SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Sulfadoxine / Trimethoprim 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
Serious eye damage : Category 1
Reproductive toxicity : Category 2
Specific target organ toxicity - repeated exposure : Category 2 (Bone marrow)
Short-term (acute) aquatic hazard : Category 3
Long-term (chronic) aquatic hazard : Category 3

GHS label elements in accordance with ABNT NBR 14725 Standard
Hazard pictograms : 
Signal Word : Danger
Hazard Statements : H318 Causes serious eye damage.
        H361d Suspected of damaging the unborn child.
        H373 May cause damage to organs (Bone marrow) through prolonged or repeated exposure.
        H412 Harmful 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:**
P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor.
P308 + P313 IF exposed or concerned: Get medical advice/ attention.

**Storage:**
P405 Store locked up.

Other hazards which do not result in classification
None known.

### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Substance / Mixture</th>
<th>Mixture</th>
</tr>
</thead>
</table>

#### 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>1,3-Dioxan-5-ol</td>
<td>4740-78-7</td>
<td>Flammable liquids, Category 4, Eye irritation, Category 2A</td>
<td>&gt;= 30 - &lt; 50</td>
</tr>
<tr>
<td>1,3-Dioxolan-4-ylmethanol</td>
<td>5464-28-8</td>
<td>Eye irritation, Category 2A</td>
<td>&gt;= 30 - &lt; 50</td>
</tr>
<tr>
<td>Sulfadoxine</td>
<td>2447-57-6</td>
<td>Skin irritation, Category 2, Eye irritation, Category 2A, Specific target organ toxicity - single exposure, Category 3, Short-term (acute) aquatic hazard, Category 2, Long-term (chronic) aquatic hazard, Category 2</td>
<td>&gt;= 10 - &lt; 20</td>
</tr>
<tr>
<td>Trimethoprim</td>
<td>738-70-5</td>
<td>Acute toxicity (Oral), Category 4, Reproductive toxicity, Category 2, Specific target organ</td>
<td>&gt;= 3 - &lt; 5</td>
</tr>
</tbody>
</table>
### SECTION 4. FIRST AID MEASURES

<table>
<thead>
<tr>
<th>General advice</th>
<th>In the case of accident or if you feel unwell, seek medical advice immediately. When symptoms persist or in all cases of doubt seek medical advice.</th>
</tr>
</thead>
<tbody>
<tr>
<td>If inhaled</td>
<td>If inhaled, remove to fresh air. Get medical attention.</td>
</tr>
<tr>
<td>In case of skin contact</td>
<td>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.</td>
</tr>
<tr>
<td>In case of eye contact</td>
<td>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 immediately.</td>
</tr>
<tr>
<td>If swallowed</td>
<td>If swallowed, DO NOT induce vomiting. Get medical attention. Rinse mouth thoroughly with water.</td>
</tr>
<tr>
<td>Most important symptoms and effects, both acute and delayed</td>
<td>Causes serious eye damage. Suspected of damaging the unborn child. Causes damage to organs through prolonged or repeated exposure.</td>
</tr>
<tr>
<td>Protection of first-aiders</td>
<td>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).</td>
</tr>
<tr>
<td>Notes to physician</td>
<td>Treat symptomatically and supportively.</td>
</tr>
</tbody>
</table>

### SECTION 5. FIRE-FIGHTING MEASURES

- **Suitable extinguishing media**
  - Water spray
  - Alcohol-resistant foam
  - Carbon dioxide (CO2)
Unsuitable extinguishing media : None known.

Specific hazards during firefighting:
Hazardous combustion products:
- Exposure to combustion products may be a hazard to health.
- Carbon oxides
- 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:
- Use only with adequate ventilation.

Advice on safe handling:
- Avoid inhalation of vapor or mist.
- Do not swallow.
- Do not get in eyes.
- Avoid prolonged or repeated contact with skin.
Handle in accordance with good industrial hygiene and safety practice, based on the results of the workplace exposure assessment.

Keep container tightly closed.

