SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name: Benzylpenicillin / Streptomycin Sulphate / Procaine Hydrochloride / Piroxicam Liquid Formulation

Manufacturer or supplier’s details
Company: MSD
Address: Rua Coronel Bento Soares, 530 Cruzeiro - Sao Paulo - Brazil CEP 12730-340
Telephone: 908-740-4000
Emergency telephone: 1-908-423-6000
E-mail address: EHSDATASTEWARD@msd.com
Telefax: 908-735-1496

Recommended use of the chemical and restrictions on use
Recommended use: Veterinary product

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification in accordance with ABNT NBR 14725 Standard
Acute toxicity (Oral): Category 5
Eye irritation: Category 2B
Respiratory sensitization: Category 1
Skin sensitization: Category 1
Reproductive toxicity: Category 1A
Specific target organ toxicity - single exposure: Category 1 (Nervous system, Heart)
Specific target organ toxicity - repeated exposure: Category 1 (Kidney, inner ear, Gastrointestinal tract)
Short-term (acute) aquatic hazard: Category 1
Long-term (chronic) aquatic hazard: Category 1
SAFETY DATA SHEET

Benzylpenicillin / Streptomycin Sulphate / Procaine Hydrochloride / Piroxicam Liquid Formulation

GHS label elements in accordance with ABNT NBR 14725 Standard

Hazard pictograms:

Signal Word: Danger

Hazard Statements:
H303 May be harmful if swallowed.
H317 May cause an allergic skin reaction.
H320 Causes eye irritation.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H360 May damage fertility or the unborn child.
H370 Causes damage to organs (Nervous system, Heart).
H372 Causes damage to organs (Kidney, inner ear, Gastrointestinal tract) through prolonged or repeated exposure.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statements:
Prevention:
P201 Obtain special instructions before use.
P273 Avoid release to the environment.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:
P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P308 + P311 IF exposed or concerned: Call a POISON CENTER/doctor.
P391 Collect spillage.

Additional Labeling

The following percentage of the mixture consists of ingredient(s) with unknown hazards to the aquatic environment: 3%

Other hazards which do not result in classification
None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture: Mixture

Components

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS-No.</th>
<th>Classification</th>
<th>Concentration (% w/w)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6-(2-Phenylacetamido)penicillanic acid</td>
<td>61-33-6</td>
<td>Respiratory sensitization, Sub-category 1A</td>
<td>&gt;= 10 &lt;- 20</td>
</tr>
</tbody>
</table>
# SAFETY DATA SHEET

## Benzylpenicillin / Streptomycin Sulphate / Procaine Hydrochloride / Piroxicam Liquid Formulation

<table>
<thead>
<tr>
<th>Version</th>
<th>Revision Date</th>
<th>SDS Number</th>
<th>Date of last issue</th>
<th>Date of first issue</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.3</td>
<td>08/14/2019</td>
<td>2449588-00009</td>
<td>19.02.2019</td>
<td>13.02.2018</td>
</tr>
</tbody>
</table>

### SECTION 4. FIRST AID MEASURES

**General advice:** In the case of accident or if you feel unwell, seek medical attention immediately.

<table>
<thead>
<tr>
<th>Substance</th>
<th>Category</th>
<th>Acute Toxicity</th>
<th>Reproductive Toxicity</th>
<th>Specific Target Organ Toxicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Streptomycin sulphate</td>
<td>Category 1</td>
<td>Acute toxicity (Oral), Category 4</td>
<td>Eye irritation, Category 2B</td>
<td>Skin sensitization, Sub-category 1B</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Reproductive toxicity, Category 1A</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Specific target organ toxicity - repeated exposure (Kidney, inner ear), Category 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Short-term (acute) aquatic hazard, Category 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Long-term (chronic) aquatic hazard, Category 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&gt;= 10 - &lt; 20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Procaine hydrochloride</td>
<td>Category 3</td>
<td>Acute toxicity (Oral), Category 3</td>
<td>Eye irritation, Category 2B</td>
<td>Skin sensitization, Category 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Reproductive toxicity, Category 1A</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Specific target organ toxicity - single exposure (Nervous system, Heart), Category 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&gt;= 1 - &lt; 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Piroxicam</td>
<td>Category 3</td>
<td>Acute toxicity (Oral), Category 3</td>
<td>Reproductive toxicity, Category 2</td>
<td>Specific target organ toxicity - repeated exposure (Gastrointestinal tract), Category 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>&gt;= 1 - &lt; 5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
advice immediately.  
When symptoms persist or in all cases of doubt seek medical advice.

