1. Specification of substance / mixture and company

Trade name / description: Stop solution for recomWell

Identified use: Laboratory chemicals

Details of the supplier providing the safety data sheet

- **Company name:**
  Mikrogen GmbH
  Floriansbogen 2-4
  82061 Neuried, Germany

- **Informing entity / telephone no.:**
  Tel.: +49(0)89 - 54801-118
  Fax.: +49(0)89 – 54801-100
  E-mail: hendmeier@mikrogen.de
  Responsible for this SDS: Ms Sonja Hendmeier

- **EMERGENCY NUMBER:**
  Munich Poison Control Centre: +49(0)89 – 19240

2. Possible hazards

- **Classification in accordance with Regulation (EC) No. 1272/2008 [CLP]:**
  Category 2, H315
  Category 2, H319

- **Identifying elements:**

<table>
<thead>
<tr>
<th>Hazard pictogram</th>
<th>Signal word</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Exclamation Mark" /></td>
<td>Caution</td>
</tr>
</tbody>
</table>

- **Hazard-determining components for labelling:**
  Phosphoric acid

- **Hazard warnings:**
  H 315, Category 2: Causes severe skin irritation
  H 319, Category 2: Causes severe eye irritation
3. Composition/details of the components

- Description: Watery solution
- Ingredient:

<table>
<thead>
<tr>
<th>CAS No.</th>
<th>EC No.</th>
<th>% [Mass]</th>
<th>Name</th>
<th>Classification in accordance with Regulation (EC) No. 1272/2008 [CLP]</th>
</tr>
</thead>
<tbody>
<tr>
<td>7664-38-2</td>
<td>&lt; 25 %</td>
<td>Phosphoric acid</td>
<td>Category 1B H314; Category 1 H290</td>
<td></td>
</tr>
</tbody>
</table>

4. First aid measures

- General information:
  Immediately remove items of clothing contaminated with product.

- After inhalation:
  Go into fresh air; if short of breath, call a doctor.

- After skin contact:
  Rinse with plenty of water. Contact a doctor if skin irritation persists.

- After eye contact:
  Rinse opened eyes with plenty of water. Consult an ophthalmologist.

- After swallowing:
  Rinse mouth out and drink water. Consult a doctor.

- Most important acute and delayed-onset symptoms and effects
  Gastrointestinal problems
  Diarrhoea

5. Fire-fighting procedures

- Suitable extinguishing agent:
  The product itself does not burn, adapt fire extinguishing measures to nearby fire.

- Special hazards due to substance or mixture:
  In the event of a fire, the release of hazardous combustion gases and vapours is possible.
  In the event of a fire, the following may be released:
  Carbon monoxide and carbon dioxide

6. Accidental release measures

- Personal precautions:
  Do not inhale fumes.
  Wear respirator mask, safety goggles, galoshes, rubber gloves.
• **Environmental precautions:**
  Do not empty into drains / surface water / groundwater.

• **Methods and material for containment and cleaning up**
  Cleaning measures:
  Mechanically pick up.
  Make sure the room is well-ventilated and then clean.

7. **Handling and storage**

• **Handling**
  Safe handling:
  No special measures necessary if handled and stored correctly.

• **Protection against fire and explosion:**
  The accumulation of fine dust can lead to the risk of dust explosion in the presence of air.

• **Storage**
  Requirements for storage rooms and containers:
  Seal opened containers carefully and store upright to prevent any leakage.

• **Combined storage:**
  None known.

• **Further information about storage conditions:**
  No special measures necessary.

• **Recommended storage temperature:**
  Value +15°C - +25°C

8. **Exposure limitation and controls/personal protection**

• **Preventative medical examinations for the workplace should be made available.**

• **Parameters to be monitored**
  Components with limit values that require monitoring in the workplace:
  7664-38-2 phosphoric acid

<table>
<thead>
<tr>
<th>AGW (Germany)</th>
<th>Long-term value: 2 E mg/m³ 2(l):DFG, EU, AGS, Y</th>
</tr>
</thead>
<tbody>
<tr>
<td>IOELV (European Union)</td>
<td>Short-term value: 2 mg/m³</td>
</tr>
<tr>
<td></td>
<td>Long-term value: 1 mg/m³</td>
</tr>
</tbody>
</table>

**Additional information:**
The lists applicable at the time of production were used.

• **Personal protective clothing:**
  Wear personal protective clothing.

• **Respiratory protection:**
  No special protection necessary.

• **Gloves:**
  Protective gloves (DIN EN 455): The protective gloves should, in all cases, be checked for their workplace-specific suitability (e.g. mechanical resistance, product compatibility, anti-static properties). Follow the instructions and information from the protective glove manufacturer concerning the use, storage, maintenance and replacement of gloves. If damaged or showing initial wear marks, the protective gloves
should be replaced immediately. Arrange work processes in such a way that the gloves need not be worn continuously.

<table>
<thead>
<tr>
<th>Suitable material</th>
<th>Nitrile</th>
<th>Suitable material</th>
<th>Latex</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material thickness</td>
<td>0.4 mm</td>
<td>Material thickness</td>
<td>0.4 mm</td>
</tr>
<tr>
<td>Penetration time</td>
<td>&gt; 120 min.</td>
<td>Penetration time</td>
<td>&gt;120 min.</td>
</tr>
</tbody>
</table>

- **Eye protection:**
  Safety goggles (DIN EN 166)

- **Body protection:**
  Standard laboratory work clothing

- **General protective and hygiene measures:**
  - Do not smoke, eat or drink when working.
  - Keep away from food and drink.
  - Wash hands before breaks and after work.
  - Avoid contact with eyes and skin.
  - Immediately remove soiled or soaked clothing.

