

(R)-(+)-Verapamil Hydrochloride: sc-208225



The Power to Question

MATERIAL SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY INFORMATION

Catalog Number: sc-208225

Product Name: (R)-(+)-Verapamil Hydrochloride

Supplier:

Santa Cruz Biotechnology, Inc.
2145 Delaware Avenue
Santa Cruz, California 95060
800.457.3801 or 831.457.3800

Emergency:

ChemWatch
Within the US & Canada: 877-715-9305
Outside the US & Canada: +800 2436 2255
(1-800-CHEMCALL) or call +613 9573 3112

2. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS Number	Weight %	ACGIH Exposure Limits:	OSHA Exposure Limits:
R(+)-VERAPAMIL HYDROCHLORIDE	38321-02-7	90 - 100%	None	None

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: Toxic if swallowed. May be toxic by inhalation or skin contact.

Category of Danger:

Toxic

Principle routes of exposure: Skin

Inhalation: Harmful by inhalation.

Ingestion: Toxic if swallowed.

Skin contact: Harmful in contact with skin.

Eye contact: Risk of serious damage to eyes

Statements of hazard Toxic if swallowed

Statement of Spill or Leak - ANSI Label Eliminate all ignition sources. Absorb and/or contain spill with inert materials (e.g., sand, vermiculite). Then place in appropriate container. For large spills, use water spray to disperse vapors, flush spill area. Prevent runoff from entering waterways or sewers.

4. FIRST AID MEASURES

General advice: In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Inhalation: Move to fresh air. Call a physician immediately.

Skin contact: Rinse immediately with plenty of water and seek medical advice

Ingestion: Do not induce vomiting without medical advice.

Eye contact: In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Protection of first-aiders: No information available

Medical conditions aggravated by exposure: None known

5. FIRE FIGHTING MEASURES

Suitable extinguishing media:

Specific hazards:

Unusual hazards:

Special protective equipment for firefighters:

Use dry chemical, CO₂, water spray or "alcohol" foam
Burning produces irritant fumes.

None known

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

Specific methods:

Water mist may be used to cool closed containers.

Flash point:	Not determined
Autoignition temperature:	Not determined
NFPA rating:	
NFPA Health:	2
NFPA Flammability:	1
NFPA Reactivity:	0

6. ACCIDENTAL RELEASE MEASURES

Personal precautions:	Use personal protective equipment.
Environmental precautions:	Prevent product from entering drains.
Methods for cleaning up:	Sweep up and shovel into suitable containers for disposal.

7. HANDLING AND STORAGE

Storage: Store at 4° C
PROTECT FROM LIGHT

Handling:	Use only in area provided with appropriate exhaust ventilation.
Safe handling advice:	Wear personal protective equipment.
Incompatible products:	Oxidising and spontaneously flammable products

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering measures: Ensure adequate ventilation.

PERSONAL PROTECTIVE EQUIPMENT

Respiratory protection: Breathing apparatus only if aerosol or dust is formed.

Hand protection: Pvc or other plastic material gloves

Skin and body protection: Usual safety precautions while handling the product will provide adequate protection against this potential effect.

Eye protection: Safety glasses with side-shields

Hygiene measures: Handle in accordance with good industrial hygiene and safety practice.



9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Powder
Formula:	C ₂₇ H ₃₈ N ₂ O ₄ • HCl
Molecular weight:	491
Melting point/range:	No data available at this time.
Boiling point/range:	No Data available at this time.
Density:	No data available
Vapor pressure:	No data available
Evaporation rate:	No data available
Vapor density:	No data available
Solubility (in water):	No data available
Flash point:	Not determined
Autoignition temperature:	Not determined

10. STABILITY AND REACTIVITY

Stability:	Stable under recommended storage conditions.
Polymerization:	None under normal processing.
Hazardous decomposition products:	Chloride/Hydrochloric acid , Nitrogen oxides (NO _x)/ammonia/CN-
Materials to avoid:	Strong oxidising agents
Conditions to avoid:	Exposure to air or moisture over prolonged periods.

11. TOXICOLOGICAL INFORMATION

Product Information

Acute toxicity

Components

R(+)-VERAPAMIL
HYDROCHLORIDE

RTECS Number:

Not Available

Selected LD50s and LC50s

Not Determined

Chronic toxicity:

Chronic exposure may cause nausea and vomiting, higher exposure causes unconsciousness.

Local effects:

Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

Specific effects:

May include moderate to severe erythema (redness) and moderate edema (raised skin), nausea, vomiting, headache.

Primary irritation:

No data is available on the product itself.

Carcinogenic effects:

No data is available on the product itself.

Mutagenic effects:

No data is available on the product itself.

