS).
  - **Hazard pictograms** Void
  - **Signal word** Warning

- **Hazard statements**
  - Causes eye irritation.

- **Precautionary statements**
  - Wash thoroughly after handling.
  - Wear protective gloves/protective clothing/eye protection/face protection.
  - **IF INHALED:** Remove person to fresh air and keep comfortable for breathing.
  - **If in eyes:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  - Store in a dry place. Store in a closed container.

- **Classification system**

- **NFPA ratings (scale 0 - 4)**
  - Health = 1
  - Fire = 1
  - Reactivity = 0

- **HMIS-ratings (scale 0 - 4)**
  - HEALTH 1
  - FIRE 1
  - REACTIVITY 0

(Contd. on page 2)
### 3 Composition/information on ingredients

- Chemical characterization: Substances
- CAS No. Description
  - 25322-68-3 Polyethylene glycol
- Identification number(s)
- NLP Number: 500-038-2

### 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:
  - If symptoms persist consult 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: No special measures required.

### 6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures: Not required.
- Environmental precautions: Do not allow to enter sewers/surface or ground water.
- Methods and material for containment and cleaning up: Pick up mechanically.
- 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: 30 mg/m³
  - PAC-2: 1,300 mg/m³
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 item 7.

· Control parameters
  · Components with limit values that require monitoring at the workplace:

<table>
<thead>
<tr>
<th>Code</th>
<th>Component</th>
<th>Long-term value (mg/m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>25322-68-3 Polyethylene glycol</td>
<td>10</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Code</th>
<th>Component</th>
<th>Long-term value (mg/m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>WEEL</td>
<td>Polyethylene glycol (H); MW&gt;200</td>
<td>10</td>
</tr>
</tbody>
</table>

· 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.
      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.

· Breathing equipment: 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.

· 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.
### 9 Physical and chemical properties

**Information on basic physical and chemical properties**
- **General Information**
  - **Appearance:**
    - **Form:** Flakes
    - **Color:** White
  - **Odor:** Mild
  - **Odor threshold:** Not determined.
- **pH-value:** Not applicable.

**Change in condition**
- Melting point/Melting range: Undetermined.
- Boiling point/Boiling range: Undetermined.

**Flammability (solid, gaseous):** Product is 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 applicable.

- **Density at 20 °C (68 °F):** 1.2 g/cm³ (10.014 lbs/gal)
- **Relative density** Not determined.
- **Vapor density** Not applicable.
- **Evaporation rate** Not applicable.

**Solubility in / Miscibility with**
- **Water:** Soluble.

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

**Viscosity:**
- **Dynamic:** Not applicable.
- **Kinematic:** Not applicable.
- **VOC content:** 0.00 %
- **Solids content:** 100.0 %

**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: Irritating effect.
  - Sensitization: No sensitizing effects known.
- Additional toxicological information:
  - 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:
      Water hazard class 1 (Assessment by list): slightly hazardous for water
      Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
    - 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

- **UN-Number**
  - DOT, ADR, IMDG, IATA: Void

- **UN proper shipping name**
  - DOT, ADR, IMDG, IATA: Void

- **Transport hazard class(es)**
  - DOT, ADR, ADN, IMDG, IATA: Void

- **Packing group**
  - DOT, ADR, IMDG, IATA: Void

- **Environmental hazards:**
  - Not applicable.

- **Special precautions for user**
  - Not applicable.

- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**
  - Not applicable.

- **UN "Model Regulation":**
  - Void

### 15 Regulatory information

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

- **Sara**

- **Section 355 (extremely hazardous substances):**
  - Substance is not listed.

- **Section 313 (Specific toxic chemical listings):**
  - Substance is not listed.

- **TSCA (Toxic Substances Control Act):**
  - ACTIVE

- **Hazardous Air Pollutants**
  - Substance is not listed.

- **Proposition 65**

- **Chemicals known to cause cancer:**
  - Substance is not listed.

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Trade name: POLYETHYLENE GLYCOL 1450

- Chemicals known to cause reproductive toxicity for females:
  Substance is not listed.

- Chemicals known to cause reproductive toxicity for males:
  Substance is not listed.

- Chemicals known to cause developmental toxicity:
  Substance is not listed.

- Carcinogenic categories
  Substance is not listed.

- EPA (Environmental Protection Agency)
  Substance is not listed.

- TLV (Threshold Limit Value)
  Substance is not listed.

- NIOSH-Ca (National Institute for Occupational Safety and Health)
  Substance is not listed.

- GHS label elements
  The substance is classified and labeled according to the Globally Harmonized System (GHS).
  - Hazard pictograms: Void
  - Signal word: Warning
  - Hazard statements:
    Causes eye irritation.

- Precautionary statements
  Wash thoroughly after handling.
  Wear protective gloves/protective clothing/eye protection/face protection.
  IF INHALED: Remove person to fresh air and keep comfortable for breathing.
  If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
  Continue rinsing.
  Store in a dry place. Store in a closed container.

- 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 02/07/2023
- 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
  CAS: Chemical Abstracts Service (division of the American Chemical Society)
  NFFA: 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
  Eye Irritation 2B: Serious eye damage/eye irritation – Category 2B