If inhaled :  If inhaled, remove to fresh air.  
If not breathing, give artificial respiration.  
If breathing is difficult, give oxygen.  
Get medical attention.

In case of skin contact :  In case of contact, immediately flush skin with soap and plenty of water.  
Remove contaminated clothing and shoes.  
Get medical attention.  
Wash clothing before reuse.  
Thoroughly clean shoes before reuse.

In case of eye contact :  In case of contact, immediately flush eyes with plenty of water for at least 15 minutes.  
If easy to do, remove contact lens, if worn.  
Get medical attention.

If swallowed :  If swallowed, DO NOT induce vomiting.  
Get medical attention.  
Rinse mouth thoroughly with water.  
Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed :  May be harmful if swallowed.  
May cause an allergic skin reaction.  
Causes eye irritation.  
May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
May damage fertility or the unborn child.  
Causes damage to organs.  
Causes damage to organs through prolonged or repeated exposure.  
Excessive exposure may aggravate preexisting asthma and other respiratory disorders (e.g. emphysema, bronchitis, reactive Airways Dysfunction Syndrome).

Protection of first-aiders :  First Aid responders should pay attention to self-protection, and use the recommended personal protective equipment when the potential for exposure exists (see section 8).

Notes to physician :  Treat symptomatically and supportively.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media :  Water spray  
Alcohol-resistant foam  
Carbon dioxide (CO2)  
Dry chemical

Unsuitable extinguishing media :  None known.

Specific hazards during fire fighting :  Exposure to combustion products may be a hazard to health.

Hazardous combustion products :  Carbon oxides  
Nitrogen oxides (NOx)  
Sulfur oxides  
Oxides of phosphorus
Metal oxides

Specific extinguishing methods: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use water spray to cool unopened containers. Remove undamaged containers from fire area if it is safe to do so. Evacuate area.

Special protective equipment for fire-fighters: In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: Use personal protective equipment. Follow safe handling advice and personal protective equipment recommendations.

Environmental precautions: Discharge into the environment must be avoided. Prevent further leakage or spillage if safe to do so. Prevent spreading over a wide area (e.g., by containment or oil barriers). Retain and dispose of contaminated wash water. Local authorities should be advised if significant spillages cannot be contained.

Methods and materials for containment and cleaning up: Soak up with inert absorbent material. For large spills, provide diking or other appropriate containment to keep material from spreading. If diked material can be pumped, store recovered material in appropriate container. Clean up remaining materials from spill with suitable absorbent. Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which regulations are applicable. Sections 13 and 15 of this SDS provide information regarding certain local or national requirements.

SECTION 7. HANDLING AND STORAGE

Technical measures: See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.

Local/Total ventilation: If sufficient ventilation is unavailable, use with local exhaust ventilation.

Advice on safe handling: Do not get on skin or clothing. Do not breathe vapors or spray mist. Do not swallow. Do not get in eyes. Handle in accordance with good industrial hygiene and safety practice, based on the results of the workplace exposure assessment.
Keep container tightly closed.
Already sensitized individuals should consult their physician regarding working with respiratory irritants or sensitizers.
Take care to prevent spills, waste and minimize release to the environment.

Hygiene measures: If exposure to chemical is likely during typical use, provide eye flushing systems and safety showers close to the working place.
When using do not eat, drink or smoke.
Wash contaminated clothing before re-use.
The effective operation of a facility should include review of engineering controls, proper personal protective equipment, appropriate degowning and decontamination procedures, industrial hygiene monitoring, medical surveillance and the use of administrative controls.

Conditions for safe storage: Keep in properly labeled containers.
Store locked up.
Keep tightly closed.
Store in accordance with the particular national regulations.