Reproductive toxicity:

No data is available on the product itself.

12. ECOLOGICAL INFORMATION

Mobility:

No data available

Bioaccumulation:

No data available

Ecotoxicity effects:

No data available

Aquatic toxicity:

May cause long-term adverse effects in the aquatic environment.

Components

R(+)-VERAPAMIL
HYDROCHLORIDE

U.S. DOT - Appendix B - Marine Pollutan

Not Listed

U.S. DOT - Appendix B - Severe Marine Pollutants

Not Listed

United Kingdom - The Red List:

Not Listed

Components

R(+)-VERAPAMIL
HYDROCHLORIDE

Germany VCI (WGK)

Not Listed

World Health Organization (WHO) - Drinking Water

Not Listed

Ecotoxicity - Fish Species Data

Not Listed

Components

R(+)-VERAPAMIL
HYDROCHLORIDE

Ecotoxicity - Freshwater Algae Data

Not Listed

Ecotoxicity - Microtox Data

Not Listed

Ecotoxicity - Water Flea Data

Not Listed

Components

R(+)-VERAPAMIL
HYDROCHLORIDE

EPA - ATSDR Priority List

Not Listed

EPA - HPV Challenge Program Chemical List

Not Listed

California - Priority Toxic Pollutants

Not Listed

Components

R(+)-VERAPAMIL
HYDROCHLORIDE

California - Priority Toxic Pollutants

Not Listed

California - Priority Toxic Pollutants

Not Listed

13. DISPOSAL CONSIDERATIONS

Waste from residues / unused products:

Waste disposal must be in accordance with appropriate Federal, State, and local regulations. This product, if unaltered by use, may be disposed of by treatment at a permitted facility or as advised by your local hazardous waste regulatory authority. Residue from fires extinguished with this material may be hazardous.

Contaminated packaging:

Do not re-use empty containers

14. TRANSPORT INFORMATION

UN/Id No: 2811
DOT:
Proper shipping name: Toxic solid, organic, n.o.s.
IATA Hazard Label(s): Toxic
Hazard Class: 6.1 -
Packing group: Toxic substances - oral
Emergency Response Guide Number (ERG): 154

Components **U.S. DOT - Appendix A Table 1 - Reportable Quantities**
 R(+)-VERAPAMIL
 HYDROCHLORIDE Not Listed

TDG (Canada):
WHMIS hazard class: D1b toxic materials



IMDG/IMO
Proper shipping name: Toxic solid, organic, n.o.s.
IMDG - Hazard Classifications Not Applicable

Components	U.S. DOT - Appendix B - Marine Pollutant	U.S. DOT - Appendix B - Severe Marine Pollutants
R(+)-VERAPAMIL HYDROCHLORIDE	Not Listed	Not Listed

IMO-labels:

15. REGULATORY INFORMATION

International Inventories

Components
 R(+)-VERAPAMIL HYDROCHLORIDE
Inventory - United States TSCA - Sect. 8(b) Not Listed
Canada DSL Inventory List - Not Listed

U.S. regulations:

Components	California Proposition 65	Massachusetts Right to Know List:	New Jersey Right to Know List:	Pennsylvania Right to Know List:
R(+)-VERAPAMIL HYDROCHLORIDE	Not Listed	Not Listed	Not Listed	Not Listed

Components	Florida substance List:	Rhode Island Right to Know List:	Illinois - Toxic Air Contaminants	Connecticut - Hazardous Air Pollutants
R(+)-VERAPAMIL HYDROCHLORIDE	Not Listed	Not Listed	Not Listed	Not Listed

Components	SARA 313 Emission reporting/Toxic Release of Chemicals	CERCLA/SARA - Section 302 Extremely Haz	NTP:	IARC:
R(+)-VERAPAMIL HYDROCHLORIDE	Not Listed	Not Listed	None	None

SARA 313 Notification: The above is your notification as to the SARA 313 listing for this product(s) pursuant to Section 313 of Title III of the Superfund Ammendments and Reauthorization Act of 1986 and 40 CFR Part 372.
 If you are unsure if you are subject to the reporting requirements of Section 313, or need more information, please call the EPA Emergency Planning and Community Right-To-Know Information Hotline: (800) 535-0202 or (202) 479-2499 (in Washington, DC or Alaska).

State Notification:

The above information is your notice as to the Right-to-Know listings of the stated product(s). Individual states will list chemicals for a variety of reasons including, but not limited to, the compounds toxicity; carcinogenic, tumorigenic and/or reproductive hazards; and the compounds environmental impact if accidentally released.

16. OTHER INFORMATION

The above information is believed to be correct but does not purport to be complete and should be used only as a guide. The burden of safe use of this material rests entirely with the user.

8/19/2010