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/PERSONAL 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>Sulfadoxine</td>
<td>2447-57-6</td>
<td>TWA</td>
<td>40 µg/m³ (OEB 3)</td>
<td>Internal</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wipe limit</td>
<td>400 µg/100 cm²</td>
<td>Internal</td>
</tr>
<tr>
<td>trimethoprim</td>
<td>738-70-5</td>
<td>TWA</td>
<td>0.2 mg/m³ (OEB 2)</td>
<td>Internal</td>
</tr>
<tr>
<td>Sodium hydroxide</td>
<td>1310-73-2</td>
<td>C</td>
<td>2 mg/m³</td>
<td>ACGIH</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.

Containment technologies suitable for controlling compounds are required to control at source and to prevent migration of the compound to uncontrolled areas (e.g., open-face containment devices).

Minimize open handling.

**Personal protective equipment**

**Respiratory protection**:

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

Material: Chemical-resistant gloves

Remarks: Consider double gloving.
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.
Additional body garments should be used based upon the task being performed (e.g., sleevelets, apron, gauntlets, disposable suits) to avoid exposed skin surfaces.
Use appropriate degowning techniques to remove potentially contaminated clothing.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: liquid
Color: light brown, yellow
Odor: No data available
Odor Threshold: No data available
pH: 9.3 - 10.0
Melting point/freezing point: Not applicable
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 : 1,210 - 1,250 g/cm³
Solubility(ies)
  Water solubility : No data available
Partition coefficient: n-octanol/water : No data available
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 : Not applicable
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 reac-tions : Can react with strong oxidizing agents.
Conditions to avoid : None known.
Incompatible materials : Oxidizing agents
  Acids
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
Not classified based on available information.

**Product:**
Acute oral toxicity : Acute toxicity estimate: > 5,000 mg/kg
Method: Calculation method

**Components:**
1,3-Dioxan-5-ol:
### Acute oral toxicity
- **LD50 (Rat):** > 5.000 mg/kg

### Acute dermal toxicity
- **LD50 (Rat):** > 2.000 mg/kg
  - Remarks: Based on data from similar materials

#### 1,3-Dioxolan-4-ylmethanol:
- Acute oral toxicity: LD50 (Rat): > 5.000 mg/kg
- Acute dermal toxicity: LD50 (Rat): > 2.000 mg/kg
  - Remarks: Based on data from similar materials

#### Sulfadoxine:
- Acute oral toxicity: LD50 (Mouse): 5.200 mg/kg

#### Trimethoprim:
- Acute oral toxicity: LD50 (Rat): 1.500 - 5.300 mg/kg
  - LD50 (Mouse): 1.910 - 7.000 mg/kg
- Acute toxicity (other routes of administration):
  - LD50 (Rat): 400 - 500 mg/kg
  - Application Route: Intraperitoneal
  - LD50 (Dog): 90 mg/kg
  - Application Route: Intravenous
  - LD50 (Mouse): 132 mg/kg
  - Application Route: Intravenous

#### Sodium hydroxide:
- Acute inhalation toxicity: Assessment: Corrosive to the respiratory tract.

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

### Product:
- Result: No skin irritation

### Components:

#### 1,3-Dioxan-5-ol:
- **Species:** Rabbit
- **Method:** OECD Test Guideline 404
- **Result:** No skin irritation
- **Remarks:** Based on data from similar materials

#### 1,3-Dioxolan-4-ylmethanol:
- **Species:** Rabbit
- **Method:** OECD Test Guideline 404
- **Result:** No skin irritation
- **Remarks:** Based on data from similar materials
Sulfadoxine / Trimethoprim Formulation

**Sulfadoxine:**
- **Species:** Rabbit
- **Method:** OECD Test Guideline 404
- **Result:** irritating

**Sodium hydroxide:**
- **Result:** Corrosive after 3 minutes or less of exposure

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

**Components:**

1,3-Dioxan-5-ol:
- **Species:** Rabbit
- **Result:** Irritation to eyes, reversing within 21 days
- **Method:** OECD Test Guideline 405
- **Remarks:** Based on data from similar materials

1,3-Dioxolan-4-ylmethanol:
- **Species:** Rabbit
- **Result:** Irritation to eyes, reversing within 21 days
- **Method:** OECD Test Guideline 405
- **Remarks:** Based on data from similar materials