Materials to avoid: Do not store with the following product types:
Strong oxidizing agents
Organic peroxides
Explosives
Gases

SECTION 8. EXPOSURE CONTROLS/PERSO NAL PROTECTION

Ingredients with workplace control parameters

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Value type (Form of exposure)</th>
<th>Control parameters / Permissible concentration</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>6-(2-Phenylacetamido)penicillanic acid</td>
<td>61-33-6</td>
<td>TWA</td>
<td>2000 µg/m³ (OEB 1)</td>
<td>Internal</td>
</tr>
<tr>
<td>Streptomycin sulphate</td>
<td>3810-74-0</td>
<td>TWA</td>
<td>OEB 2 (&gt;= 100 &lt; 1,000 µg/m³)</td>
<td>Internal</td>
</tr>
<tr>
<td>Procaine hydrochloride</td>
<td>51-05-8</td>
<td>TWA</td>
<td>60 µg/m³ (OEB 3)</td>
<td>Internal</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wipe limit</td>
<td>600 µg/100 cm²</td>
<td>Internal</td>
</tr>
<tr>
<td>Piroxicam</td>
<td>36322-90-4</td>
<td>TWA</td>
<td>100 µg/m³ (OEB 3)</td>
<td>Internal</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wipe limit</td>
<td>700 µg/100 cm²</td>
<td>Internal</td>
</tr>
</tbody>
</table>

Engineering measures: Use appropriate engineering controls and manufacturing technologies to control airborne concentrations (e.g., dripless quick connections).
All engineering controls should be implemented by facility design and operated in accordance with GMP principles to protect products, workers, and the environment.
SAFETY DATA SHEET

Benzylpenicillin / Streptomycin Sulphate / Procaine Hydrochloride / Piroxicam Liquid Formulation

Laboratory operations do not require special containment.

Personal protective equipment

Respiratory protection: If adequate local exhaust ventilation is not available or exposure assessment demonstrates exposures outside the recommended guidelines, use respiratory protection.

Filter type: Particulates type

Hand protection Material: Chemical-resistant gloves

Eye protection: Wear safety glasses with side shields or goggles. If the work environment or activity involves dusty conditions, mists or aerosols, wear the appropriate goggles. Wear a faceshield or other full face protection if there is a potential for direct contact to the face with dusts, mists, or aerosols.

Skin and body protection: Work uniform or laboratory coat.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: liquid

Color: No data available

Odor: No data available

Odor Threshold: No data available

pH: No data available

Melting point/freezing point: No data available

Initial boiling point and boiling range: No data available

Flash point: No data available

Evaporation rate: No data available

Flammability (solid, gas): Not applicable

Flammability (liquids): No data available

Upper explosion limit / Upper flammability limit: No data available

Lower explosion limit / Lower flammability limit: No data available

Vapor pressure: No data available

Relative vapor density: No data available
Relative density: No data available
Density: No data available
Solubility(ies):
  Water solubility: No data available
Partition coefficient: n-octanol/water: Not applicable
Autoignition temperature: No data available
Decomposition temperature: No data available
Viscosity:
  Viscosity, kinematic: No data available
Explosive properties: Not explosive
Oxidizing properties: The substance or mixture is not classified as oxidizing.
Molecular weight: No data available
Particle size: Not applicable

SECTION 10. STABILITY AND REACTIVITY
Reactivity: Not classified as a reactivity hazard.
Chemical stability: Stable under normal conditions.
Possibility of hazardous reactions: Can react with strong oxidizing agents.
Conditions to avoid: None known.
Incompatible materials: Oxidizing agents
Hazardous decomposition products: No hazardous decomposition products are known.

SECTION 11. TOXICOLOGICAL INFORMATION
Information on likely routes of exposure:
  Inhalation
  Skin contact
  Ingestion
  Eye contact

Acute toxicity:
May be harmful if swallowed.

