

## SAFETY DATA SHEET

Preparation Date: 4/14/2016

Revision Date: 8/14/2018

Revision Number: G2

### 1. IDENTIFICATION

#### Product identifier

**Product code:** E1418  
**Product Name:** RACEPINEPHRINE HYDROCHLORIDE, USP

#### Other means of identification

**Synonyms:** (+)-Adrenaline hydrochloride  
 dl-Adrenaline hydrochloride  
 1,2-Benzenediol, 4-(1-hydroxy-2-(methylamino)ethyl)-, hydrochloride, (+)- (9CI)  
 (+)-3,4-Dihydroxy-alpha-((methylamino)methyl)benzyl alcohol hydrochloride  
 (+)-Epinephrine hydrochloride  
 dl-Epinephrine hydrochloride

**CAS #:** 329-63-5  
**RTECS #** DO3330000  
**CI#:** Not available

#### Recommended use of the chemical and restrictions on use

**Recommended use:** Drug, Medication.  
**Uses advised against** No information available

**Supplier:** Spectrum Chemical Mfg. Corp  
 14422 South San Pedro St.  
 Gardena, CA 90248  
 (310) 516-8000

**Order Online At:** <https://www.spectrumchemical.com>  
**Emergency telephone number** Chemtrec 1-800-424-9300  
**Contact Person:** Martin LaBenz (West Coast)  
**Contact Person:** Ibad Tirmiz (East Coast)

### 2. HAZARDS IDENTIFICATION

#### Classification

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

Considered a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Acute toxicity - Oral	Category 3
Acute toxicity - Dermal	Category 3
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2B

#### Label elements

**Danger**

**Hazard statements**

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Toxic if swallowed  
Toxic in contact with skin  
Causes skin irritation  
Causes eye irritation



**Hazards not otherwise classified (HNOC)**

Not Applicable

**Other hazards**

Not available

**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling  
Do not eat, drink or smoke when using this product  
Wear protective gloves  
Wear protective clothing

**Precautionary Statements - Response**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.  
IF ON SKIN: Wash with plenty of water  
If skin irritation occurs: Get medical advice/attention  
Take off contaminated clothing and wash it before reuse  
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician  
Rinse mouth

**Precautionary Statements - Storage**

Store locked up

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Components	CAS-No.	Weight %
Racpinephrine Hydrochloride	329-63-5	100

**4. FIRST AID MEASURES**

**First aid measures**

**General Advice:**

National Capital Poison Center in the United States can provide assistance if you have a poison emergency and need to talk to a poison specialist. Call 1-800-222-1222. Ensure that medical personnel are aware of the material(s)

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involved and take precautions to protect themselves. First aider needs to protect himself.

- Skin Contact:** Toxic in contact with skin. Wash off immediately with soap and plenty of water removing all contaminated clothing and shoes. Immediate medical attention is required. Call a physician or Poison Control Centre immediately.
- Eye Contact:** Flush eyes with water for 15 minutes. Get medical attention.
- Inhalation:** Toxic by inhalation. Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. **WARNING!** It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled or ingested material is toxic, infectious or corrosive. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Get medical attention.
- Ingestion:** Toxic if swallowed. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Immediate medical attention is required. Call a physician or Poison Control Center immediately.

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

- Symptoms**
- Irritating to eyes, respiratory system and skin
  - Ingestion may cause nausea, vomiting, and diarrhea
  - Central nervous system effects
  - Dizziness
  - Headache
  - Convulsions
  - Tremors
  - Somnolence
  - Hallucinations
  - May affect respiration
  - Dyspnea (Shortness of breath and difficulty breathing)
  - May affect the cardiovascular system
  - Weak, rapid pulse or rapid heart rate (Tachycardia)
  - Cardiac arrhythmias
  - Cardiac arrest

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

**Notes to Physician:** Treat symptomatically.

**Protection of first-aiders**

First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste.

