



## Safety Data Sheet

For Compliance with OSHA 29 CFR 1910.1200 and ANSI Z400.1-1998

Verapamil Hydrochloride USP

55-1921

### Section 1: Identification

**Product Name** Verapamil Hydrochloride USP

**Commercial Name** Not available.

**Product Use** Not available

**Restrictions On Use** Not available

**Product Code** 55-1921

**Company** PCCA  
9901 South Wilcrest  
Houston, TX 77099  
Phone: 1-800-331-2498  
Fax: 1-800-874-5760

In case of emergency contact:  
**CHEMTREC (24hr) 1-800-424-9300**

### Section 2: Hazard(s) Identification

**OSHA Haz Com:** Acute toxicity, oral Category 3 Serious eye damage/eye irritation Category 2A Specific target organ toxicity, single exposure Category 2 (Cardiovascular system)

**CFR 1910.1200**

**Signal Word** DANGER

**Hazard Statement(s)** TOXIC IF SWALLOWED. TOXIC IN CONTACT WITH SKIN. TOXIC IF INHALED. MAY CAUSE DAMAGE TO ORGANS THROUGH PROLONGED OR REPEATED EXPOSURE. CAUSES SERIOUS EYE IRRITATION. CAUSES SKIN IRRITATION.

**Pictogram(s) or Symbol(s)**



**Precautionary Statement(s):**

<b>Prevention</b>	Do not breathe dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Wear eye protection/face protection.
<b>Response</b>	If swallowed: Immediately call a poison center/doctor. Rinse mouth. 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 exposed or concerned: Call a poison center/doctor.
<b>Storage</b>	Store locked up.
<b>Disposal</b>	Dispose of contents/container in accordance with local/regional/national/international regulations.

### Section 3: Composition/Information on Ingredients

**Substance/Mixture** Substance

**Components** Verapamil Hydrochloride USP

**% By Weight** 100

**CAS#** 152-11-4

**Molecular Weight** Not available.

**Chemical Formula** C<sub>27</sub>H<sub>38</sub>N<sub>2</sub>O<sub>4</sub>.HCl

**Synonym(s)** 5-[N-(3,4 Piramal Healthcare Limited Dimethoxyphenylethyl)methylamino]-2-(3,4- 5-9-30, Road No.4, dimethoxyphenyl)-2-isopropylvaleronitrile hydrochloride

#### Mixtures

Name	CAS#	% by Weight	TLV/PEL	LC50/LD50
Verapamil Hydrochloride USP	152-11-4	100	Not Available.	ORAL (LD50):Acute: 108mg/kg [Rat].163 mg/kg[Mouse].

**Section 4: First-Aid Measures**

<b>Inhalation</b>	Move to fresh air. Call a physician if symptoms develop or persist.
<b>Skin Contact</b>	Wash off with soap and water. Get medical attention if irritation develops and persists.
<b>Eye Contact</b>	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.
<b>Ingestion</b>	Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting without advice from poison control center. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Do not use mouth-to-mouth method if substance is ingested. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.
<b>Symptoms/Effects</b>	
<b>Acute</b>	Pharmacologically active material. Occupational exposure may cause physiological effects. Cardiovascular effects
<b>Delayed</b>	Pharmacologically active material. Occupational exposure may cause physiological effects. Cardiovascular effects
<b>Immediate Medical Attention</b>	Provide general supportive measures and treat symptomatically

**Section 5: Fire-Fighting Measures****Suitable Extinguishing Media**

Water. Foam. Dry chemical or CO<sub>2</sub>. Use fire-extinguishing media appropriate for surrounding materials.

