SAFETY DATA SHEET

72852 72854 - Raloxifene (Hydrochloride)

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Name Raloxifene (Hydrochloride)

Other means of identification

Catalog Number 72852 72854
UN/ID no. UN3077
Document Number DX21157
Synonyms Keoxifene; LY156758;

Recommended use of the chemical and restrictions on use

Recommended Use Laboratory chemicals

Details of the supplier of the safety data sheet

Manufacturer/Supplier
STEMCELL Technologies Canada Inc.
Suite 500 - 1618 Station Street
Vancouver, British Columbia V6A 1B6 Canada

Emergency telephone number

Emergency Telephone 1-800-667-0322

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

<table>
<thead>
<tr>
<th>Carcinogenicity</th>
<th>Category 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reproductive toxicity</td>
<td>Category 1A</td>
</tr>
</tbody>
</table>

Hazards not otherwise classified (HNOC)

Not applicable

Label elements
SAFETY DATA SHEET

72852 72854 - Raloxifene (Hydrochloride)

Revision Date 24-Nov-2022
Revision Number 3

Danger

Hazard statements
Suspected of causing cancer
May damage fertility or the unborn child

Appearance Crystalline
Physical state Solid
Odor No data available

Precautionary Statements - Prevention
Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Wear protective gloves/protective clothing/eye protection/face protection

Precautionary statements - Response
IF exposed or concerned: Get medical advice/attention

Precautionary Statements - Storage
Store locked up

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant

Other Information
Very toxic to aquatic life with long lasting effects
Very toxic to aquatic life

Unknown acute toxicity
100 % of the mixture consists of ingredient(s) of unknown toxicity
100 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
100 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity
100 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)
100 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)
100 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance
Synonyms Keoxifene; LY156758;
SAFETY DATA SHEET

72852 72854 - Raloxifene (Hydrochloride)

Revision Date 24-Nov-2022
Revision Number 3

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS No.</th>
<th>Weight-%</th>
</tr>
</thead>
<tbody>
<tr>
<td>6-Hydroxy-2-(p-hydroxyphenyl)benzo[b]thien-3-yl-p-(2-piperidinoethoxy)phenyl ketone hydrochloride</td>
<td>82640-04-8</td>
<td>100</td>
</tr>
</tbody>
</table>

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

**Description of first aid measures**

**General advice**
IF exposed or concerned: Get medical advice/attention. Show this safety data sheet to the doctor in attendance.

**Inhalation**
Remove to fresh air.

**Eye contact**
Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

**Skin contact**
Wash skin with soap and water.

**Ingestion**
Clean mouth with water and drink afterwards plenty of water.

**Most important symptoms and effects, both acute and delayed**

**Symptoms**
No information available.

**Indication of any immediate medical attention and special treatment needed**

**Note to physicians**
Treat symptomatically.

5. FIRE-FIGHTING MEASURES

**Suitable Extinguishing Media**
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable extinguishing media**
CAUTION: Use of water spray when fighting fire may be inefficient.

**Specific hazards arising from the chemical**
No information available.

**Explosion data**
- Sensitivity to Mechanical Impact: None.
- Sensitivity to Static Discharge: None.
Special protective equipment for fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions
Ensure adequate ventilation.

Other Information
Refer to protective measures listed in Sections 7 and 8.

Environmental precautions

Environmental precautions
See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for containment
Prevent further leakage or spillage if safe to do so.

Methods for cleaning up
Pick up and transfer to properly labeled containers.

Prevention of secondary hazards
Clean contaminated objects and areas thoroughly observing environmental regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling
Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Remove contaminated clothing and shoes.

Conditions for safe storage, including any incompatibilities

Storage Conditions
Store locked up. Store in accordance with information listed on the Product Information Sheet (PIS).

8. EXPOSURE CONTROLS/PERSOAL PROTECTION

Control parameters

Exposure Limits
The following ingredients are the only ingredients of the product above the cut-off level (or
level that contributes to the hazard classification of the mixture) which have an exposure limit applicable in the region for which this safety data sheet is intended or other recommended limit. At this time, the other relevant constituents have no known exposure limits from the sources listed here.

Appropriate engineering controls

Engineering controls
Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection
No special protective equipment required.

Hand protection
Wear suitable gloves.

Skin and body protection
Wear suitable protective clothing.

Respiratory protection
No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations
Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Solid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Appearance</td>
<td>Crystalline</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td>No information available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Odor</td>
<td>No data available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No data available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
<td>None known</td>
<td></td>
</tr>
<tr>
<td>Melting point / freezing point</td>
<td>No data available</td>
<td>None known</td>
<td></td>
</tr>
<tr>
<td>Boiling point / boiling range</td>
<td>No data available</td>
<td>None known</td>
<td></td>
</tr>
<tr>
<td>Flash point</td>
<td>No data available</td>
<td>None known</td>
<td></td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No data available</td>
<td>None known</td>
<td></td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Product is not flammable.</td>
<td>None known</td>
<td></td>
</tr>
<tr>
<td>Flammability Limit in Air</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upper flammability limit</td>
<td>No data available</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
SAFETY DATA SHEET

72852 72854 - Raloxifene (Hydrochloride)

10. STABILITY AND REACTIVITY

Reactivity
No information available.

Chemical stability
Stable under recommended transport or storage conditions.

Possibility of hazardous reactions
None under normal processing.

Conditions to avoid
None known based on information supplied.

Incompatible materials
Strong oxidizing agents.

Hazardous decomposition products

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation
Specific test data for the substance or mixture is not available.
SAFETY DATA SHEET

72852 72854 - Raloxifene (Hydrochloride)

Revision Date 24-Nov-2022
Revision Number 3

Eye contact
Specific test data for the substance or mixture is not available.

Skin contact
Specific test data for the substance or mixture is not available.

Ingestion
Specific test data for the substance or mixture is not available.

Symptoms related to the physical, chemical and toxicological characteristics
Symptoms
No information available.

Numerical measures of toxicity

Acute toxicity

Unknown acute toxicity
100 % of the mixture consists of ingredient(s) of unknown toxicity
100 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
100 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity
100 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)
100 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)
100 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

Product Information

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation
No information available.

Product Information

Serious eye damage/eye irritation
No information available.

Product Information

Respiratory or skin sensitization
No information available.

Product Information

Germ cell mutagenicity
No information available.

Product Information

Carcinogenicity
Classification based on data available for ingredients.

Product Information

Reproductive toxicity
Classification based on data available for ingredients.

Product Information

STOT - single exposure
No information available.

Product Information

STOT - repeated exposure
No information available.
SAFETY DATA SHEET

72852 72854 - Raloxifene (Hydrochloride)

Revision Date 24-Nov-2022
Revision Number 3

Product Information

Aspiration hazard
No information available.

RTECS #
PC4956925

12. ECOLOGICAL INFORMATION

Ecotoxicity
The environmental impact of this product has not been fully investigated.

Persistence and degradability
No information available.

Bioaccumulation
There is no data for this product.

Other adverse effects
No information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste from residues/unused products
Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging
Do not reuse empty containers.

14. TRANSPORT INFORMATION

Note:
When sold in quantities of less than or equal to 1 mL, or 1 g, with an Excepted Quantity Code of E1, E2, E4, or E5, this item meets the De Minimis Quantities exemption, per IATA 2.6.10. Therefore packaging does not have to be labeled as Dangerous Goods/Excepted Quantity.

DOT

UN/ID no. UN3077
Proper shipping name Environmentally hazardous substance, solid, n.o.s. (Raloxifene hydrochloride)
Hazard class 9 Miscellaneous dangerous substances and articles
Packing Group III

TDG
Not regulated
SAFETY DATA SHEET

72852 72854 - Raloxifene (Hydrochloride)

Revision Date 24-Nov-2022
Revision Number 3

MEX Not regulated
ICAO (air) Not regulated

IATA
UN Number UN3077
UN proper shipping name Environmentally hazardous substance, solid, n.o.s. (Raloxifene hydrochloride)
Transport hazard class(es) 9 Miscellaneous dangerous substances and articles
Packing Group III

IMDG
UN Number UN3077
UN proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE,SOLID, N.O.S. (Raloxifene hydrochloride), MARINE POLLUTANT
Transport hazard class(es) 9 Miscellaneous dangerous substances and articles
Packing Group III

RID Not regulated
ADR Not regulated
ADN Not regulated

15. REGULATORY INFORMATION

International Inventories
TSCA Does not comply
DSL/NDSL Does not comply
EINECS/ELINCS Does not comply
ENCS Does not comply
IECSC Does not comply
KECL Does not comply
PICCS Does not comply
AICS Does not comply

Legend:
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313
SAFETY DATA SHEET

72852 72854 - Raloxifene (Hydrochloride)

Revision Date 24-Nov-2022
Revision Number 3

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories
- Acute health hazard: No
- Chronic Health Hazard: Yes
- Fire hazard: No
- Sudden release of pressure hazard: No
- Reactive Hazard: No

CWA (Clean Water Act)
This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA
This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations

California Proposition 65
This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

US State Regulations
This product does not contain any substances regulated by state right-to-know regulations

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

Prepared By, Quality Control. STEMCELL Technologies Canada Inc.
Revision Date 24-Nov-2022
Revision Note No information available.
Disclaimer 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 given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. STEMCELL Technologies Inc. shall not be held liable for any damage resulting from handling or from contact with the product.

End of Safety Data Sheet