**5. FIRE-FIGHTING MEASURES**

**Extinguishing Media**

**Suitable Extinguishing Media:** Dry chemical. Carbon dioxide (CO<sub>2</sub>). Water spray mist or foam.

**Unsuitable Extinguishing Media:** No information available.

**Specific hazards arising from the chemical**

**Hazardous Combustion Products:** Carbon Monoxide, Carbon Dioxide. Nitrogen Oxides. Hydrogen Chloride Gas.

**Specific hazards:** May be combustible at high temperatures.

## **Special Protective Actions for Firefighters**

### **Specific Methods:**

No information available.

### **Special Protective Equipment for Firefighters:**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

## **6. ACCIDENTAL RELEASE MEASURES**

### **Personal precautions, protective equipment and emergency procedures**

#### **Personal Precautions:**

Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Avoid contact with skin, eyes and clothing. Wear personal protective equipment. Remove all sources of ignition.

#### **Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Prevent entry into waterways, sewers, basements or confined areas.

### **Methods and material for containment and cleaning up**

#### **Methods for containment**

Stop leak if you can do it without risk. Cover with plastic sheet to prevent spreading.

#### **Methods for cleaning up**

Sweep up and shovel into suitable containers for disposal. Clean contaminated surface thoroughly.

## **7. HANDLING AND STORAGE**

### **Precautions for safe handling**

#### **Technical Measures/Precautions:**

Provide sufficient air exchange and/or exhaust in work rooms. Avoid dust formation. All equipment used when handling the product must be grounded. Keep away from incompatible materials.

#### **Safe Handling Advice**

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Avoid dust formation. Do not ingest. Do not breathe dust. Keep away from heat and sources of ignition. Handle in accordance with good industrial hygiene and safety practice.

### **Conditions for safe storage, including any incompatibilities**

#### **Technical Measures/Storage Conditions:**

Sensitive to light. Store in light-resistant containers. Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. Store away from incompatible materials. Store in a segregated and approved area.

#### **Incompatible Materials:**

Oxidizing agents  
Acid chlorides  
Acid anhydrides  
Acids

## **8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

### **Control parameters**

#### **National occupational exposure limits**

## United States

Components	CAS-No.	OSHA	NIOSH	ACGIH	AIHA WEEL
Racpinephrine Hydrochloride	329-63-5	None	None	None	None

## Canada

Components	CAS-No.	Canada - Alberta	Canada - British Columbia	Canada - Ontario	Canada - Quebec
Racpinephrine Hydrochloride	329-63-5	None	None	None	None

## Australia and Mexico

Components	CAS-No.	Australia	Mexico
Racpinephrine Hydrochloride	329-63-5	None	None

## Appropriate engineering controls

### Engineering measures to reduce exposure:

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

## Individual protection measures, such as personal protective equipment

### Personal Protective Equipment

- Eye protection:** Goggles
- Skin and body protection:** Long sleeved clothing  
Chemical resistant apron  
Gloves
- Respiratory protection:** Effective dust mask. Use a dust respirator under conditions where exposure to the substance is apparent (e.g. generation of high concentration of dust (dust clouds) , inadequate ventilation, development of respiratory tract irritation), and engineering controls are not feasible. Be sure to use an approved/certified respirator or equivalent.
- Hygiene measures:** Avoid contact with skin, eyes and clothing. When using, do not eat, drink or smoke. Wash hands before breaks and immediately after handling the product.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical state:**

Solid

**Appearance:**

Fine powder.

**Color:**

White.

**Odor:**

Odorless.

**Taste**

No information available.

**Formula:**

C9-H13-N-O3.HCl

**Molecular/Formula weight (g/mole):**

219.67

**Flammability:**

No information available

**Flashpoint (°C/°F):**

No information available.

