

Revision number: 3 Revision date: 11/10/2015

# 1. IDENTIFICATION

Product name: Product code: Ritodrine Hydrochloride R0114

Product use: Restrictions on use:

# Company:

TCI America 9211 N. Harborgate Street Portland, OR 97203 U.S.A. Telephone: +1-800-423-8616 / +1-503-283-1681 Fax: +1-888-520-1075 / +1-503-283-1987 e-mail: sales-US@TCIchemicals.com www.TCIchemicals.com

# 2. HAZARD(S) IDENTIFICATION

OSHA Haz Com: CFR 1910.1200:

Acute Toxicity - Oral [Category 4]

Warning!

Harmful if swallowed

Signal word:

Hazard Statement(s):

Pictogram(s) or Symbol(s):



Precautionary Statement(s): [Prevention] [Response] [Storage] [Disposal]

Do not eat, drink or smoke when using this product. Wash hands and face thoroughly after handling. If swallowed: Immediately call a poison center or doctor. Rinse mouth. None Dispose of contents and container in accordance with US EPA guidelines for the classification and determination of hazardous waste listed in 40 CFR 261.3. (See Section 13)

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Mixture: Components: Percent: CAS Number: Molecular Weight: Chemical Formula: Synonyms: Substance Ritodrine Hydrochloride >98.0%(HPLC)(N) 23239-51-2 323.82 C<sub>17</sub>H<sub>21</sub>NO<sub>3</sub>·HCl N-(4-Hydroxyphenethyl)-4-hydroxynorephedrine Hydrochloride

#### 4. FIRST-AID MEASURES

For laboratory research purposes. Not for drug or household use.

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SAFETY DATA SHEET

Emergency telephone number: Chemical Emergencies: TCI America (8:00am - 5:00pm) PST +1-503-286-7624 Transportation Emergencies: Chemtrec 24-Hour +1-800-424-9300 (U.S.A.) +1-703-527-3887 (International) Responsible department: TCI America Environmental Health Safety and Security +1- 503-286-7624

4. FIRST-AID MEASURES	
Inhalation:	Call a poison center or doctor if you feel unwell. Move victim to fresh air. Give artificial respiration if victim is not breathing. Administer oxygen if breathing is difficult. Keep victim warm and quiet. Treat symptomatically and supportively. Ensure that medical personnel are aware of the material(s) involved and take preservings to protect themselves.
Skin contact:	take precautions to protect themselves. Call a poison center or doctor if you feel unwell. Remove and isolate contaminated clothing and shoes. In case of contact with substance, immediately flush skin with running water for at least 20 minutes. Treat symptomatically and supportively. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.
Eye contact:	If this chemical contacts the eyes, immediately wash (irrigate) the eyes with large amounts of water, occasionally lifting the lower and upper eyelids. If eye irritation persists get medical advice/attention. Move victim to fresh air. Check for and remove any contact lenses. Keep victim warm and quiet. Treat symptomatically and supportively. Effects of exposure to substance may be delayed. Ensure that medical
Ingestion:	personnel are aware of the material(s) involved and take precautions to protect themselves. Harmful if swallowed. If swallowed, seek medical advice immediately and show the container or label. Do not use mouth-to-mouth method if victim ingested the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Loosen tight clothing such as a collar, tie, belt or waistband. If a person vomits place them in the recovery position so that vomit will not reenter the mouth and throat. Rinse mouth. Keep victim warm and quiet. Treat symptomatically and supportively. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.
Symptoms/effects:	
Acute: Delayed:	No data available No data available
Immediate medical attention:	WARNING: It might be hazardous to the person providing aid to give mouth-to-mouth respiration, because the inhaled material is harmful. If breathing has stopped, perform artificial respiration. Use first aid treatment according to the nature of the injury. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.
5. FIRE-FIGHTING MEASURES	
Suitable extinguishing media:	Dry chemical, $CO_2$ , sand, earth, water spray or regular foam Consult with local fire authorities before attempting large scale fire fighting operations.
Specific hazards arising from the chem Hazardous combustion products: Other specific hazards:	ical These products include: Carbon oxides Nitrogen oxides Halogenated compounds WARNING: Highly toxic HCI gas is produced during combustion.
heated. Move containers from fire area if y <b>Special protective equipment for fire-fig</b> Wear positive pressure self-contained brea	
6. ACCIDENTAL RELEASE MEASU	RES
Personal precautions:	Avoid contact with skin, eyes, and clothing. Keep people away from and upwind of spill/leak. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing (Section 8). Warn
Personal protective equipment:	unnecessary personnel to move away. Stop leak if you can do it without risk. Ensure adequate ventilation. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Safety glasses. Lab coat. Dust respirator. Be sure to use a MSHA/NIOSH approved respirator or equivalent. Wear protective gloves (nitrile).
Emergency procedures:	Prevent dust cloud. In case of a spill and/or a leak, always shut off any sources of ignition, ventilate the area, and excercise caution. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Warn personnel to move away. Prevent entry into sewers, basements or confined areas; dike if needed.