### 9. Physical and chemical properties

**General information:**

- **Appearance:**
  - Form: Liquid
  - Colour: Colourless
- **Smell:** Odourless
- **Odour threshold:** Not determined
- **pH value:** Not determined
- **State changes**
  - Melting point / melting range: Not determined
  - Boiling point / boiling range: Not determined
- **Flash point:** Not suitable
- **Flammability (solid, gaseous):** Not suitable
- **Ignition temperature:** Not determined
- **Decomposition temperature:** Not determined
- **Self-ignition:** The product does not self-ignite.
- **Risk of explosion:** The product is not an explosion risk.
- **Explosion limits:**
  - Lower: Not determined
  - Upper: Not determined
- **Vapour pressure at 20°C:** 23 hPA
- **Density:** Not determined
- **Relative density:** Not determined
- **Vapour density:** Not determined
- **Evaporation rate:** Not determined
- **Solubility in / miscibility with water:** Completely miscible
- **Distribution coefficient (n-octanol/water):** Not determined

### 10. Stability and reactivity

- **Conditions to avoid:**
  Strong heating
Substances to avoid:
Various metals

Possible hazardous reactions
Strong reactions possible with:
Strong bases
Reaction with metals forming hydrogen (explosion hazard)
When diluting, add the acid to water, never the other way round.

Hazardous decomposition products:
In the event of a fire:
In the event of a fire, the release of hazardous combustion gases and vapours is possible.
In the event of a fire, the following may be released:
Carbon monoxide and carbon dioxide
No hazardous decomposition products known.

11. Toxicological information

Classification-relevant LD/LC50 values:

<table>
<thead>
<tr>
<th></th>
<th>7664-38-2 phosphoric acid</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral LD₅₀</td>
<td>1530 mg/kg (rat)</td>
<td>Anhydrous substance</td>
</tr>
<tr>
<td>Dermal LD₅₀</td>
<td>2740 mg/kg (rabbits)</td>
<td>Anhydrous substance</td>
</tr>
</tbody>
</table>

Irritation

- Irritation to the skin
  Assessment Irritating

- Irritation to the eye
  Assessment Highly irritating

- Sensitisation
  Assessment No information available

- Irritation to the airways
  Assessment Irritating

Practical experience
May cause sensitisation through contact with the skin.

CMR effects:

- Germ cell mutagenicity:
  No particular effects or hazards known.

- Carcinogenicity:
  No particular effects or hazards known.

- Reproduction toxicity:
  No particular effects or hazards known.

- Aspiration hazard:
  No classification in relation to aspiration toxicity.

Specific end organ toxicity following single exposure:
The substance or mixture is not classified as end organ toxic following single exposure.

Specific end organ toxicity following repeated exposure:
The substance or mixture is not classified as end organ toxic following repeated exposure.
Additional toxicological information:
- After swallowing: Burns the mouth, throat, oesophagus and gastrointestinal tract. Risk of perforation.
- After eye contact: Eye damage
- Blindness
- After inhalation: Shortness of breath
- Lung damage.
- Pulmonary oedema
- Latency time until onset of effect.

Further information:
The product must be handled with the care required for chemicals.

12. Environmental information

The mixture is not classified in the hazard class "Hazardous to the Aquatic Environment".

13. Disposal considerations

- **Product:** The allocation of a waste code number must be made in accordance with the European Waste Catalogue (AVV - Waste List Ordinance) in consultation with the regional disposer.

- **Packaging:** Disposal in accordance with official regulations.

14. Transport information

Not subject to transport regulations according to ADR, RID, IATA and IMDG.

15. Regulatory information

- Regulations regarding safety, health and environmental protection / specific legal provisions for the material or mixture
- National regulations:
- **Information about limitation of use:** Note the limitations of use for young persons in accordance with Section 22 JArbSchG.
- **Hazardous Incidents Ordinance:**
- **Classification according to VbF:** Not applicable
- **Water hazard class:** Not hazardous to water
- **Chemical safety assessment:** No chemical safety assessment has been carried out.

16. Other information

Further information

- The information is based upon our present knowledge. It is intended to describe our products in terms of safety requirements, but does not represent any undertaking as regards product quality, nor does it constitute any contractual legal obligation.

- **Section issuing the data sheet:** Department of Occupational Safety and Environmental Protection
• **Contact**: Ms Hendlmeier

• **Abbreviations and acronyms**:  
  - RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)  
  - ICAO: International Civil Aviation Organization  
  - 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  
  - IATA: International Air Transport Association  
  - GHS: Globally Harmonized System of Classification and Labelling of Chemicals  
  - EINECS: European Inventory of Existing Commercial Chemical Substances  
  - CAS: Chemical Abstracts Service (division of the American Chemical Society)  
  - VbF: Verordnung über brennbare Flüssigkeiten, Österreich (Ordinance on the storage of combustible liquids, Austria)  
  - LC50: Lethal concentration, 50 per cent  
  - LD50: Lethal dose, 50 per cent  
  - LD50*: Lethal dose, 50 per cent (not relevant to classification)  
  - LC50*: Lethal concentration, 50 per cent (not relevant to classification)  
  - H315, category 2, irritation to the skin.  
  - H319, category 2, severe eye damage/irritation.  
  - H314, category 1 B, causes severe burning of the skin and severe eye damage.  
  - H290, category 1, may be corrosive to metals.