SECTION 1 Identification of the Substance/Mixture and of the Company/Undertaking

Product identifiers
Product name: Penicillin/Streptomycin (100x)
Cat. No.: PS-B

Relevant identified uses of the substance or mixture and uses advised against
For research use only. Not intended for human or animal diagnostic or therapeutic uses.

Details of the supplier of the safety data sheet
Company: Capricorn Scientific GmbH
Auf der Lette 13 A
35085 Ebsdorfergrund
Germany
Phone: +49 6424 94464 0
E-Mail: info@capricorn-scientific.com

Emergency telephone number
Emergency Phone: During Office Time +49 6424 94464 0.

SECTION 2 Hazards Identification

The product is classified and labelled in accordance with Directive 1999/45/EC.

GHS-Classification
Signal word: Warning

Health Hazard
Skin corrosion/irritation Category 2
Serious eye damage/eye irritation Category 2B
Skin sensitisation Category 1

Physical Hazard
Not hazardous.

Hazard statements
H315 - Causes skin irritation
H317 - May cause an allergic skin reaction
H320 - Causes eye irritation
H335 - May cause respiratory irritation
Precautionary statements
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water.  
P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention.  
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.  
P304 + P340 - IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.  
P312 - Call a POISON CENTRE or doctor/physician if you feel unwell.  
P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.  
P271 - Use only outdoors or in a well-ventilated area.  
P280 - Wear protective gloves/protective clothing/eye protection/face protection.  
P264 - Wash hands thoroughly after handling. 

European Union

EU Specific Hazard Statements
R-phrase(s)
R36/37/38 - Irritating to eyes, respiratory system and skin.  
R43 - May cause sensitization by skin contact.

S-phrase(s)
S24/25 - Avoid contact with skin and eyes.  
S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
S36/37 - Wear suitable protective clothing and gloves.

Principle Routes of Exposure/Potential Health effects
Eyes: Irritating to eyes.  
Skin: May cause sensitisation by skin contact. Irritating to skin.  
Inhalation: May cause irritation of respiratory tract.  
Ingestion: May be harmful if swallowed.

Specific effects
Carcinogenic effects: Not applicable.  
Mutagenic effects: Not applicable.  
Reproductive toxicity: Not applicable.  
Sensitisation: May cause sensitisation of susceptible persons.

SECTION 3 Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Hazardous ingredient</th>
<th>CAS #</th>
<th>EINECS #</th>
<th>Weight percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Streptomycin Sulfate</td>
<td>3810-74-0</td>
<td>223-286-0</td>
<td>0.5 – 1.5</td>
</tr>
</tbody>
</table>
We recommend handling all chemicals with caution.

**SECTION 4  First Aid Measures**

<table>
<thead>
<tr>
<th>Skin contact</th>
<th>Wash off immediately with plenty of water. If symptoms persist, call a physician.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye contact</td>
<td>Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>Never give anything by mouth to an unconscious person. If symptoms persist, call a physician.</td>
</tr>
<tr>
<td>Inhalation</td>
<td>Move to fresh air. If symptoms persist, call a physician.</td>
</tr>
<tr>
<td>Notes to physician</td>
<td>Treat symptomatically.</td>
</tr>
</tbody>
</table>

**SECTION 5  Firefighting Measures**

**Suitable extinguishing media**
Dry chemical.

**Special protective equipment for firefighters**
Wear self-contained breathing apparatus and protective suit.

**SECTION 6  Accidental Release Measures**

<table>
<thead>
<tr>
<th>Personal precautions</th>
<th>Use personal protective equipment.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methods for cleaning up</td>
<td>Soak up with inert absorbent material.</td>
</tr>
<tr>
<td>Environmental precautions</td>
<td>Prevent further leakage or spillage if safe to do so.</td>
</tr>
</tbody>
</table>

See Section 12 for additional information.

**SECTION 7  Handling and Storage**

**Handling**
Avoid contact with skin and eyes. Wear personal protective equipment.

**Storage**
Keep in a dry, cool and well-ventilated place. Keep in properly labelled containers. Recommended storage temperature: <-15°C.
SECTION 8 Exposure Controls/Personal Protection

Exposure limits
We are not aware of any national exposure limit.

Engineering measures
Ensure adequate ventilation, especially in confined areas.

Personal protective equipment
Personal Protective Equipment requirements are dependent on the user institution's risk assessment and are specific to the risk assessment for each laboratory where this material may be used.

