## Section 1. Identification of the Substance/Mixture and of the Company/Undertaking

### 1.1 Product Code: 14423

**Product Name:** Rifampicin

**Synonyms:** 3-[[4-methyl-1-piperazinyl]imino]methyl]-rifamycin; NIH 10782; NSC 113926; Rifampin;

### 1.2 Relevant identified uses of the substance or mixture and uses advised against:

**Relevant identified uses:** For research use only, not for human or veterinary use.

### 1.3 Details of the Supplier of the Safety Data Sheet:

**Company Name:** Cayman Chemical Company

1180 E. Ellsworth Rd.
Ann Arbor, MI  48108

**Web site address:** www.caymanchem.com

**Information:** Cayman Chemical Company +1  (734)971-3335

### 1.4 Emergency telephone number:

**Emergency Contact:** CHEMTREC Within USA and Canada: +1 (800)424-9300

CHEMTREC Outside USA and Canada: +1 (703)527-3887

---

## Section 2. Hazards Identification

### 2.1 Classification of the Substance or Mixture:

- **Acute Toxicity:** Oral, Category 4
- **Skin Corrosion/Irritation:** Category 2
- **Serious Eye Damage/Eye Irritation:** Category 2A
- **Specific Target Organ Toxicity (single exposure):** Category 3

### 2.2 Label Elements:

- **GHS Signal Word:** Warning

**GHS Hazard Phrases:**

- H302: Harmful if swallowed.
- H315: Causes skin irritation.
- H319: Causes serious eye irritation.
- H335: May cause respiratory irritation.

**GHS Precaution Phrases:**

- P264: Wash (hands) thoroughly after handling.
- P280: Wear {protective gloves/protective clothing/eye protection/face protection}.
- P362+364: Take off contaminated clothing and wash it before reuse.
- P261: Avoid breathing {dust/fume/gas/mist/vapours/spray}.

**GHS Response Phrases:**

- P301+312: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
- P330: Rinse mouth.
- P302+352: IF ON SKIN: Wash with plenty of soap and water.
- P332+313: If skin irritation occurs, get medical advice/attention.
- P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P337+313: If eye irritation persists, get medical advice/attention.
- P309+311: Call a POISON CENTER or doctor/physician if exposed or you feel unwell.
Section 3. Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>CAS # / RTECS #</th>
<th>Hazardous Components (Chemical Name)</th>
<th>Concentration</th>
<th>EC No./ EC Index No.</th>
<th>GHS Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>13292-46-1 VJ700000000</td>
<td>Rifampicin</td>
<td>100.0 %</td>
<td>236-312-0 NA</td>
<td>Acute Tox.(O) 4: H302 Skin Corr. 2: H315 Eye Damage 2: H319 STOT (SE) 3: H335</td>
</tr>
</tbody>
</table>

Section 4. First Aid Measures

4.1 Description of First Aid Measures:

- **In Case of Inhalation:** Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Get immediate medical attention.
- **In Case of Skin Contact:** Immediately wash skin with soap and plenty of water for at least 15 minutes. Remove contaminated clothing. Get medical attention if symptoms occur. Wash clothing before reuse.
- **In Case of Eye Contact:** Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Have eyes examined and tested by medical personnel.
- **In Case of Ingestion:** Wash out mouth with water provided person is conscious. Never give anything by mouth to an unconscious person. Get medical attention. Do NOT induce vomiting unless directed to do so by medical personnel.

Section 5. Fire Fighting Measures

5.1 Suitable Extinguishing Media: Use alcohol-resistant foam, carbon dioxide, water, or dry chemical spray. Use water spray to cool fire-exposed containers.

5.2 Flammable Properties and Hazards: No data available.

- **Flash Pt:** No data.
- **Explosive Limits:** LEL: No data. UEL: No data.
- **Autoignition Pt:** No data.

5.3 Fire Fighting Instructions: As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent), and full protective gear to prevent contact with skin and eyes.
**Section 6. Accidental Release Measures**

6.1 Protective Precautions, Protective Equipment and Emergency Procedures: Avoid raising and breathing dust, and provide adequate ventilation. As conditions warrant, wear a NIOSH approved self-contained breathing apparatus, or respirator, and appropriate personal protection (rubber boots, safety goggles, and heavy rubber gloves).

6.2 Environmental Precautions: Take steps to avoid release into the environment, if safe to do so.

6.3 Methods and Material For Containment and Cleaning: Contain spill and collect, as appropriate. Transfer to a chemical waste container for disposal in accordance with local regulations.

**Section 7. Handling and Storage**

7.1 Precautions To Be Taken in Handling: Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid prolonged or repeated exposure.

7.2 Precautions To Be Taken in Storing: Keep container tightly closed. Store in accordance with information listed on the product insert.