Product:
Acute oral toxicity: Acute toxicity estimate: 2.447 mg/kg
Method: Calculation method
Components:

6-(2-Phenylacetamido)penicillanic acid:
Acute oral toxicity: LD50 (Rat): 8.000 mg/kg
LD50 (Mouse): > 5.000 mg/kg

Acute toxicity (other routes of administration):
LD50 (Mouse): 3.500 mg/kg
Application Route: Intraperitoneal
LD50 (Mouse): 329 mg/kg
Application Route: Intravenous

Streptomycin sulphate:
Acute oral toxicity:
LD50 (Hamster): 400 mg/kg
LD50 (Rat): 430 mg/kg
LD50 (Mouse): 25.000 mg/kg

Acute toxicity (other routes of administration):
LD50 (Mouse): 85 - 111 mg/kg
Application Route: Intravenous
LD50 (Mouse): 575 - 610 mg/kg
Application Route: Intraperitoneal
LD50 (Mouse): 500 - 600 mg/kg
Application Route: Subcutaneous
TDLo (Dog): 220 - 440 mg/kg
Application Route: Intravenous
Symptoms: Lowered blood pressure
LDLo (Monkey): 110 mg/kg
Application Route: Intravenous
TDLo (Monkey): 30 - 70 mg/kg
Application Route: Subcutaneous
Symptoms: respiratory depression

Procaine hydrochloride:
Acute oral toxicity:
LD50 (Rat): 200 mg/kg
LD50 (Mouse): 350 mg/kg

Acute toxicity (other routes of administration):
LD50 (Rat): 43 mg/kg
Application Route: Intravenous
LD50 (Mouse): 33 mg/kg
Application Route: Intravenous
LD50 (Dog): 33 mg/kg
Application Route: Intravenous

**Piroxicam:**
Acute oral toxicity : LD50 (Rat): 216 mg/kg
LD50 (Dog): 108 mg/kg
LD50 (Hamster): 170 mg/kg
LD50 (Guinea pig): 388 mg/kg
LD50 (Monkey): 1.000 mg/kg
Acute dermal toxicity : LD50 (Rat): > 5.000 mg/kg

**Skin corrosion/irritation**
Not classified based on available information.

**Serious eye damage/eye irritation**
Causes eye irritation.

**Components:**

**Streptomycin sulphate:**
Result : Mild eye irritation

**Procaine hydrochloride:**
Result : Moderate eye irritation

**Respiratory or skin sensitization**

**Skin sensitization**
May cause an allergic skin reaction.

**Respiratory sensitization**
May cause allergy or asthma symptoms or breathing difficulties if inhaled.

**Components:**

6-(2-Phenylacetamido)penicillanic acid:
Test Type : Local lymph node assay (LLNA)
Routes of exposure : Dermal
Species : Mouse
Result : Weak sensitizer
Remarks : Maximization Test
Species : Guinea pig
Result : positive
Remarks : Based on data from similar materials
SAFETY DATA SHEET

Benzylpenicillin / Streptomycin Sulphate / Procaine Hydrochloride / Piroxicam Liquid Formulation

Version 4.3  Revision Date: 08/14/2019  SDS Number: 2449588-00009  Date of last issue: 19.02.2019  Date of first issue: 13.02.2018

Remarks: Strong sensitizer
Based on human experience.

Streptomycin sulphate:
Test Type: Human repeat insult patch test (HRIPT)
Routes of exposure: Dermal
Species: Humans
Result: Weak sensitizer

Procaine hydrochloride:
Routes of exposure: Dermal
Result: Sensitizer
Remarks: Based on human experience.
Based on data from similar materials

Germ cell mutagenicity
Not classified based on available information.

Components:

6-(2-Phenylacetamido)penicillanic acid:
Germ cell mutagenicity - Assessment: Weight of evidence does not support classification as a germ cell mutagen.

Streptomycin sulphate:
Genotoxicity in vitro: Test Type: Chromosomal aberration
Result: equivocal
Genotoxicity in vivo: Test Type: Chromosomal aberration
Cell type: Human lymphocytes
Result: negative

Procaine hydrochloride:
Genotoxicity in vitro: Test Type: Bacterial reverse mutation assay (AMES)
Result: equivocal

Piroxicam:
Genotoxicity in vivo: Test Type: sister chromatid exchange assay
Species: Humans
Cell type: Human lymphocytes
Result: negative

Carcinogenicity
Not classified based on available information.
SAFETY DATA SHEET

Benzylpenicillin / Streptomycin Sulphate / Procaine Hydrochloride / Piroxicam Liquid Formulation

Components:

Streptomycin sulphate:
Species: Rat
Application Route: Oral
NOAEL: 5 mg/kg body weight
Result: negative

Carcinogenicity - Assessment: Weight of evidence does not support classification as a carcinogen

Reproductive toxicity
May damage fertility or the unborn child.

Components:

6-(2-Phenylacetamido)penicillanic acid:
Effects on fertility: Test Type: Fertility
Species: Mouse
Result: No effects on fertility.

Test Type: Fertility
Species: Rat
Result: No effects on fertility.

Test Type: Fertility
Species: Rabbit
Result: No effects on fertility.

Effects on fetal development: Test Type: Development
Species: Mouse
Result: No effects on fetal development.

Test Type: Development
Species: Rat
Result: No effects on fetal development.

Test Type: Development
Species: Rabbit
Result: No effects on fetal development.

Streptomycin sulphate:
Effects on fertility: Test Type: Fertility
Species: Rat
Application Route: Intraperitoneal
Fertility: LOAEL: 40 mg/kg body weight
Symptoms: male reproductive effects

Effects on fetal development: Test Type: Development
Species: Mouse
Application Route: Intraperitoneal
Developmental Toxicity: LOAEL: 250 mg/kg body weight
Symptoms: fetal deafness, Embryo-fetal toxicity.

Test Type: Development
Species: Rabbit
Application Route: Oral
Developmental Toxicity: NOAEL: 10 mg/kg body weight
Result: No teratogenic effects.

Reproductive toxicity - Assessment: May damage the unborn child.

**Procaine hydrochloride:**
Reproductive toxicity - Assessment: May damage the unborn child.

**Piroxicam:**
Effects on fetal development: Test Type: Development
Species: Rat
Application Route: Oral
Developmental Toxicity: LOAEL: 10 mg/kg body weight
Result: Embryo-fetal toxicity., No teratogenic effects., Fetal growth retardation

Test Type: Development
Species: Rat
Application Route: Oral
Developmental Toxicity: LOAEL: 30 mg/kg body weight
Symptoms: Fetal mortality. Result: Embryo-fetal toxicity., No teratogenic effects., Fetal growth retardation
Remarks: Maternal toxicity observed.

Test Type: Development
Species: Rat
Application Route: Oral
Developmental Toxicity: LOAEL: 0,4 - 4 mg/kg body weight
Result: Effects on fetal development.

Test Type: Development
Species: Rabbit
Application Route: Oral
Developmental Toxicity: NOAEL: 10 mg/kg body weight
Result: No embryo-fetal toxicity.

Reproductive toxicity - Assessment: Suspected of damaging the unborn child.

**STOT-single exposure**
Causes damage to organs (Nervous system, Heart).
Components:

**Procaine hydrochloride:**
- **Target Organs**: Nervous system, Heart
- **Assessment**: Causes damage to organs.

**STOT-repeated exposure**
Causes damage to organs (Kidney, inner ear, Gastrointestinal tract) through prolonged or repeated exposure.

**Components:**

**Streptomycin sulphate:**
- **Target Organs**: Kidney, inner ear
- **Assessment**: Causes damage to organs through prolonged or repeated exposure.

**Piroxicam:**
- **Target Organs**: Gastrointestinal tract
- **Assessment**: Causes damage to organs through prolonged or repeated exposure.

**Repeated dose toxicity**

**Components:**

**Streptomycin sulphate:**
- **Species**: Rat
  - **NOAEL**: 100 mg/kg
  - **Application Route**: Subcutaneous
  - **Exposure time**: 72 Days
  - **Remarks**: No significant adverse effects were reported

- **Species**: Cat
  - **LOAEL**: 200 mg/kg
  - **Application Route**: Oral
  - **Exposure time**: 90 Days
  - **Target Organs**: inner ear

- **Species**: Dog
  - **LOAEL**: 44 mg/kg
  - **Application Route**: Intramuscular
  - **Exposure time**: 14 Days
  - **Target Organs**: inner ear

- **Species**: Dog
  - **LOAEL**: 50 - 100 mg/kg
  - **Application Route**: Intramuscular
  - **Exposure time**: 20 Days
  - **Target Organs**: inner ear, Kidney
  - **Symptoms**: ataxia
SAFETY DATA SHEET

