1. PRODUCT AND COMPANY IDENTIFICATION

Product name: Sulfapyridine Formulation

Manufacturer or supplier's details
Company: MSD
Address: JL Raya Pandaan KM. 48
         Pandaan, Jawa Timur - Indonesia
Telephone: 908-740-4000
Emergency telephone number: 1-908-423-6000
E-mail address: EHSDATASTeward@msd.com

Recommended use of the chemical and restrictions on use
Recommended use: Pharmaceutical

2. HAZARDS IDENTIFICATION

GHS Classification
Acute toxicity (Oral): Category 3
Skin sensitisation: Category 1
Reproductive toxicity: Category 1A
Specific target organ toxicity - single exposure (Oral): Category 1
Long-term (chronic) aquatic hazard: Category 3

GHS label elements
Hazard pictograms:
Signal word: Danger
Hazard statements:
H301 Toxic if swallowed.
H317 May cause an allergic skin reaction.
H360F May damage fertility.
H370 Causes damage to organs if swallowed.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements:
Prevention:
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read
and understood.
P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P272 Contaminated work clothing should not be allowed out of the workplace.
P273 Avoid release to the environment.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:
P301 + P310 + P330 IF SWALLOWED: Immediately call a POISON CENTER/ doctor. Rinse mouth.
P302 + P352 IF ON SKIN: Wash with plenty of water.
P308 + P311 IF exposed or concerned: Call a POISON CENTER/ doctor.
P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.
P362 + P364 Take off contaminated clothing and wash it before reuse.

Storage:
P405 Store locked up.

Disposal:
P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards which do not result in classification
Dust contact with the eyes can lead to mechanical irritation.
Contact with dust can cause mechanical irritation or drying of the skin.
May form combustible dust concentrations in air during processing, handling or other means.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Substance / Mixture</th>
<th>Components</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mixture</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS-No.</th>
<th>Concentration (% w/w)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Petrolatum</td>
<td>8009-03-8</td>
<td>&gt;= 10 &lt; 30</td>
</tr>
<tr>
<td>Sulfapyridine</td>
<td>144-83-2</td>
<td>&gt;= 10 &lt; 25</td>
</tr>
<tr>
<td>Benzyl benzoate</td>
<td>120-51-4</td>
<td>&gt;= 0.25 &lt; 2.5</td>
</tr>
<tr>
<td>Benzyl cinnamate</td>
<td>103-41-3</td>
<td>&gt;= 0.25 &lt; 1</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

General advice : 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.

If inhaled : If inhaled, remove to fresh air.
Get medical attention.

In case of skin contact : In case of contact, immediately flush skin with soap and plenty
**5. FIREFIGHTING MEASURES**

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

**Unsuitable extinguishing media:**
- None known.

**Specific hazards during firefighting:**
- Exposure to combustion products may be a hazard to health.

**Hazardous combustion products:**
- Carbon 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 firefighters:**
- In the event of fire, wear self-contained breathing apparatus.
- Use personal protective equipment.

**6. ACCIDENTAL RELEASE MEASURES**

**Personal precautions, protective equipment and emergency procedures:**
- Use personal protective equipment.
- Follow safe handling advice (see section 7) and personal protective equipment recommendations (see section 8).

**Environmental precautions:**
- Avoid release to the environment.
- Prevent further leakage or spillage if safe to do so.
- 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:
- Sweep up or vacuum up spillage and collect in suitable container for disposal.
- Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air).
- Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration.
- 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.

7. HANDLING AND STORAGE

Technical measures:
- Static electricity may accumulate and ignite suspended dust causing an explosion.
- Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres.

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 dust, fume, gas, mist, vapours or spray.
- Do not swallow.
- Avoid contact with eyes.
- Wash skin thoroughly after handling.
- Handle in accordance with good industrial hygiene and safety practice, based on the results of the workplace exposure assessment.
- Keep container tightly closed.
- Minimize dust generation and accumulation.
- Keep container closed when not in use.
- Keep away from heat and sources of ignition.
- Take precautionary measures against static discharges.
- Do not eat, drink or smoke when using this product.
- Take care to prevent spills, waste and minimize release to the environment.

Conditions for safe storage:
- Keep in properly labelled 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:
  - Explosives

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components 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>
</table>
Engineering measures: Use feasible engineering controls to minimize exposure to compound. All engineering controls should be implemented by facility design and operated in accordance with GMP principles to protect products, workers, and the environment.

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: Combined particulates and organic vapour type

Hand protection: 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.