**Section 8. Exposure Controls/Personal Protection**

8.1 Exposure Parameters:

8.2 Exposure Controls:

8.2.1 Engineering Controls: Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

8.2.2 Personal protection equipment:

- **Eye Protection:** Safety glasses
- **Protective Gloves:** Compatible chemical-resistant gloves
- **Other Protective Clothing:** Lab coat
- **Respiratory Equipment:** NIOSH approved respirator, as conditions warrant.
- **Work/Hygienic/Maintenance Practices:** Facilities storing or utilizing this material should be equipped with an eyewash and a safety shower. Wash thoroughly after handling. Do not take internally.

No data available.

**Section 9. Physical and Chemical Properties**

9.1 Information on Basic Physical and Chemical Properties

- **Physical States:** [ ] Gas [ ] Liquid [ X ] Solid
- **Appearance and Odor:** A crystalline solid
- **pH:** No data.
- **Melting Point:** No data.
- **Boiling Point:** No data.
- **Flash Pt:** No data.
- **Evaporation Rate:** No data.
- **Flammability (solid, gas):** No data available.
- **Explosive Limits:** LEL: No data. UEL: No data.
- **Vapor Pressure (vs. Air or mm Hg):** No data.
- **Vapor Density (vs. Air = 1):** No data.
Rifampicin

Section 10. Stability and Reactivity

10.1 Reactivity: No data available.
10.2 Stability: Unstable [ ] Stable [ X ]
10.3 Stability Note(s): Stable if stored in accordance with information listed on the product insert.
10.4 Conditions To Avoid: No data available.
10.5 Incompatibility - Materials strong oxidizing agents
To Avoid:
10.6 Hazardous carbon dioxide
Decomposition or carbon monoxide
Byproducts: nitrogen oxides

Section 11. Toxicological Information

11.1 Information on Toxicological Effects: Rifampicin - Toxicity Data: Oral TDLO (woman): 315 mg/kg/5W (intermittent); Oral LDLO (man): 857 mg/kg; Oral LD50 (rat): 1570 mg/kg; Intraperitoneal LD50 (rat): 511 mg/kg; Subcutaneous LD50 (rat): 534 mg/kg; Oral LD50 (mouse): 500 mg/kg; Intraperitoneal LD50 (mouse): 416 mg/kg; Subcutaneous LD50 (mouse): 621 mg/kg;
 Chronic Toxicological Effects: Rifampicin - Investigated as a drug, mutagen, natural product, reproductive effector, and tumorigen.
 Only select Registry of Toxic Effects of Chemical Substances (RTECS) data is presented here. See actual entry in RTECS for complete information.
Rifampicin RTECS Number: VJ7000000

<table>
<thead>
<tr>
<th>CAS #</th>
<th>Hazardous Components (Chemical Name)</th>
<th>NTP</th>
<th>IARC</th>
<th>ACGIH</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>13292-46-1</td>
<td>Rifampicin</td>
<td></td>
<td>3</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
</tbody>
</table>

Section 12. Ecological Information

12.1 Toxicity: Avoid release into the environment.
Runoff from fire control or dilution water may cause pollution.
12.2 Persistence and Degradability: No data available.
12.3 Bioaccumulative Potential: No data available.
12.4 Mobility in Soil: No data available.
12.5 Results of PBT and vPvB: No data available.
### 12.6 Other adverse effects
No data available.

---

#### Section 13. Disposal Considerations

**13.1 Waste Disposal Method:** Dispose in accordance with local, state, and federal regulations.

---

#### Section 14. Transport Information

**14.1 LAND TRANSPORT (US DOT):**
- DOT Proper Shipping Name: Not dangerous goods.
- DOT Hazard Class: 
- UN/NA Number: 

**14.1 LAND TRANSPORT (European ADR/RID):**
- ADR/RID Shipping Name: Not dangerous goods.
- UN Number: 
- Hazard Class: 

**14.3 AIR TRANSPORT (ICAO/IATA):**
- ICAO/IATA Shipping Name: Not dangerous goods.

---

#### Section 15. Regulatory Information

**EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists**

<table>
<thead>
<tr>
<th>CAS #</th>
<th>Hazardous Components (Chemical Name)</th>
<th>S. 302 (EHS)</th>
<th>S. 304 RQ</th>
<th>S. 313 (TRI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>13292-46-1</td>
<td>Rifampicin</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

**Other US EPA or State Lists**

- CAA HAP, ODC: No; CWA NPDES: No; TSCA: No; CA PROP.65: Yes; RDTox(F)

**Regulatory Information Statement:**
This SDS was prepared in accordance with 29 CFR 1910.1200 and Regulation (EC) No. 1272/2008.

---

#### Section 16. Other Information

**Revision Date:** 11/12/2018

**Additional Information About This Product:** No data available.

**Company Policy or Disclaimer:** DISCLAIMER: This information is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes.