Safety Data Sheet

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

Section 1: Identification

Product Name Atenolol USP Fine Powder
Commercial Name Not available.
Product Use Not available.
Restrictions On Use Not available.

Product Code 55-2467

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: CFR 1910.1200 Eye irritation, Category 2

Signal Word WARNING

Hazard Statement(s) Causes serious eye irritation. May cause drowsiness or dizziness. Irritating to eyes. May cause harm to breast-fed babies. Harmful if swallowed.

Pictogram(s) or Symbol(s)

Precautionary Statement(s):

Prevention P264: Wash hands and other exposed parts thoroughly after handling P28O: Wear protective gloves/protective clothing/eye protection/face protection. Safety glasses with side shields(frame goggles) (EN 166). P260: Do not breathe dust/fume/gas/mist/vapours/spray. P263: Avoid contact during pregnancy/ while nursing. P264: Wash hands thoroughly after handling P270: Do not eat, drink or smoke when using this product.

Response Not available

Storage Not available

Disposal Not available.

Section 3: Composition/Information on Ingredients

Substance/Mixture Substances
Components 1) Atenolol
% By Weight 100
CAS# 29122-68-7
Molecular Weight 266.38 g/mole
Chemical Formula C14-H22-N2-O3
Synonym(s) Acetamide, 2-(p-(2-hydroxy-3-(isopropylamino)propoxy)phenyl)

Mixtures

Name	CAS#	% by Weight	TLV/PEL	LC50/LD50
1) Atenolol	29122-68-7	100	Not Available.	Not Available.

Section 4: First-Aid Measures

Inhalation P304 + P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P308 + P313: IF exposed or concerned: Get medical advice/attention.

Skin Contact P302 + P352: Wash with plenty of soap and water. P308 + P313: IF exposed or concerned: Get medical advice/attention.

Eye Contact P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy do. Continue rinsing. P337+P313: If eye irritation persists: Get medical advice/attention.

Ingestion P330: Rinse mouth with copious amounts of water P308 + P313: IF exposed or concerned: Get medical advice/attention.

Symptoms/Effects

Acute irregular heartbeat, drowsiness, dizziness, disorientation, dilated pupils, lung congestion, convulsions, coma

Delayed allergic reactions, sore throat, rash, hair loss, ringing in the ears, nausea, vomiting, diarrhea, stomach pain, chest pain,

Immediate Medical Attention

Indication of immediate medical attention and special treatment needed, if necessary Emergency and supportive measures: 1. maintain an open airway and assist ventilation, if necessary. 2. Treat coma, seizures, hypotension, hyperkalemia, and hypoglycemia if they occur. 3. Treat bradycardia with atropine i.v.; isoproterenol i.v.; or cardiac pacing. 4. Treat bronchospasm with nebulized bronchodilators. 5. Continuously monitor the vital signs and ECG for at least 6 hours after ingestion of atenolol. Specific drugs and antidotes: 1. Bradycardia and hypotension resistant to normal measures should be treated with glucagon, Epinephrine (i.v.) infusion and titrating to effect. 2. Wide complex conduction defects caused by membrane-depressant poisoning may respond to sodium bicarbonate, as given for tricyclic antidepressant overdose. 3. Torsades de pointes polymorphous ventricular tachycardia associated with QT prolongation resulting from atenolol poisoning can be treated with isoproterenol infusion, magnesium, or overdrive pacing. Correction of hypokalemia may also be useful. Advise to authorized medical personnel Although hemodialysis has not been performed in the few known cases of overdose, it may be indicated by the patient's clinical state or in patients with significant renal impairment. Standard hemodialysis procedures result in significant clearance of atenolol (approximately 50% in 4 hours).

Section 5: Fire-Fighting Measures

Suitable Extinguishing Media

Use carbon dioxide, dry chemical, or water spray

Unsuitable Extinguishing Media

Not available.

Products of Combustion

In case of fire and/or explosion do not breathe fumes - May produce toxic fumes of carbon monoxide if burning May produce oxides of nitrogen on combustion

Firefighters Special Equipment and Precautions

Collect separately contaminated extinguishing water; do not allow reaching sewage or effluent systems. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations

Section 6: Accidental Release Measures

Personal precautions, protective equipment and emergency procedures For non-emergency Non-emergency personnel should be evacuated from affected area. Report personnel emergency situations immediately. Clean-up operations should only be taken by trained emergency personnel. For emergency personnel Personnel involved in clean-up should wear appropriate personal protective equipment (see Section 8). Ensure adequate ventilation. Minimize exposure. Environmental precautions: Place waste in an appropriately labeled, sealed container for disposal. Care should be taken to avoid environmental release. Methods and material for containment and cleaning up: Contain the source of spill if it is safe to do so. Collect spilled material by a method that controls dust generation. Clean spill area thoroughly. For large amounts: Dampen, pick up mechanically (use damp cloth) and dispose of For residues: Use approved industrial vacuum cleaners for removal. Dispose of contents/container in accordance with local/regional/national regulations.

