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

1.1 **Product Code:** 16009  
**Product Name:** Salmeterol xinafoate  
**Synonyms:** 4-hydroxy-α1-(6-(4-phenylbutoxy)hexylamino)methyl)-1,3-benzenedimethanol  
1-hydroxy-2-naphthalenecarboxylic acid; Serevent®; Salmetedur; GR-33343G;

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:**

<table>
<thead>
<tr>
<th>Company Name:</th>
<th>Cayman Chemical Company</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1180 E. Ellsworth Rd.</td>
</tr>
<tr>
<td></td>
<td>Ann Arbor, MI 48108</td>
</tr>
<tr>
<td>Web site address:</td>
<td><a href="http://www.caymanchem.com">www.caymanchem.com</a></td>
</tr>
<tr>
<td>Information:</td>
<td>Cayman Chemical Company</td>
</tr>
<tr>
<td></td>
<td>+1 (734)971-3335</td>
</tr>
</tbody>
</table>

1.4 **Emergency telephone number:**

<table>
<thead>
<tr>
<th>Emergency Contact:</th>
<th>CHEMTREC Within USA and Canada:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>+1 (800)424-9300</td>
</tr>
<tr>
<td></td>
<td>CHEMTREC Outside USA and Canada:</td>
</tr>
<tr>
<td></td>
<td>+1 (703)527-3887</td>
</tr>
</tbody>
</table>

## Section 2. Hazards Identification

2.1 **Classification of the Substance or Mixture:**

2.1.1 **Classification according to Regulation (EC) No 1272/2008 [CLP]:**

- Serious Eye Damage/Eye Irritation, Category 1
- Toxic To Reproduction, Category 2
- Aquatic Toxicity (Chronic), Category 3

2.1.2 **Classification according to Directive 1999/45/EC:**

- **T:** Toxic
- Reproductive Hazard: 3
- Risk Phrases: R41, R52/53, R62
- For full text of R-phrases: see SECTION 15.

2.2 **Label Elements:**

2.2.1 **Labeling according to Regulation (EC) No 1272/2008 [CLP]:**

- **GHS Signal Word:** Danger
- **GHS Hazard Phrases:**
  - H318: Causes serious eye damage.
  - H361: Suspected of damaging fertility or the unborn child.
  - H412: Harmful to aquatic life with long lasting effects.
SAFETY DATA SHEET
Salmeterol xinafoate

GHS Precaution Phrases:
P280: Wear (protective gloves/protective clothing/eye protection/face protection).
P201: Obtain special instructions before use.
P202: Do not handle until all safety precautions have been read and understood.
P281: Use personal protective equipment as required.
P273: Avoid release to the environment.

GHS Response Phrases:
P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310: Immediately call a {POISON CENTER/doctor/...}.
P308+313: IF exposed or concerned: Get medical attention/advice.

GHS Storage and Disposal Phrases:
Please refer to Section 7 for Storage and Section 13 for Disposal information.

2.2.2 Labeling according to Directive 1999/45/EC:

2.2.2.1 T

Reproductive Hazard: 3

2.3 Adverse Human Health

Effects and Symptoms:
Causes serious eye damage.
Harmful to aquatic life with long lasting effects.
Material may be irritating to the mucous membranes and upper respiratory tract.
May be harmful by inhalation, ingestion, or skin absorption.
May cause skin or respiratory system irritation.
Suspected of damaging fertility or the unborn child.

To the best of our knowledge, the toxicological properties have not been thoroughly investigated.

Section 3. Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>CAS # / RTECS #</th>
<th>Hazardous Components (Chemical Name)/REACH Registration No.</th>
<th>Concentration</th>
<th>EC No./EC Index No.</th>
<th>Risk Phrases/GHS Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>94749-08-3</td>
<td>4-hydroxy-.alpha.1-[[6-(4-phenylbutoxy)hexyl]amino]methyl]-1,3-benzenedimethanol</td>
<td>100.0 %</td>
<td>NA</td>
<td>T; Rp:3, R41-52/53-62</td>
</tr>
<tr>
<td></td>
<td>1-hydroxy-2-naphthalenecarboxylic acid</td>
<td></td>
<td>NA</td>
<td>Eye Damage 1: H318</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Toxic Repro. 2: H361</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Aquatic (C) 3: H412</td>
</tr>
</tbody>
</table>

Multi-region format
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.

Unsuitable Extinguishing Media: Use water spray to cool fire-exposed containers.