Benzylpenicillin / Streptomycin Sulphate / Procaine Hydrochloride / Piroxicam Liquid Formulation

Version 4.3 Revision Date: 08/14/2019 SDS Number: 2449588-00009 Date of last issue: 19.02.2019 Date of first issue: 13.02.2018

| Species | Monkey |
| NOAEL  | 50 mg/kg |
| LOAEL  | 100 mg/kg |
| Application Route | Intramuscular |
| Exposure time | 5 Days |
| Target Organs | Liver, Kidney |

| Species | Rat |
| NOAEL  | 5 mg/kg |
| Application Route | Oral |
| Exposure time | 2 y |
| Remarks | No significant adverse effects were reported |

| Species | Monkey |
| LOAEL  | 25 mg/kg |
| Application Route | Subcutaneous |
| Exposure time | 66 Days |
| Target Organs | Blood, Liver, Kidney |
| Symptoms | anemia |

**Aspiration toxicity**
Not classified based on available information.

**Experience with human exposure**

**Components:**

**6-(2-Phenylacetamido)penicillanic acid:**
Inhalation : Symptoms: Allergic reactions, Abdominal pain, bronchospasm, skin rash

**Streptomycin sulphate:**
Inhalation : Target Organs: inner ear
Symptoms: hearing loss
Target Organs: Kidney
Symptoms: hearing loss
Skin contact : Symptoms: skin rash

**Procaine hydrochloride:**
Inhalation : Target Organs: Central nervous system
Symptoms: nervousness, Dizziness, Convulsions, Breathing difficulties, Rash, Swelling of tissue, irregular heart beat
Remarks: May cause harm to the unborn child.
Based on clinical use
Target Organs: Heart
Symptoms: nervousness, Dizziness, Convulsions, Breathing difficulties, Rash, Swelling of tissue, irregular heart beat
Remarks: May cause harm to the unborn child.
Based on clinical use

**Piroxicam:**
Ingestion : Target Organs: Gastrointestinal tract
SAFETY DATA SHEET

Benzylpenicillin / Streptomycin Sulphate / Procaine Hydrochloride / Piroxicam Liquid Formulation

Symptoms: Diarrhea, constipation, flatulence, Headache, Dizziness, tinnitus, skin rash, Ulceration, chest pain, Abdominal pain

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

6-(2-Phenylacetamido)penicillanic acid:

<table>
<thead>
<tr>
<th></th>
<th>LC50 (Oryzias latipes (Japanese medaka)): 1.000 mg/l</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Exposure time: 96 hrs</td>
</tr>
<tr>
<td></td>
<td>Remarks: Based on data from similar materials</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>EC50 (Daphnia magna (Water flea)): &gt; 1.000 mg/l</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Exposure time: 48 hrs</td>
</tr>
<tr>
<td></td>
<td>Remarks: Based on data from similar materials</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>EC50 (Anabaena flos-aquae): 0.006 mg/l</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Exposure time: 96 hrs</td>
</tr>
<tr>
<td></td>
<td>Remarks: Based on data from similar materials</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>NOEC (Pseudokirchneriella subcapitata (green algae)): 100 mg/l</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Exposure time: 72 hrs</td>
</tr>
<tr>
<td></td>
<td>Remarks: Based on data from similar materials</td>
</tr>
</tbody>
</table>

M-Factor (Acute aquatic toxicity):

|                            | 100 |

M-Factor (Chronic aquatic toxicity):

|                            | 100 |

Streptomycin sulphate:

<table>
<thead>
<tr>
<th></th>
<th>EC50 (Daphnia magna (Water flea)): 487 mg/l</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Exposure time: 48 h</td>
</tr>
<tr>
<td></td>
<td>Method: OECD Test Guideline 202</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>EC50 (Microcystis aeruginosa (blue-green algae)): 0.007 mg/l</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Exposure time: 72 h</td>
</tr>
<tr>
<td></td>
<td>Method: ISO 8692</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>EC50 (Selenastrum capricornutum (green algae)): 0.133 mg/l</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Exposure time: 72 h</td>
</tr>
<tr>
<td></td>
<td>Method: OECD Test Guideline 201</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>NOEC (Daphnia magna (Water flea)): 32 mg/l</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Exposure time: 21 d</td>
</tr>
<tr>
<td></td>
<td>Method: OECD Test Guideline 211</td>
</tr>
</tbody>
</table>
SAFETY DATA SHEET