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. Contaminated work clothing should not be allowed out of the workplace. 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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: solid

Colour: No data available

Odour: No data available

Odour Threshold: No data available
## 10. STABILITY AND REACTIVITY

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>No data available</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>May form combustible dust concentrations in air during processing, handling or other means.</td>
</tr>
<tr>
<td>Flammability (liquids)</td>
<td>No data available</td>
</tr>
<tr>
<td>Upper explosion limit / Upper flammability limit</td>
<td>No data available</td>
</tr>
<tr>
<td>Lower explosion limit / Lower flammability limit</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Relative vapour density</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Relative density</td>
<td>No data available</td>
</tr>
<tr>
<td>Density</td>
<td>No data available</td>
</tr>
<tr>
<td>Solubility(ies)</td>
<td>Water solubility: No data available</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Viscosity, kinematic: Not applicable</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>Not explosive</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>The substance or mixture is not classified as oxidizing.</td>
</tr>
<tr>
<td>Molecular weight</td>
<td>No data available</td>
</tr>
<tr>
<td>Particle size</td>
<td>No data available</td>
</tr>
</tbody>
</table>
Reactivity: Not classified as a reactivity hazard.
Chemical stability: Stable under normal conditions.
Possibility of hazardous reactions: May form combustible dust concentrations in air during processing, handling or other means. Can react with strong oxidizing agents.

Conditions to avoid: Heat, flames and sparks. Avoid dust formation.
Incompatible materials: Oxidizing agents
Hazardous decomposition products: No hazardous decomposition products are known.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure:
- Inhalation
- Skin contact
- Ingestion
- Eye contact

Acute toxicity:
Toxic if swallowed.

Product:
Acute oral toxicity: Acute toxicity estimate: 158 mg/kg
Method: Calculation method

Components:

<table>
<thead>
<tr>
<th>Component</th>
<th>Route</th>
<th>Concentration/Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Petrolatum</td>
<td>Acute oral toxicity</td>
<td>LD50 (Rat): &gt; 5,000 mg/kg</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Method: OECD Test Guideline 401</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Remarks: Based on data from similar materials</td>
</tr>
<tr>
<td></td>
<td>Acute dermal toxicity</td>
<td>LD50 (Rat): &gt; 2,000 mg/kg</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Method: OECD Test Guideline 402</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Assessment: The substance or mixture has no acute dermal toxicity</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Remarks: Based on data from similar materials</td>
</tr>
<tr>
<td>Sulfapyridine</td>
<td>Acute oral toxicity</td>
<td>LD50 (Rat): 15.8 mg/kg</td>
</tr>
<tr>
<td>Benzy1 benzoate</td>
<td>Acute oral toxicity</td>
<td>LD50 (Rat): 1,700 mg/kg</td>
</tr>
<tr>
<td>Benzy1 cinnamate</td>
<td>Acute oral toxicity</td>
<td>LD50 (Rat): 2,610 mg/kg</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Remarks: Based on data from similar materials</td>
</tr>
<tr>
<td></td>
<td>Acute dermal toxicity</td>
<td>LD50 (Rabbit): &gt; 2,000 mg/kg</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Remarks: Based on data from similar materials</td>
</tr>
<tr>
<td></td>
<td>Acute dermal toxicity</td>
<td>LD50 (Rabbit): &gt; 5,000 mg/kg</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Remarks: Based on data from similar materials</td>
</tr>
</tbody>
</table>
Skin corrosion/irritation
Not classified based on available information.

Components:

- **Petrolatum:**
  - Species: Rabbit
  - Method: OECD Test Guideline 404
  - Result: No skin irritation
  - Remarks: Based on data from similar materials

- **Benzyl benzoate:**
  - Species: Rabbit
  - Method: OECD Test Guideline 404
  - Result: No skin irritation

- **Benzyl cinnamate:**
  - Species: Rabbit
  - Result: No skin irritation
  - Remarks: Based on data from similar materials

Serious eye damage/eye irritation
Not classified based on available information.

Components:

- **Petrolatum:**
  - Species: Rabbit
  - Method: OECD Test Guideline 405
  - Remarks: Based on data from similar materials

- **Benzyl benzoate:**
  - Species: Rabbit
  - Result: No eye irritation

- **Benzyl cinnamate:**
  - Species: Rabbit
  - Result: No eye irritation
  - Remarks: Based on data from similar materials

Respiratory or skin sensitisation

Skin sensitisation
May cause an allergic skin reaction.