5.2 Flammable Properties and Hazards:

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:

<table>
<thead>
<tr>
<th>CAS #</th>
<th>Partial Chemical Name</th>
<th>Britain EH40</th>
<th>France VL</th>
<th>Europe</th>
</tr>
</thead>
<tbody>
<tr>
<td>94749-08-3</td>
<td>4-hydroxy-.alpha.1-[[6-(4-phenylbutoxy)hexyl][amino]methyl]-1,3-benzenedimethanol</td>
<td>No data.</td>
<td>No data.</td>
<td>No data.</td>
</tr>
</tbody>
</table>
1-hydroxy-2-naphthalenecarboxylic acid

<table>
<thead>
<tr>
<th>CAS #</th>
<th>Partial Chemical Name</th>
<th>OSHA TWA</th>
<th>ACGIH TWA</th>
<th>Other Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>94749-08-3</td>
<td>4-hydroxy-α,1-[[6-(4-phenylbutoxy)hexyl]amino]methyl]-1,3-benzenedimethanol</td>
<td>No data.</td>
<td>No data.</td>
<td>No data.</td>
</tr>
<tr>
<td></td>
<td>1-hydroxy-2-naphthalenecarboxylic acid</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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.

(Specify Type):

Work/Hygienic/Maintenance: Do not take internally.

Facilities storing or utilizing this material should be equipped with an eyewash and a safety shower.

Wash thoroughly after handling.

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

Melting Point: No data.

Boiling Point: No data.

Flash Pt: No data.

Evaporation Rate: No data.

Explosive Limits: LEL: No data. UEL: No data.

Vapor Pressure (vs. Air or mm Hg): No data.

Vapor Density (vs. Air = 1): No data.

Specific Gravity (Water = 1): No data.

Solubility in Water: No data.

Solubility Notes: ~0.5 mg/ml in 1:1 DMF:PBS (pH 7.2); ~2 mg/ml in EtOH; ~25 mg/ml in DMSO; ~30 mg/ml in DMF;

Autoignition Pt: No data.
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 No data available.
10.6 Hazardous decomposition or byproducts:
  - carbon dioxide
  - carbon monoxide
  - nitrogen oxides

Section 11. Toxicological Information

11.1 Information on Toxicological Effects: Salmeterol xinafoate - Toxicity Data: Inhalation TCLO (human): 42 µg/kg/4W (intermittent); Intraperitoneal TDLO (rat): 4000 µg/kg/2D (intermittent); Intraperitoneal TDLO (rat): 280 µg/kg/4W (intermittent);

11.2 Chronic Toxicological Effects: Only select Registry of Toxic Effects of Chemical Substances (RTECS) data is presented here. See actual entry in RTECS for complete information. Salmeterol xinafoate RTECS Number: QJ1970500

11.3 Carcinogenicity: NTP? No IARC Monographs? No OSHA Regulated? No

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 assessment: No data available.

Section 13. Disposal Considerations

13.1 Waste Disposal Method: Dispose in accordance with local, state, and federal regulations.
SAFETY DATA SHEET  
Salmeterol xinafoate  

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.

Additional Transport Information:  Transport in accordance with local, state, and federal regulations.

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>94749-08-3</td>
<td>4-hydroxy-.alpha.1-[[6-(4-phenylbutoxy)hexyl]amino][methyl]-1,3-benzenedimethanol 1-hydroxy-2-naphthalenecarboxylic acid</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CAS #</th>
<th>Hazardous Components (Chemical Name)</th>
<th>Other US EPA or State Lists</th>
</tr>
</thead>
<tbody>
<tr>
<td>94749-08-3</td>
<td>4-hydroxy-.alpha.1-[[6-(4-phenylbutoxy)hexyl]amino][methyl]-1,3-benzenedimethanol 1-hydroxy-2-naphthalenecarboxylic acid</td>
<td>CAA HAP, ODC: No; CWA NPDES: No; TSCA: No; CA PROP.65: No</td>
</tr>
</tbody>
</table>

European Community Hazard Symbol codes:

Reproductive Hazard:  3

European Community Risk and Safety Phrases:

R41   Risk of serious damage to the eyes.
R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R62   Risk of impaired fertility.
S24/25 Avoid contact with skin and eyes.
S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
S45   In case of accident or if you feel unwell, seek medical advice immediately (show the label whenever possible.)

Regulatory Information

Statement:  This SDS was prepared in accordance with Regulation (EC) No.1272/2008 and European Directive 67/548/EEC as amended.
Section 16. Other Information

Revision Date: 10/28/2014
Additional Information About This Product: No data available.

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