Benzylpenicillin / Streptomycin Sulphate / Procaine Hydrochloride / Piroxicam Liquid Formulation

Version 4.3  Revision Date: 08/14/2019  SDS Number: 2449588-00009  Date of last issue: 19.02.2019
Date of first issue: 13.02.2018

M-Factor (Chronic aquatic toxicity) : 100

**Procaine hydrochloride:**

Ecotoxicology Assessment
- Acute aquatic toxicity : Toxic effects cannot be excluded
- Chronic aquatic toxicity : Toxic effects cannot be excluded

**Piroxicam:**

Ecotoxicology Assessment
- Acute aquatic toxicity : Toxic effects cannot be excluded
- Chronic aquatic toxicity : Toxic effects cannot be excluded

**Persistence and degradability**

**Components:**

6-(2-Phenylacetamido)penicillanic acid:
- Biodegradability : Biodegradation: 27 %
  Exposure time: 28 d
  Method: OECD Test Guideline 301D
  Remarks: Not inherently biodegradable.
  Based on data from similar materials

**Bioaccumulative potential**

**Components:**

6-(2-Phenylacetamido)penicillanic acid:
- Partition coefficient: n-octanol/water : log Pow: 1,83

Streptomycin sulphate:
- Partition coefficient: n-octanol/water : log Pow: -3,2

Procaine hydrochloride:
- Partition coefficient: n-octanol/water : log Pow: 2,14

**Mobility in soil**
No data available

**Other adverse effects**
No data available
SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods
Waste from residues : Dispose of in accordance with local regulations.
Contaminated packaging : Empty containers should be taken to an approved waste handling site for recycling or disposal.
If not otherwise specified: Dispose of as unused product.

SECTION 14. TRANSPORT INFORMATION

International Regulations

UNRTDG
UN number : UN 3082
Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(6-(2-Phenylacetamido)penicillanic acid, Streptomycin sulphate)
Class : 9
Packing group : III
Labels : 9

IATA-DGR
UN/ID No. : UN 3082
Proper shipping name : Environmentally hazardous substance, liquid, n.o.s.
(6-(2-Phenylacetamido)penicillanic acid, Streptomycin sulphate)
Class : 9
Packing group : III
Labels : Miscellaneous
Packing instruction (cargo aircraft) : 964
Packing instruction (passenger aircraft) : 964
Environmentally hazardous : yes

IMDG-Code
UN number : UN 3082
Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(6-(2-Phenylacetamido)penicillanic acid, Streptomycin sulphate)
Class : 9
Packing group : III
Labels : 9
EmS Code : F-A, S-F
Marine pollutant : yes

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not applicable for product as supplied.

Domestic regulation
SAFETY DATA SHEET

Benzylpenicillin / Streptomycin Sulphate / Procaine Hydrochloride / Piroxicam Liquid Formulation

Version 4.3  Revision Date: 08/14/2019  SDS Number: 2449588-00009  Date of last issue: 19.02.2019

Date of first issue: 13.02.2018

ANTT
UN number : UN 3082
Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(6-(2-Phenylacetamido)penicillanic acid, Streptomycin sulphate)

Class : 9
Packing group : III
Labels : 9
Hazard Identification Number : 90

Special precautions for user
The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

SECTION 15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture
National List of Carcinogenic Agents for Humans - (LINACH) : Not applicable
Brazil. Ordinance No. 1274 on the control and monitoring of chemicals. : Procaine hydrochloride

International Regulations

The ingredients of this product are reported in the following inventories:
AICS : not determined
DSL : not determined
IECSC : not determined

SECTION 16. OTHER INFORMATION

Further information

Full text of other abbreviations
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provided relates only to the specific material identified at the top of this SDS and may not be valid when the SDS material is used in combination with any other materials or in any process, unless specified in the text. Material users should review the information and recommendations in the specific context of their intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the SDS material in the user’s end product, if applicable.

BR / Z8