Respiratory sensitisation
Not classified based on available information.
SAFETY DATA SHEET

Sulfapyridine Formulation

Components:

Petrolatum:
- Test Type: Buehler Test
- Exposure routes: Skin contact
- Species: Guinea pig
- Result: negative
- Remarks: Based on data from similar materials

Sulfapyridine:
- Assessment: May cause sensitisation by skin contact.

Benzyl benzoate:
- Test Type: Local lymph node assay (LLNA)
- Exposure routes: Skin contact
- Species: Mouse
- Method: OECD Test Guideline 429
- Result: negative

Benzyl cinnamate:
- Test Type: Maximisation Test
- Exposure routes: Skin contact
- Species: Guinea pig
- Method: OECD Test Guideline 406
- Remarks: Based on data from similar materials
- Assessment: Probability or evidence of low to moderate skin sensitisation rate in humans

Germ cell mutagenicity
Not classified based on available information.

Components:

Petrolatum:
- Genotoxicity in vitro: Test Type: Chromosome aberration test in vitro
  Result: negative
  Remarks: Based on data from similar materials
- Genotoxicity in vivo: Test Type: Mammalian erythrocyte micronucleus test (in vivo cytogenetic assay)
  Species: Mouse
  Application Route: Intraperitoneal injection
  Method: OECD Test Guideline 474
  Result: negative
  Remarks: Based on data from similar materials

Sulfapyridine:
- Genotoxicity in vitro: Test Type: In vitro sister chromatid exchange assay in mammalian cells
  Result: positive
### Sulfapyridine Formulation

<table>
<thead>
<tr>
<th>Test Type</th>
<th>Description</th>
</tr>
</thead>
</table>
| **Genotoxicity in vivo** | Test Type: Mammalian erythrocyte micronucleus test (in vivo cytogenetic assay)  
Species: Mouse  
Cell type: Bone marrow  
Result: negative  
Remarks: Based on data from similar materials |
| **Germ cell mutagenicity - Assessment** | Weight of evidence does not support classification as a germ cell mutagen. |

### Benzyl benzoate:

<table>
<thead>
<tr>
<th>Test Type</th>
<th>Description</th>
</tr>
</thead>
</table>
| **Genotoxicity in vitro** | Test Type: Bacterial reverse mutation assay (AMES)  
Result: negative  
Remarks: Based on data from similar materials  
Test Type: In vitro mammalian cell gene mutation test  
Result: positive  
Remarks: Based on data from similar materials  
Test Type: Chromosome aberration test in vitro  
Result: negative  
Remarks: Based on data from similar materials |
| **Genotoxicity in vivo** | Test Type: Unscheduled DNA synthesis (UDS) test with mammalian liver cells in vivo  
Species: Rat  
Application Route: Ingestion  
Result: negative  
Remarks: Based on data from similar materials |

### Benzyl cinnamate:

<table>
<thead>
<tr>
<th>Test Type</th>
<th>Description</th>
</tr>
</thead>
</table>
| **Genotoxicity in vitro** | Test Type: In vitro mammalian cell gene mutation test  
Method: OECD Test Guideline 476  
Result: negative  
Remarks: Based on data from similar materials  
Test Type: In vitro sister chromatid exchange assay in mammalian cells  
Result: negative  
Remarks: Based on data from similar materials |
| **Genotoxicity in vivo** | Test Type: Bacterial reverse mutation assay (AMES)  
Result: negative  
Remarks: Based on data from similar materials |

### Carcinogenicity

Not classified based on available information.
SAFETY DATA SHEET

Sulfapyridine Formulation

Components:

Petrolatum:
Species: Rat
Application Route: Ingestion
Exposure time: 2 Years
Result: negative

Sulfapyridine:
Carcinogenicity - Assessment: No data available

Benzyl cinnamate:
Species: Rat
Application Route: Ingestion
Exposure time: 105 weeks
Result: negative
Remarks: Based on data from similar materials
Species: Mouse
Application Route: Ingestion
Exposure time: 105 weeks
Result: negative
Remarks: Based on data from similar materials

Reproductive toxicity
May damage fertility.

Components:

Petrolatum:
Effects on fertility: Test Type: Reproduction/Developmental toxicity screening test
Species: Rat
Application Route: Ingestion
Result: negative
Remarks: Based on data from similar materials
Effects on foetal development: Test Type: Embryo-foetal development
Species: Rat
Application Route: Skin contact
Result: negative
Remarks: Based on data from similar materials

Sulfapyridine:
Reproductive toxicity - Assessment: Positive evidence of adverse effects on sexual function and fertility from human epidemiological studies.