**Unsuitable Extinguishing Media**

Not available

**Products of Combustion**

No unusual fire or explosion hazards noted

**Firefighters Special Equipment and Precautions**

Wear suitable protective equipment. Use water spray to cool unopened containers. As with all fires, evacuate personnel to a safe area. Firefighters should use self-contained breathing equipment and protective clothing. Use standard firefighting procedures and consider the hazards of other involved materials

**Section 6: Accidental Release Measures**

Keep unnecessary personnel away. Wear appropriate personal protective equipment. Avoid inhalation of dust from the spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. For personal protection, see section 8 of the SDS. Methods and materials for containment and cleaning up: Avoid the generation of dusts during clean-up. Sweep up or vacuum up spillage and collect in suitable container for disposal. Clean surface thoroughly to remove residual contamination. For waste disposal, see section 13 of the SDS Environmental precautions: Avoid discharge into drains, water courses or onto the ground.

**Section 7: Handling and Storage**

Handling: As a general rule, when handling USP Reference Standards, avoid all contact and inhalation of dust, mists, and/or vapors associated with the material. Clean equipment and work surfaces with suitable detergent or solvent after use. After removing gloves, wash hands and other exposed skin thoroughly. Select and use containment devices and personal protective equipment based on a risk assessment of material potency and exposure potential. Storage: Store in tight container as defined in the USP-NF. This material should be handled and stored per label instructions to ensure product integrity.

**Section 8: Exposure Controls/Personal Protection**

<b>Exposure Limits</b>	No exposure limits noted for ingredient(s)
<b>Engineering Controls</b>	For laboratory operations, use local exhaust ventilation or a ventilated enclosure for high energy operations such as particle sizing. Control exposures to below the occupational exposure level (if available). Select and use containment devices and personal protective equipment based on a risk assessment of exposure potential. Cover all containers for solutions and slurries while being transferred.

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**Personal Protection**

Eye/face protection: Wear safety glasses with side shields, chemical splash goggles, or full face shield, if necessary. Base the choice of protection on the job activity and potential for contact with eyes or face. An emergency eye wash station should be available. Skin protection Hand protection: Wear nitrile or other impervious gloves if skin contact is possible. When the material is dissolved or suspended in an organic solvent, wear gloves that provide protection against the solvent. Other: Train employees in proper gowning and degowning practices. Wear lab coat. Base the choice of skin protection on the job activity, potential for skin contact and solvents and reagents in use. Do not wear protective garments in common areas (e.g., cafeterias) or out-of-doors. Respiratory protection: Respirators are generally not required for laboratory operations. Use a tight-fitting full-face respirator with HEPA filters for spill cleanup. Choose respiratory protection appropriate to the task and the level of existing engineering controls. Thermal hazards: Wear appropriate thermal protective clothing, when necessary. General hygiene considerations: Handling practices in this SDS are recommendations for laboratory use of reference standards. Procedures for any other uses or quantities should be determined after an appropriate assessment.

**Section 9: Physical and Chemical Properties**

<b>Appearance</b>	White. Off-white. Solid. Crystalline powder		
<b>Odor</b>	Practically odorless.		
<b>Odor Threshold</b>	Not available		
<b>Melting Point</b>	267.8 - 302 °F (131 - 150 °C)	<b>pH</b>	in aqueous solution 4.5 (5% solution)
<b>Freezing Point</b>	Not available	<b>Vapor Pressure</b>	< 0.0000001 kPa (77 °F (25 °C))
<b>Boiling Point/Range</b>	139.5 °C (283.1 °F)	<b>Vapor Density</b>	Not available.
<b>Decomposition temperature</b>	Not available	<b>Viscosity</b>	Not available.
<b>Partition Coefficient: n-octanol/water</b>	3.79	<b>Evaporation Rate</b>	Not available
<b>Flash Point</b>	Not available.	<b>Autoignition temperature</b>	Not available
<b>Flammability</b>	Not available	<b>Flammability or Explosive Limits:</b>	
		<b>Lower</b>	Not available
		<b>Upper</b>	Not available
<b>Solubility(ies)</b>	Soluble in water.		
<b>Other</b>	Chloroform: Freely soluble. Ether: Practically insoluble. Methyl alcohol: Freely soluble. Alcohol: Sparingly soluble. Chemical family Diphenylalkylamine. Molecular formula C <sub>27</sub> H <sub>38</sub> N <sub>2</sub> O <sub>4</sub> . HCl Molecular weight 491.06		