Methods and materials for containment and cleaning up: ELIMINATE all ignition sources (no smoking, flares, sparks, or flames in immediate area). Stop leak if without risk. Ventilate the area. Absorb with an inert material and put the spilled material in an appropriate waste disposal container. Use clean non-sparking tools to collect absorbed material. Environmental precautions:

Keep away from living quarters. Prevent further leakage or spillage if safe to do so. Water runoff can cause environmental damage. Prevent entry into sewers, basements or confined areas; dike if needed.

# 7. HANDLING AND STORAGE

7. HANDLING AND STORAGE	
Precautions for safe handling:	Avoid inhalation of vapor or mist. Do not ingest. Avoid contact with skin and eyes. Good general ventilation should be sufficient to control airborne levels. Keep container dry. Handle and open container with care. Wear suitable protective clothing, gloves and eye/face protection. When using do not eat, drink, or smoke. Keep away from sources of ignition.
Conditions for safe storage:	Keep only in the original container in a cool well-ventilated place. Keep away from incompatibles. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Avoid prolonged storage periods.
Storage incompatibilities:	Store away from oxidizing agents

# 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Exposure limits:** 

No data available

#### Appropriate engineering controls:

Good general ventilation should be sufficient to control airborne levels. Ventilation is normally required when handling or using this product. Eyewash fountains should be provided in areas where there is any possibility that workers could be exposed to the substance. Follow safe industrial engineering/laboratory practices when handling any chemical.

Personal protective equipment		
Respiratory protection:	Dust respirator. Be sure to use a MSHA/NIOSH approved respirator or equivalent.	
Hand protection:	Wear protective gloves.	
Eye protection:	Safety glasses.	
Skin and body protection:	Lab coat.	

### 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state (20°C): Form: Color: Odor: Odor threshold:	Solid Crystal - Powder White - Slightly pale yellow No data available No data available		
Melting point/freezing point: Boiling point/range: Decomposition temperature: Relative density: Kinematic Viscosity:	195°C (dec.) (383°F) No data available No data available No data available No data available No data available	pH: Vapor pressure: Vapor density: Dynamic Viscosity:	No data available No data available No data available No data available
Partition coefficient: n-octanol/water (log P <sub>ow</sub> )	No data available	Evaporation rate: (Butyl Acetate = 1)	No data available
Flash point: Flammability (solid, gas):	No data available No data available		No data available i <b>ts:</b> available available

#### Solubility(ies):

# **10. STABILITY AND REACTIVITY**

Reactivity: Chemical Stability: Possibility of Hazardous Reactions: Conditions to avoid: Incompatible materials: Hazardous Decomposition Products: Not Available. Moisture sensitive. Light sensitive. No hazardous reactivity has been reported. Exposure to light. Exposure to moisture. Moisture sensitive. Oxidizing agents No data available