**Flash Point Tested according to:****Autoignition Temperature (°C/°F):**

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Not available	No information available	<b>Lower Explosion Limit (%):</b> No information available
<b>Upper Explosion Limit (%):</b> No information available	<b>Melting point/range(°C/°F):</b> 157 °C/314.6 °F	<b>Decomposition temperature(°C/°F):</b> No information available
<b>Boiling point/range(°C/°F):</b> No information available	<b>Bulk density:</b> No information available	<b>Density (g/cm3):</b> No information available
<b>Specific gravity:</b> No information available	<b>pH:</b> No information available	<b>Vapor pressure @ 20°C (kPa):</b> No information available
<b>Evaporation rate:</b> No information available	<b>Vapor density:</b> No information available	<b>VOC content (g/L):</b> No information available
<b>Odor threshold (ppm):</b> No information available	<b>Partition coefficient (n-octanol/water):</b> No information available	<b>Viscosity:</b> No information available
<b>Miscibility:</b> No information available	<b>Solubility:</b> Soluble in Water	

## 10. STABILITY AND REACTIVITY

### Reactivity

Reactive with oxidizing agents  
Sensitive to light. It gradually darkens on exposure to light

### Chemical stability

**Stability:** Sensitive to light. Exposure to light accelerates decomposition. Stable under recommended storage conditions.

**Possibility of Hazardous Reactions:** Hazardous polymerization does not occur

**Conditions to avoid:** Heat. Ignition sources. Exposure to light. Exposure to air. Incompatible materials.

**Incompatible Materials:** Oxidizing agents  
Acid chlorides  
Acid anhydrides  
Acids

**Hazardous decomposition products:** Carbon oxides. When heated to decomposition it emits toxic fumes. Nitrogen oxides (NOx). Hydrogen chloride gas.

### Other Information

**Corrosivity:** No information available

**Special Remarks on Corrosivity:** No information available

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

**Principal Routes of Exposure:**  
Ingestion. Inhalation. Skin.

### Acute Toxicity

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## Component Information

Racepinephrine Hydrochloride	
CAS-No.	329-63-5

LD50/oral/rat = No information available  
LD50/oral/mouse = 90 mg/kg Oral LD50 Mouse  
LD50/dermal/rabbit = No information available  
LD50/dermal/rat = No information available  
LC50/inhalation/rat = No information available  
LC50/inhalation/mouse = No information available  
Other LD50 or LC50 information = No information available

## Product Information

LD50/oral/rat =  
VALUE- Acute Tox Oral = No information available

LD50/oral/mouse =  
Value - Acute Tox Oral = 90 mg/kg

LD50/dermal/rabbit  
VALUE-Acute Tox Dermal = No information available

LD50/dermal/rat  
VALUE -Acute Tox Dermal = No information available

LC50/inhalation/rat  
VALUE-Vapor = No information available  
VALUE-Gas = No information available  
VALUE-Dust/Mist = No information available

LC50/Inhalation/mouse  
VALUE-Vapor = No information available  
VALUE - Gas = No information available  
VALUE - Dust/Mist = No information available

## Symptoms

**Skin Contact:** Causes skin irritation. Toxic in contact with skin.

**Eye Contact:** Causes eye irritation. Mild eye irritation.

**Inhalation** May cause irritation of respiratory tract.

**Ingestion** Toxic if swallowed. May cause digestive (gastrointestinal) tract irritation. Ingestion may cause nausea, vomiting, diarrhea. May cause pallor. May cause excessive sweating. May affect the cardiovascular system (palpitations). May affect the cardiovascular system (tachycardia). It may affect the heart (cardiomyopathy including myocardial infarction, arrhythmias). It may cause central nervous system depression. May affect behavior/central nervous system (somnolence, tremor, hallucinations). May affect behavior/central nervous system (dizziness, headache). May affect behavior/central nervous system (tremor, convulsions). May also cause anxiety and stress. May affect respiration (acute pulmonary edema). May affect respiration (dyspnea - difficulty breathing and shortness of breath).