**Sulfadoxine:**
- **Result:** irritating

**Sodium hydroxide:**
- **Result:** Irreversible effects on the eye
- **Remarks:** Based on skin corrosivity.

**Respiratory or skin sensitization**

**Skin sensitization**
Not classified based on available information.

**Respiratory sensitization**
Not classified based on available information.

**Components:**

1,3-Dioxan-5-ol:
- **Test Type:** Maximization Test
- **Routes of exposure:** Skin contact
- **Species:** Guinea pig
- **Method:** OECD Test Guideline 406
- **Result:** negative
- **Remarks:** Based on data from similar materials
1,3-Dioxolan-4-ylmethanol:
- **Test Type**: Maximization Test
- **Routes of exposure**: Skin contact
- **Species**: Guinea pig
- **Method**: OECD Test Guideline 406
- **Result**: negative
- **Remarks**: Based on data from similar materials

**trimethoprim**:
- **Test Type**: Maximization Test
- **Routes of exposure**: Dermal
- **Species**: Guinea pig
- **Result**: Not a skin sensitizer.

**Sodium hydroxide**:
- **Test Type**: Human repeat insult patch test (HRIPT)
- **Routes of exposure**: Skin contact
- **Result**: negative

**Germ cell mutagenicity**
Not classified based on available information.

**Components**:

**1,3-Dioxan-5-ol**:
- **Genotoxicity in vitro**: Test Type: Bacterial reverse mutation assay (AMES)
  Result: negative
  Test Type: In vitro mammalian cell gene mutation test
  Result: negative

**1,3-Dioxolan-4-ylmethanol**:
- **Genotoxicity in vitro**: Test Type: Bacterial reverse mutation assay (AMES)
  Result: negative
  Test Type: In vitro mammalian cell gene mutation test
  Result: negative

**trimethoprim**:
- **Genotoxicity in vitro**: Test Type: Bacterial reverse mutation assay (AMES)
Result: negative

Test Type: Chromosomal aberration
Result: negative

Test Type: In vitro mammalian cell gene mutation test
Result: negative

Test Type: DNA damage and repair, unscheduled DNA synthesis in mammalian cells (in vitro)
Result: negative

Genotoxicity in vivo:
Species: Rat
Result: negative

Species: Humans
Result: negative

Carcinogenicity
Not classified based on available information.

Reproductive toxicity
Suspected of damaging the unborn child.

Components:

trimethoprim:

Effects on fertility:
Species: Rat
Application Route: Oral
Fertility: NOAEL: 70 mg/kg body weight
Result: No effects on fertility.

Effects on fetal development:
Species: Rat
Application Route: Oral
Developmental Toxicity: LOAEL: 70 mg/kg body weight
Result: Effects on newborn.
Remarks: Maternal toxicity observed.

Test Type: Development
Species: Rat
Application Route: Oral
Developmental Toxicity: LOAEL: 70 mg/kg body weight
Result: Embryotoxic effects.
Remarks: Maternal toxicity observed.

Test Type: Development
Species: Rat
Application Route: Oral
Developmental Toxicity: LOAEL: 15 mg/kg body weight
Result: Embryotoxic effects., Teratogenic effects.
Test Type: Development
Species: Hamster
Application Route: Oral
Developmental Toxicity: LOAEL: 1,7 mg/kg body weight
Result: Embryotoxic effects., No teratogenic effects.

Test Type: Development
Species: Rabbit
Application Route: Oral
Developmental Toxicity: LOAEL: 100 mg/kg body weight
Result: Embryotoxic effects., No teratogenic effects.

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

**STOT-single exposure**
Not classified based on available information.

**Components:**

**Sulfadoxine:**
Assessment : May cause respiratory irritation.

**STOT-repeated exposure**
Causes damage to organs (Bone marrow) through prolonged or repeated exposure.

**Components:**

**trimethoprim:**
Target Organs : Bone marrow
Assessment : Causes damage to organs through prolonged or repeated exposure.