Section 7: Handling and Storage

Precautions for safe Handling General handling: Do not open until use. Ensure adequate ventilation in working areas. Minimize dust generation and accumulation. Avoid breathing dust and avoid contact with eyes, skin, and clothing. When handling, use appropriate personal protective equipment See Section 8). Do not eat, drink or smoke when using this product. Hygienic measures: Wash hands and any exposed skin after removal of PPE. Store work clothing separately StorageRequirements and storage rooms vessels: Store as directed by product packaging. Store in original containers. Protect from heat and direct sunlight Store in rooms with jointless smooth floor Advice on storage Keep away from sources of ignition compatibility: Keep away from food, drink and animal feeding stuffs. Do not store with explosive materials, strong oxidizing agents and infectious materials Storage class according to VCI 13 Non-flammable solids

Section 8: Exposure Controls/Personal Protection

Exposure Limits	Occupational exposure limits (Air): Not available
Engineering Controls	Engineering controls should be used as the primary means to control exposures. General room ventilation is adequate unless the process generates dust, mist or fumes. Keep airborne contamination levels below the exposure limits listed above in this section
Personal Protection	Hand protection Chemical resistant protective gloves (EN 374) Body protection: Laboratory : Laboratory coat Eye Protection: Safety glasses with side shields(frame goggles) (EN 166) Repiratory Protection: Use breathing apparatus if exposed to vapours / dust / aerosol. Half mask (EN 140) particle filter P2 (EN 143)

Section 9: Physical and Chemical Properties

Appearance	White to off-white Solid.
Odor	Not available.
Odor Threshold	Not available.

Melting Point	146-155 C	**pH**	4.0
Freezing Point	Not available.	**Vapor Pressure**	Not available.
Boiling Point/Range	Not available.	**Vapor Density**	Not available.
Decomposition temperature	Not available.	**Viscosity**	Not available.
Partition Coefficient: n-octanol/water	0.23	**Evaporation Rate**	Not available.
Flash Point	Not available.	**Autoignition temperature**	Not available.
Flammability	Not available.	**Flammability or Explosive Limits:**	
		Lower	Not available.
		Upper	Not available.

Solubility(ies)	WATER 0.3 mg/mL; ETHANOL 3.4 mg/mL; DMSO 18 mg/mL: ETHER Practically Insoluble
Other	Not available.

Section 10: Stability and Reactivity

Reactivity	Not reactive under normal ambient storage and handling conditions of temperature and pressure. As a precautionary measure, keep away from strong oxidizers
Chemical Stability	Stable under normal ambient storage and handling conditions of temperature and pressure Possibility of hazardous reactions
Hazardous Polymerization	Will not polymerize or decompose under normal ambient storage and handling conditions of temperature and pressure Incompatible materials
Conditions to Avoid	Not available.
Incompatible Materials	Explosive materials, strong oxidizing agents and infectious materials
Hazardous Decomposition Products	Not available.

Section 11: Toxicological Information

RTECS AC3600000

Acute Toxicity

Non-human toxicological data (Rats) Method: OECD guidelines. Oral (rat) LD50: 3000 mg/kg Subcutaneous (rat) LD50: >600 mg/kg Intravenous (rat) LD50: 59 mg/kg Oral (mouse) LD50: 2000 mg/kg Subcutaneous (mouse) LD50: >4000 mg/kg Intravenous (mouse) LD50: 57 mg/kg Routes of administration: p.o., i.p., s.c.

Skin Corrosion/Irritation

Not available.

Serious Eye Damage/Irritation

Not available.

Respiratory or Skin Sensitization

Not available.

Germ Cell Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive Toxicity

Not available.

Routes of Entry
Likely routes of exposure include nose, skin, eyes and mouth. See above section for likely effects of exposure.

Symptoms Related to Exposure
Ingestion of this material may cause effects similar to those seen in clinical use including abdominal pain, dizziness, flushing, heart palpitations, and swelling.

Potential Health Effects
Immediate Effects: irregular heartbeat, drowsiness, dizziness, disorientation, dilated pupils, lung congestion, convulsions, coma
Delayed Effects: allergic reactions, sore throat, rash, hair loss, ringing in the ears, nausea, vomiting, diarrhea, stomach pain, chest pain

Target Organ(s) Severe exposure may result in abdominal pain, dizziness, flushing, heart palpitations and swelling

Section 12: Ecological Information

Ecotoxicity
Toxicity to daphnia Daphnia magna (Water Flea) EC50 48 Hours 313 mg^Method: OECD, Exposition time 48 Hours Toxicity to algae Green algae OECD EbC50 72 Hours, Species subspicatus Method: OECD EbC50, Exposition time 72 Hours EC50 = 620 mg11 Method: OECD ErC50, Exposition time 72 Hours Toxicity to bacteria No data available

Persistance and Degradability
Not available.

Bioaccumulative Potential
log Kow (Sangster 1997): 0.16

Mobility in Soil
log Koc 4.38 (DOM), log Koc 3.57 (ESRS)

Other Adverse Effects
Not available.

Section 13: Disposal Considerations

Waste Disposal
P501: Dispose of contents / containers in accordance with local / regional / national / International regulations Sewage disposal: Do not pour into drains or waterways. DO NOT allow wash water from cleaning equipment to enter drains. Collect all wash water for treatment before disposal.

Disposal of Container
Disposal containers that cannot be cleaned should be disposed of in the same manner as the contents. Puncture used containers to prevent re-use

Other Considerations
Not available.

Section 14: Transport Information

DOT Classification
Not a DOT controlled material (United States). This material is not classified dangerous good according to international transportation regulations (ADR/RID-IMDG-ICAO/IATA).

Section 15: Regulatory Information

Regulations
European Information: TOXIC

Other
Not available.

Section 16: Other Information

The information given in the saftey data sheet is believed to be accurate and is based on our present knowledge. We take no guarantee with respect to such information and assume no liability resulting from it's use.