# 11. TOXICOLOGICAL INFORMATION

RTECS Number: DO6524000

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Acute Toxicity: orl-rat LD50:1840 mg/kg	ipr-rat LD50:330 mg/kg	
ivn-rat LD50:83 mg/kg	scu-rat LD50:980 mg/kg	
Skin corrosion/irritation: No data available		
Serious eye damage/irritation: No data available		
Respiratory or skin sensitization: No data available		
Germ cell mutagenicity: No data available		
Carcinogenicity:		
No data available		
IARC: No data available	NTP: No data available OSHA: No data availa	ble
Reproductive toxicity: ivn-wmn TDLo:450 ug/kg(39W preg)	orl-wmn TDLo:24 mg/kg(31-33W preg)	
Routes of Exposure: Symptoms related to exposure: Overexposure may result in serious illness Potential Health Effects: No specific information available; skin and Target organ(s):	Inhalation, Eye contact, Ingestion. or death. eye contact may result in irriatation. May be harmful if inhaled or ingested. No data available	
12. ECOLOGICAL INFORMATION		
Ecotoxicity Fish:	No data available No data available	
Ecotoxicity		
Ecotoxicity Fish: Crustacea:	No data available	
Ecotoxicity Fish: Crustacea: Algae: Persistence and degradability: Bioaccumulative potential (BCF): Mobillity in soil: Partition coefficient: n-octanol/water (log Pow) Soil adsorption (Koc): Henry's Law: constant (PaM <sup>3</sup> /mol)	No data available No data available No data available No data available No data available No data available No data available	
Ecotoxicity Fish: Crustacea: Algae: Persistence and degradability: Bioaccumulative potential (BCF): Mobillity in soil: Partition coefficient: n-octanol/water (log Pow) Soil adsorption (Koc): Henry's Law:	No data available No data available U200/Reserpine Recycle to process if possible. It is the generator's responsibility to comply with Federa rules and regulations. You may be able to dissolve or mix material with a combustible e chemical incinerator equipped with an afterburner and scrubber system. This section is assistance but does not replace these laws, nor does compliance in accordance with t regulatory compliance according to the law. US EPA guidelines for Identification and L Waste are listed in 40 CFR Parts 261. The product should not be allowed to enter the	solvent and burn in a s intended to provide his section ensure isting of Hazardous
Ecotoxicity Fish: Crustacea: Algae: Persistence and degradability: Bioaccumulative potential (BCF): Mobillity in soil: Partition coefficient: n-octanol/water (log Pow) Soil adsorption (Koc): Henry's Law: constant (PaM <sup>3</sup> /mol) <u>13. DISPOSAL CONSIDERATIONS</u> Listed waste	No data available No data available U200/Reserpine Recycle to process if possible. It is the generator's responsibility to comply with Federa rules and regulations. You may be able to dissolve or mix material with a combustible s chemical incinerator equipped with an afterburner and scrubber system. This section is assistance but does not replace these laws, nor does compliance in accordance with t regulatory compliance according to the law. US EPA guidelines for Identification and L	solvent and burn in a s intended to provide his section ensure isting of Hazardous
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Ecotoxicity Fish: Crustacea: Algae: Persistence and degradability: Bioaccumulative potential (BCF): Mobillity in soil: Partition coefficient: n-octanol/water (log Pow) Soil adsorption (Koc): Henry's Law: constant (PaM³/mol) <u>13. DISPOSAL CONSIDERATIONS</u> Listed waste Disposal of product: Disposal of container: Other considerations:	No data available No data available U200/Reserpine Recycle to process if possible. It is the generator's responsibility to comply with Federa rules and regulations. You may be able to dissolve or mix material with a combustible of chemical incinerator equipped with an afterburner and scrubber system. This section is assistance but does not replace these laws, nor does compliance in accordance with t regulatory compliance according to the law. US EPA guidelines for Identification and L Waste are listed in 40 CFR Parts 261. The product should not be allowed to enter the water ways, or the soil. Dispose of as unused product. Do not re-use empty containers.	solvent and burn in a s intended to provide his section ensure isting of Hazardous
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## 14. TRANSPORT INFORMATION

# IMDG

Non-hazardous for transportation.

# 15. REGULATORY INFORMATION

#### Toxic Substance Control Act (TSCA 8b.):

This product is NOT on the EPA Toxic Substances Control Act (TSCA) inventory. The following notices are required by 40 CFR 720.36 (C) for those products not on the inventory list:

(i) These products are supplied solely for use in research and development by or under the supervision of a technically qualified individual as defined in 40 CFR 720.0 et sec.

(ii) The health risks of these products have not been fully determined. Any information that is or becomes available will be supplied on a SDS sheet.

#### **US Federal Regulations**

<b>CERCLA Hazardous substance</b>	e and Reportable Quantity:
SARA 313:	Not Listed
SARA 302:	Not Listed

#### State Regulations

#### State Right-to-Know

Massachusetts	Not Listed
New Jersey	Not Listed
Pennsylvania	Not Listed
California Proposition 65:	Not Listed

#### **Other Information**

#### **NFPA Rating:**

Health:	0	Health:	0
Flammability:	0	Flammability:	0
Instability:	0	Physical:	0
-		-	

#### International Inventories

WHMIS hazard class: EC-No: D2A: Materials causing other toxic effects. (Very Toxic) 245-514-8

HMIS Classification:

# 16. OTHER INFORMATION

#### Revision date: 11/10/2015

Revision number: 3

TCI chemicals are for research purposes only and are NOT intended for use as drugs, food additives, households, or pesticides. The information herein is believed to be correct, but does not claim to be all inclusive and should be used only as a guide. Neither the above named supplier nor any of its affiliates or subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All chemical reagents must be handled with the recognition that their chemical, physiological, toxicological, and hazardous properties have not been fully investigated or determined. All chemical reagents should be handled only by individuals who are familiar with their potential hazards and who have been fully trained in proper safety, laboratory, and chemical handling procedures. Although certain hazards are described herein, we can not guarantee that these are the only hazards which exist. Our SDS are based only on data available at the time of shipping and are subject to change without notice as new information is obtained. Avoid long storage periods since the product is subject to degradation with age and may become more dangerous or hazardous. It is the responsibility of the user to request updated SDS for products that are stored for extended periods. Disposal of unused product must be undertaken by qualified personnel who are knowledgeable in all applicable regulations and follow all pertinent safety precautions including the use of appropriate protective equipment (e.g. protective goggles, protective clothing, breathing equipment, face mask, fume hood). For proper handling and disposal, always comply with federal, state and local regulations.