Benzyl benzoate:
Effects on foetal development: Test Type: Embryo-foetal development
Species: Rat
Application Route: Ingestion
Result: negative
SAFETY DATA SHEET

Sulfapyridine Formulation

Benzyl cinnamate:
Effects on fertility: Test Type: Combined repeated dose toxicity study with the reproduction/developmental toxicity screening test
Species: Rat
Application Route: Ingestion
Method: OECD Test Guideline 422
Result: negative
Remarks: Based on data from similar materials

Effects on foetal development: Test Type: Embryo-foetal development
Species: Rat
Application Route: Ingestion
Result: negative
Remarks: Based on data from similar materials

STOT - single exposure
Causes damage to organs if swallowed.

Components:

Sulfapyridine:
Exposure routes: Oral
Assessment: Shown to produce significant health effects in animals at concentrations of 300 mg/kg bw or less.

STOT - repeated exposure
Not classified based on available information.

Repeated dose toxicity

Components:

Petrolatum:
Species: Rat
NOAEL: 5,000 mg/kg
Application Route: Ingestion
Exposure time: 2 yr

Benzyl benzoate:
Species: Rat
NOAEL: 781 mg/kg
Application Route: Skin contact
Exposure time: 4 Weeks

Benzyl cinnamate:
Species: Rat, male
NOAEL: 275 mg/kg
Application Route: Ingestion
Exposure time: 90 Days
Remarks: Based on data from similar materials
Aspiration toxicity
Not classified based on available information.

Experience with human exposure

Components:

**Sulfapyridine:**
- **Skin contact**
  - Symptoms: Sensitisation
- **Ingestion**
  - Symptoms: Gastrointestinal disturbance
  - Symptoms: Sensitivity to light
  - Symptoms: Headache
  - Symptoms: hepatitis
  - Symptoms: Stevens-Johnson syndrome

12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

**Petrolatum:**
- **Toxicity to fish**
  - LL50 (Pimephales promelas (fathead minnow)): > 100 mg/l
  - Exposure time: 96 h
  - Test substance: Water Accommodated Fraction
  - Method: OECD Test Guideline 203
  - Remarks: Based on data from similar materials

- **Toxicity to daphnia and other aquatic invertebrates**
  - EC50 (Daphnia magna (Water flea)): > 10,000 mg/l
  - Exposure time: 48 h
  - Test substance: Water Accommodated Fraction
  - Remarks: Based on data from similar materials

- **Toxicity to algae/aquatic plants**
  - NOEL (Pseudokirchneriella subcapitata (green algae)): >= 100 mg/l
  - Exposure time: 72 h
  - Test substance: Water Accommodated Fraction
  - Method: OECD Test Guideline 201
  - Remarks: Based on data from similar materials

- **Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)**
  - NOEC (Daphnia magna (Water flea)): 10 mg/l
  - Exposure time: 21 d
  - Test substance: Water Accommodated Fraction
  - Remarks: Based on data from similar materials

**Sulfapyridine:**
- **Toxicity to algae/aquatic plants**
  - EC10 (Raphidocelis subcapitata (freshwater green alga)): 1.0 mg/l
  - End point: Growth rate
  - Exposure time: 72 h

**Benzyl benzoate:**
### Toxicity to fish
- **LC50**: 2.32 mg/l (Danio rerio (zebra fish)), Exposure time: 96 h

### Toxicity to daphnia and other aquatic invertebrates
- **EC50**: 3.09 mg/l (Daphnia magna (Water flea)), Exposure time: 48 h
- Method: OECD Test Guideline 202

### Toxicity to algae/aquatic plants
- **EC50**: 0.475 mg/l (Pseudokirchneriella subcapitata (green algae)), Exposure time: 72 h
- Method: OECD Test Guideline 201

**NOEC** (Pseudokirchneriella subcapitata (green algae)): 0.247 mg/l, Exposure time: 72 h
- Method: OECD Test Guideline 201

### M-Factor (Acute aquatic toxicity)
- **M-Factor**: 1

### Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)
- **NOEC**: 0.258 mg/l (Daphnia magna (Water flea)), Exposure time: 21 d
- Method: OECD Test Guideline 211