**Repeated dose toxicity**

**Components:**

**trimethoprim:**
Species : Rat
NOAEL : 100 mg/kg
LOAEL : 300 mg/kg
Application Route : Oral
Exposure time : 6 Months
Target Organs : Bone marrow, Liver, Pituitary gland, Thyroid

Species : Rat
LOAEL : 300 mg/kg
Application Route : Oral
Exposure time : 3 Months
Target Organs : Bone marrow

Species : Dog
NOAEL : 2.5 mg/kg
LOAEL : 45 mg/kg
Application Route : Oral
Exposure time: 3 Months
Target Organs: Blood, Thyroid

Aspiration toxicity
Not classified based on available information.

Experience with human exposure

Components:

Sulfadoxine:
Ingestion
Target Organs: Blood
Symptoms: The most common side effects are: Nausea, Vomiting, Headache, anemia, Rash, Stevens-Johnson syndrome

trimethoprim:
Ingestion
Target Organs: Bone marrow
Symptoms: Abdominal pain, Nausea, Vomiting, skin rash, Dizziness, Headache, mental depression, confusion

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

1,3-Dioxan-5-ol:
Toxicity to fish
LL50 (Pimephales promelas (fathead minnow)): > 100 mg/l
Exposure time: 96 h
Remarks: Based on data from similar materials

Toxicity to daphnia and other aquatic invertebrates
EL50 (Daphnia magna (Water flea)): > 100 mg/l
Exposure time: 48 h
Remarks: Based on data from similar materials

Toxicity to algae/aquatic plants
EL50 (Pseudokirchneriella subcapitata (green algae)): > 100 mg/l
Exposure time: 72 h
Remarks: Based on data from similar materials

NOELR (Pseudokirchneriella subcapitata (green algae)): > 1 mg/l
Exposure time: 72 h
Remarks: Based on data from similar materials

Toxicity to microorganisms
EC10: > 1.000 mg/l
Exposure time: 3 h
Method: OECD Test Guideline 209
Remarks: Based on data from similar materials

1,3-Dioxolan-4-ylmethanol:
Toxicity to fish
LL50 (Pimephales promelas (fathead minnow)): > 100 mg/l
Exposure time: 96 h
### Remarks
Based on data from similar materials

#### Toxicity to daphnia and other aquatic invertebrates

**EL50** (Daphnia magna (Water flea)): > 100 mg/l  
Exposure time: 48 h  
Remarks: Based on data from similar materials

#### Toxicity to algae/aquatic plants

**EL50** (Pseudokirchneriella subcapitata (green algae)): > 100 mg/l  
Exposure time: 72 h  
Remarks: Based on data from similar materials

**NOELR** (Pseudokirchneriella subcapitata (green algae)): > 1 mg/l  
Exposure time: 72 h  
Remarks: Based on data from similar materials

#### Toxicity to microorganisms

**EC10**: > 1,000 mg/l  
Exposure time: 3 h  
Method: OECD Test Guideline 209  
Remarks: Based on data from similar materials

### Sulfadoxine:

#### Toxicity to fish

**LC50** (Pimephales promelas (fathead minnow)): > 100 mg/l  
Exposure time: 96 h  
Remarks: Based on data from similar materials

#### Toxicity to daphnia and other aquatic invertebrates

**EC50** (Daphnia magna (Water flea)): > 100 mg/l  
Exposure time: 48 h  
Remarks: Based on data from similar materials

#### Toxicity to algae/aquatic plants

**EC50** (Anabaena flos-aquae (cyanobacterium)): 17 mg/l  
Exposure time: 72 h  
Remarks: Based on data from similar materials

**NOEC** (Anabaena flos-aquae (cyanobacterium)): 3,9 mg/l  
Exposure time: 72 h  
Remarks: Based on data from similar materials

**EC50** (Pseudokirchneriella subcapitata (green algae)): > 1 mg/l  
Exposure time: 72 h  
Remarks: Based on data from similar materials

**NOEC** (Pseudokirchneriella subcapitata (green algae)): 0,13 mg/l  
Exposure time: 72 h  
Remarks: Based on data from similar materials

#### Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)