**Aspiration hazard** No information available.

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

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**Chronic Toxicity** No information available.

**Sensitization:** No information available.

**Mutagenic Effects:** DNA damage - human leukocyte

**Carcinogenic effects:** Not considered carcinogenic.

Components	CAS-No.	IARC	ACGIH - Carcinogens	NTP	OSHA HCS - Carcinogens	Australia - Notifiable Carcinogenic Substances	Australia - Prohibited Carcinogenic Substances
Racipinephrine Hydrochloride	329-63-5	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed

*ACGIH (American Conference of Governmental Industrial Hygienists)*

*IARC (International Agency for Research on Cancer)*

*NTP (National Toxicology Program)*

*OSHA (Occupational Safety and Health Administration of the US Department of Labor)*

**Reproductive toxicity** No data is available

**Reproductive Effects:** No information available

**Developmental Effects:** No information available

**Teratogenic Effects:** No information available

**Specific Target Organ Toxicity**

**STOT - single exposure** No information available.

**STOT - repeated exposure** No information available.

**Target Organs:** No information available.

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

**Ecotoxicity effects:** No data available.

**Persistence and degradability:** No information available

**Bioaccumulative potential:** Potential for bioconcentration in aquatic organisms is low.

**Mobility:** It is expected to have high mobility in soil.

**13. DISPOSAL CONSIDERATIONS**

**Disposal Methods**

**Waste from residues / unused products:**  
Waste must be disposed of in accordance with Federal, State and Local regulation.

**Contaminated packaging:**  
Empty containers should be taken for local recycling, recovery or waste disposal



Components	CAS-No.	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Racpinephrine Hydrochloride	329-63-5	None	None	None	None

## 14. TRANSPORT INFORMATION

### DOT

**UN-No:** Not Regulated  
**Proper Shipping Name:** Toxic solids, organic, n.o.s.(epinephrine hydrochloride)  
**Hazard Class:** 6.1  
**Subsidiary Class:** No information available  
**Packing group:** No information available  
**Emergency Response Guide Number:** No information available  
**Marine Pollutant:** No data available  
**DOT RQ (lbs):** No information available  
**Special Provisions:** No Information available  
**Symbol(s):** [DOT]: (G) - Identifies proper shipping names for which one or more technical names of the hazardous material must be entered in parentheses, in association with the basic description.  
**Description:** UN2811, Toxic solids, organic, n.o.s. ,6.1,PG II

### TDG (Canada)

**UN-No:** UN2811  
**Proper Shipping Name:** Toxic solid, organic, n.o.s.  
**Hazard Class:** 6.1  
**Subsidiary Risk:** No information available  
**Packing Group:** II  
**Marine Pollutant:** No Information available  
**Description:** UN2811, TOXIC SOLID, ORGANIC, N.O.S.,6.1,PG II

### ADR

**UN-No:** UN2811  
**Proper Shipping Name:** Toxic solid, organic, n.o.s.  
**Hazard Class:** 6.1  
**Packing Group:** II  
**Subsidiary Risk:** No information available  
**Description:** UN2811 Toxic solid, organic, n.o.s.,6.1,II

### IMO / IMDG

**UN-No:** UN2811  
**Proper Shipping Name:** Toxic solid, organic, n.o.s.  
**Hazard Class:** 6.1  
**Subsidiary Risk:** No information available  
**Packing Group:** II  
**Marine Pollutant:** No information available  
**EMS:** F-A

### RID

**UN-No:** UN2811  
**Proper Shipping Name:** Toxic solid, organic, n.o.s.  
**Hazard Class:** 6.1  
**Subsidiary Risk:** No information available  
**Packing Group:** II  
**Description:** UN2811 Toxic solid, organic, n.o.s.,6.1,II