### Toxicity to microorganisms
- **EC50**: > 10,000 mg/l, Exposure time: 3 h
- Method: ISO 8192

### Benzyl cinnamate

<table>
<thead>
<tr>
<th>Toxicity to fish</th>
<th>LC50 (Danio rerio (zebra fish)): &gt; 0.643 mg/l, Exposure time: 96 h</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toxicity to daphnia and other aquatic invertebrates</td>
<td>EL50 (Daphnia magna (Water flea)): 2.8 mg/l, Exposure time: 48 h, Test substance: Water Accommodated Fraction, Method: OECD Test Guideline 202</td>
</tr>
<tr>
<td>Toxicity to algae/aquatic plants</td>
<td>ErC50 (Pseudokirchneriella subcapitata (green algae)): 0.386 mg/l, Exposure time: 72 h, Method: OECD Test Guideline 201</td>
</tr>
<tr>
<td></td>
<td>EC10 (Pseudokirchneriella subcapitata (green algae)): 0.122 mg/l, Exposure time: 72 h, Method: OECD Test Guideline 201</td>
</tr>
<tr>
<td>M-Factor (Acute aquatic toxicity)</td>
<td>1</td>
</tr>
<tr>
<td>Toxicity to microorganisms</td>
<td>EC50: &gt; 100 mg/l, Exposure time: 3 h, Method: ISO 8192, Remarks: Based on data from similar materials</td>
</tr>
</tbody>
</table>
Persistence and degradability

**Components:**

**Petrolatum:**

- **Biodegradability:** Result: Not readily biodegradable.  
  Biodegradation: 31 %  
  Exposure time: 28 d  
  Method: OECD Test Guideline 301F  
  Remarks: Based on data from similar materials

**Benzyl benzoate:**

- **Biodegradability:** Result: Readily biodegradable.  
  Biodegradation: 94 %  
  Exposure time: 28 d  

**Benzyl cinnamate:**

- **Biodegradability:** Result: Readily biodegradable.  
  Biodegradation: 100 %  
  Exposure time: 7 d  
  Remarks: Based on data from similar materials

Bioaccumulative potential

**Components:**

**Benzyl benzoate:**

- **Partition coefficient: n-octanol/water:** log Pow: 4  
  Method: OECD Test Guideline 117

**Benzyl cinnamate:**

- **Partition coefficient: n-octanol/water:** log Pow: 4.18  
  Method: OECD Test Guideline 117

**Mobility in soil**

No data available

**Other adverse effects**

No data available

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.
14. TRANSPORT INFORMATION

International Regulations

**UNRTDG**
- UN number: UN 2811
- Proper shipping name: TOXIC SOLID, ORGANIC, N.O.S. (Sulfapyridine)
- Class: 6.1
- Packing group: III
- Labels: 6.1

**IATA-DGR**
- UN/ID No.: UN 2811
- Proper shipping name: Toxic solid, organic, n.o.s. (Sulfapyridine)
- Class: 6.1
- Packing group: III
- Labels: Toxic
- Packing instruction (cargo aircraft): 677
- Packing instruction (passenger aircraft): 670

**IMDG-Code**
- UN number: UN 2811
- Proper shipping name: TOXIC SOLID, ORGANIC, N.O.S. (Sulfapyridine)
- Class: 6.1
- Packing group: III
- Labels: 6.1
- EmS Code: F-A, S-A
- Marine pollutant: no

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

**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.

15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

- Minister of Industry Regulation No. 23/M-IND/PER/4/2013 concerning the Revision of Minister of Industry Regulation No. 87/M-IND/PER/9/2009 concerning Globally Harmonized System of Classification and Labelling of Chemicals.
- Regulation of the Minister of Health No. 472 of 1996 on the Safeguarding of Substances Hazardous to Health
- Hazardous substances that must be registered: Not applicable
Government Regulation No. 74 of 2001 on the Management of Hazardous and Toxic Substances
Hazardous substances approved for use : Not applicable
Prohibited substances : Not applicable
Restricted substances : Not applicable

Regulation of the Minister of Trade No. 44 of 2009 on Procurement, Distribution and Supervision of Hazardous Materials
Type of Hazardous Materials Restricted to Import, Distribution and Supervision : Not applicable

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

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.

Date format : yyyy/mm/dd

Full text of other abbreviations
ACGIH : USA. ACGIH Threshold Limit Values (TLV)
ID OEL : Indonesia. Occupational Exposure Limits

ACGIH / TWA : 8-hour, time-weighted average
ID OEL / NAB : Long term exposure limit
ID OEL / PSD : Short term exposure limit

AIIC - Australian Inventory of Industrial Chemicals; 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
SAFETY DATA SHEET

Sulfapyridine Formulation

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; LC50 - Lethal Concentration to 50 % of a test population; 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 Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

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.

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