**NOEC** (Daphnia magna (Water flea)): 6,2 mg/l  
Exposure time: 21 d  
Remarks: Based on data from similar materials

#### Toxicity to microorganisms

**EC50**: > 1,000 mg/l  
Exposure time: 3 h
Test Type: Respiration inhibition  
Remarks: Based on data from similar materials

NOEC: 1.000 mg/l  
Exposure time: 3 h  
Test Type: Respiration inhibition  
Remarks: Based on data from similar materials

**trimethoprim:**

<table>
<thead>
<tr>
<th>Test Type</th>
<th>Description</th>
<th>Exposure Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toxicity to fish</td>
<td>LC50 (Pimephales promelas (fathead minnow)): 100 mg/l</td>
<td>96 h</td>
</tr>
<tr>
<td>Toxicity to daphnia and other aquatic invertebrates</td>
<td>EC50 (Daphnia magna Straus (Water flea)): 92 mg/l</td>
<td>48 h</td>
</tr>
<tr>
<td>Toxicity to algae/aquatic plants</td>
<td>EC50 (Pseudokirchneriella subcapitata (microalgae)): 80.3 mg/l</td>
<td>72 h</td>
</tr>
<tr>
<td></td>
<td>NOEC (Pseudokirchneriella subcapitata (green algae)): 16 mg/l</td>
<td>72 h</td>
</tr>
<tr>
<td></td>
<td>EC50 (Anabaena flos-aquae): 253 mg/l</td>
<td>72 h</td>
</tr>
<tr>
<td></td>
<td>EC10 (Anabaena flos-aquae): 26 mg/l</td>
<td>72 h</td>
</tr>
<tr>
<td>Toxicity to fish (Chronic toxicity)</td>
<td>NOEC (Zebrafish): 0.157 mg/l</td>
<td>21 d</td>
</tr>
<tr>
<td>Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)</td>
<td>NOEC (Daphnia magna (Water flea)): 6 mg/l</td>
<td>21 d</td>
</tr>
</tbody>
</table>

**Persistence and degradability**

**Components:**

**1,3-Dioxan-5-ol:**

<table>
<thead>
<tr>
<th>Test Type</th>
<th>Description</th>
<th>Exposure Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biodegradability</td>
<td>Result: Inherently biodegradable.</td>
<td></td>
</tr>
<tr>
<td>Remarks: Based on data from similar materials</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**1,3-Dioxolan-4-ylmethanol:**

<table>
<thead>
<tr>
<th>Test Type</th>
<th>Description</th>
<th>Exposure Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biodegradability</td>
<td>Result: Inherently biodegradable.</td>
<td></td>
</tr>
<tr>
<td>Remarks: Based on data from similar materials</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Sulfadoxine:**

<table>
<thead>
<tr>
<th>Test Type</th>
<th>Description</th>
<th>Exposure Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biodegradability</td>
<td>Result: Not readily biodegradable.</td>
<td>5 %</td>
</tr>
<tr>
<td>Biodegradation</td>
<td>28 d</td>
<td></td>
</tr>
<tr>
<td>Remarks: Based on data from similar materials</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Bioaccumulative potential

Components:

<table>
<thead>
<tr>
<th>Component</th>
<th>Partition coefficient: n-octanol/water</th>
<th>log Pow</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,3-Dioxan-5-ol</td>
<td></td>
<td>-0.65</td>
</tr>
<tr>
<td>trimethoprim</td>
<td></td>
<td>0.91</td>
</tr>
</tbody>
</table>

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
Not regulated as a dangerous good

IATA-DGR
Not regulated as a dangerous good

IMDG-Code
Not regulated as a dangerous good

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

Domestic regulation

ANTT
Not regulated as a dangerous good

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. List of chemicals controlled by the Federal Police: Sodium hydroxide

**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**


Items where changes have been made to the previous version are highlighted in the body of this document by two vertical lines.

**Full text of other abbreviations**

- **ACGIH**: USA. ACGIH Threshold Limit Values (TLV)
- **ACGIH / C**: Ceiling limit

AICS - Australian Inventory of Chemical Substances; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Tempera-
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