### ICAO

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**UN-No:** UN2811  
**Proper Shipping Name:** Toxic solid, organic, n.o.s.  
**Hazard Class:** 6.1  
**Subsidiary Risk:** No information available  
**Packing Group:** II  
**Description:** UN2811, Toxic solid, organic, n.o.s., 6.1, PG II

**IATA**

**UN-No:** UN2811  
**Proper Shipping Name:** Toxic solid, organic, n.o.s.  
**Hazard Class:** 6.1  
**Subsidiary Risk:** No information available  
**Packing Group:** II  
**ERG Code:** 6L  
**Special Provisions:** No information available  
**Description:** UN2811, Toxic solid, organic, n.o.s., 6.1, PG II

**15. REGULATORY INFORMATION**

**International Inventories**

Components	CAS-No.	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	CHINA	Australia (AICS)	EINECS-No.
Racpinephrine Hydrochloride	329-63-5	Present	Not present	Not present	Not present	Not present	Not present	Present 206-346-0

**U.S. Regulations**

**California Prop. 65: Safe Drinking Water and Toxic Enforcement Act of 1986.**

**Chemicals Known to the State of California to Cause Cancer:**

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

**Chemicals Known to the State of California to Cause Reproductive Toxicity:**

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Components	CAS-No.	Carcinogen	Developmental Toxicity	Male Reproductive Toxicity	Female Reproductive Toxicity:
Racpinephrine Hydrochloride	329-63-5	Not Listed	Not Listed	Not Listed	Not Listed

**CERCLA/SARA**

Components	CAS-No.	CERCLA - Hazardous Substances and their Reportable Quantities	Section 302 Extremely Hazardous Substances and TPQs	Section 302 Extremely Hazardous Substances and RQs	Section 313 - Chemical Category	Section 313 - Reporting de minimis
Racpinephrine Hydrochloride	329-63-5	None	None	None	None	None

**U.S. TSCA**

Components	CAS-No.	TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) -Health and Safety Reporting
Racpinephrine Hydrochloride	329-63-5	Not Applicable	Not Applicable

**Canada**

## WHIMIS 2015 - GHS Classifications

WHMIS 2015 Hazard Classification Information:

The WHMIS 2015 classification of this product has not been validated or reviewed yet.

**Canada Hazardous Products Regulation** This product has been classified according to the hazard criteria of the HPR (Hazardous Products Regulation) and the SDS contains all of the information required by the HPR

## WHMIS 1988 Hazard Class

D1B Toxic materials

## Canada Controlled Products Regulation:

This product has been classified according to the hazard criteria of the CPR (Controlled Products Regulation) and the MSDS contains all of the information required by the CPR.

## Inventory

Components	CAS-No.	Canada (DSL)	Canada (NDSL)
Racpinephrine Hydrochloride	329-63-5	Not Listed	Present

Components	CAS-No.	CEPA Schedule I - Toxic Substances
Racpinephrine Hydrochloride	329-63-5	Not listed
Components	CAS-No.	CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting
Racpinephrine Hydrochloride	329-63-5	Not listed

## EU Classification

### EU GHS - SV - CLP 1272/2008

Components	CAS-No.	EU GHS - SV - CLP (1272/2008)
Racpinephrine Hydrochloride	329-63-5	No information

### EU - CLP (1272/2008)

### R-phras(e)s

R25 - Toxic if swallowed.

### S -phas(e)s

S46 - If swallowed, seek medical advice immediately and show this container or label.

Components	CAS-No.	Classification	Concentration Limits:	Safety Phrases
Racpinephrine Hydrochloride	329-63-5		No information	

The product is classified in accordance with Annex VI to Directive 67/548/EEC

## Indication of danger:

T - Toxic

T



## 16. OTHER INFORMATION

**Preparation Date:** 4/14/2016  
**Revision Date:** 8/14/2018  
**Prepared by:** Sonia Owen

**Disclaimer:** All chemicals may pose unknown hazards and should be used with caution. This Safety Data Sheet (SDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.

**End of Safety Data Sheet**