Respiratory protection
In case of insufficient ventilation wear suitable respiratory equipment.

Hand protection
Impervious gloves.

Eye protection
Safety glasses with side-shields.

Skin and body protection
Lightweight protective clothing.

Hygiene measures
Handle in accordance with good industrial hygiene and safety practice.

Environmental exposure controls
Prevent product from entering drains.

SECTION 9 Physical and Chemical Properties

Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state at 20 °C:</td>
<td>Liquid</td>
</tr>
<tr>
<td>Color:</td>
<td>Colorless</td>
</tr>
<tr>
<td>Odor:</td>
<td>Odorless</td>
</tr>
<tr>
<td>pH:</td>
<td>5.8 – 7.0</td>
</tr>
<tr>
<td>Water solubility:</td>
<td>Soluble</td>
</tr>
</tbody>
</table>

Important Health Safety and Environmental Information

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boiling point/range °C</td>
<td>No data available.</td>
</tr>
<tr>
<td>Melting point/range °C</td>
<td>No data available.</td>
</tr>
<tr>
<td>Flash point °C</td>
<td>No data available.</td>
</tr>
<tr>
<td>Autoignition temperature °C</td>
<td>No data available.</td>
</tr>
<tr>
<td>Oxidising properties °C</td>
<td>No data available.</td>
</tr>
</tbody>
</table>

SECTION 10 Stability and Reactivity

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stability</td>
<td>Stable under normal conditions.</td>
</tr>
<tr>
<td>Materials to avoid</td>
<td>No information available.</td>
</tr>
<tr>
<td>Hazardous decomposition</td>
<td>No information available.</td>
</tr>
<tr>
<td>Polymerisation</td>
<td>Hazardous polymerisation does not occur.</td>
</tr>
</tbody>
</table>
SECTION 11  Toxicological Information

Acute toxicity

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>LD50 (oral, rat/mouse)</th>
<th>LD50 (dermal, rat/rabbit)</th>
<th>LC50 (inhalation, rat/mouse)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Streptomycin Sulfate</td>
<td>= 430 mg/kg (Rat)</td>
<td>No data available.</td>
<td>No data available.</td>
</tr>
<tr>
<td>Penicillin G Sodium Salt</td>
<td>= 6916 mg/kg (Rat)</td>
<td>No data available.</td>
<td>No data available.</td>
</tr>
</tbody>
</table>

Principle Routes of Exposure/Potential Health effects

Eyes: Irritating to eyes.
Skin: May cause sensitisation by skin contact. Irritating to skin.
Inhalation: May cause irritation of respiratory tract.
Ingestion: May be harmful if swallowed.
Carcinogenic effects: No information available.
Mutagenic effects: No information available.
Reproductive toxicity: No information available.
Sensitisation: May cause sensitisation of susceptible persons.

SECTION 12  Ecological Information

Ecotoxicity effects: No information available.
Mobility: No information available.
Biodegradation: No information available.
Bioaccumulation: No information available.

SECTION 13  Disposal Considerations

Dispose of in accordance with local regulations.

SECTION 14  Transport Information

IATA

<table>
<thead>
<tr>
<th>Proper shipping name</th>
<th>Not classified as dangerous in the meaning of transport regulations.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazard class</td>
<td>None.</td>
</tr>
<tr>
<td>Subsidiary Class</td>
<td>None.</td>
</tr>
<tr>
<td>Packing group</td>
<td>None.</td>
</tr>
<tr>
<td>UN-No</td>
<td>None.</td>
</tr>
</tbody>
</table>

SECTION 15  Regulatory Information

International Inventories
Safety Data Sheet
Penicillin/Streptomycin (100x)

According to Regulation (EC) No. 1907/2006 (REACH)
Revision Date: 04.02.2014
Print Date: 19.08.2014

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>EINECS</th>
<th>ELINCS</th>
<th>ENCS</th>
<th>PICCS</th>
<th>AICS</th>
<th>KECL</th>
<th>DSL</th>
<th>NDSL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Streptomycin Sulfate</td>
<td>Listed</td>
<td>–</td>
<td>–</td>
<td>Listed</td>
<td>Listed</td>
<td>Listed</td>
<td>Listed</td>
<td>–</td>
</tr>
<tr>
<td>Penicillin G Sodium Salt</td>
<td>Listed</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>Listed</td>
<td>Listed</td>
<td>Listed</td>
<td>–</td>
</tr>
</tbody>
</table>

SECTION 16  Other Information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product.