**Section 10: Stability and Reactivity**

<b>Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport
<b>Chemical Stability</b>	Material is stable under normal conditions
<b>Hazardous Polymerization</b>	No dangerous reaction known under conditions of normal use
<b>Conditions to Avoid</b>	Contact with incompatible materials
<b>Incompatible Materials</b>	Alkaline compounds. Oxidizing agent
<b>Hazardous Decomposition Products</b>	Irritating and/or toxic fumes or gases. Emits toxic fumes under fire conditions. NOx. Cl-

**Section 11: Toxicological Information**

<b>RTECS</b>	YV830000
<b>Acute Toxicity</b>	Toxic if swallowed. Oral LD50 Rat 108 mg/kg
<b>Skin Corrosion/Irritation</b>	Not available
<b>Serious Eye Damage/Irritation</b>	Causes serious eye irritation
<b>Respiratory or Skin Sensitization</b>	Not available
<b>Germ Cell Mutagenicity</b>	Not available
<b>Carcinogenicity</b>	Not available
<b>Reproductive Toxicity</b>	Not available
<b>Routes of Entry</b>	Eye. Ingestion.

**Symptoms Related to Exposure**

Calcium channel blocking agents: Cardiovascular effects. Dizziness. Fatigue. Hyperglycemia. Gastrointestinal effects. Flushing. Confusion. Seizures. Peripheral edema.

**Potential Health Effects**

Pharmacologically active material. Occupational exposure may cause physiological effects.

**Target Organ(s)** May cause damage to organs (Cardiovascular system)

**Section 12: Ecological Information****Ecotoxicity**

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

**Persistence and Degradability**

Not readily biodegradable

**Bioaccumulative Potential**

Not available

**Mobility in Soil**

Not available

**Other Adverse Effects**

Not available

**Section 13: Disposal Considerations****Waste Disposal**

Dispose in accordance with all applicable regulations. Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste. The waste code should be assigned in discussion between the user, the producer and the waste disposal company. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

**Disposal of Container**

Since emptied containers may retain product residue, follow label warnings even after container is emptied.

**Other Considerations**

Not available

**Section 14: Transport Information****DOT Classification**

UN number: UN2811 UN proper shipping name: Toxic solid, organic, n.o.s. (Verapamil Hydrochloride) Transport hazard class(es) Class 6.1 Subsidiary risk - Packing group III

**Section 15: Regulatory Information****Regulations**

US federal regulations: This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200 Toxic Substances Control Act (TSCA) TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D) Not regulated. CERCLA Hazardous Substance List (40 CFR 302.4) Not listed. SARA 304 Emergency release notification Not regulated. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053) Not listed. SARA 302 Extremely hazardous substance Superfund Amendments and Reauthorization Act of 1986 (SARA) Not listed. YesSARA 311/312 Hazardous chemical Acute toxicity (any route of exposure) Serious eye damage or eye irritation Specific target organ toxicity (single or repeated exposure) Classified hazard categories SARA 313 (TRI reporting) Not regulated. Other federal regulations Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List Not regulated Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130) Not regulated. Not regulated. Safe Drinking Water Act (SDWA) US state regulations California Proposition 65 California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

**Other**

Not available.



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### Section 16: Other Information

The (M) SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered. (M)SDS prepared date: 20/06/11 (M)SDS review date: 19/06/15 Disclaimer: The information above is believed to be accurate and represents the best information currently available to us. Users should make their own investigations to determine the suitability of the information for their particular purposes. This document is intended as a guide to the appropriate precautionary handling of the material by a properly trained person using this product.