

**Safety Data Sheet**

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

**Section 1: Identification**

**Product Name** Ephedrine Sulfate USP  
**Commercial Name** Not available.  
**Product Use** Not available.  
**Restrictions On Use** Not available.

**Product Code** 55-1471

**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 4 Specific target organ toxicity, single exposure Category 2 (cardiovascular system, nervous system)  
**CFR 1910.1200**

**Signal Word** WARNING

**Hazard Statement(s)** Harmful if swallowed. May cause damage to organs (cardiovascular system, nervous system).

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



**Precautionary Statement(s):**

**Prevention** Do not breathe dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling.  
**Response** IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth. IF exposed: Call a POISON CENTER or doctor/physician.  
**Storage** Store locked up.  
**Disposal** Dispose of contents/container in accordance with local/regional/national/international regulation.

**Section 3: Composition/Information on Ingredients**

**Substance/Mixture** Substance  
**Components** Ephedrine Sulfate USP  
**% By Weight** 100  
**CAS#** 134-72-5  
**Molecular Weight** 428.54 g/mole  
**Chemical Formula** (C<sub>10</sub>H<sub>15</sub>NO).H<sub>2</sub>SO<sub>4</sub>  
**Synonym(s)** alpha-[1-(Methylamino)ethyl]benzen methanol sulfate

**Mixtures**

<b>Name</b>	<b>CAS#</b>	<b>% by Weight</b>	<b>TLV/PEL</b>	<b>LC50/LD50</b>
1) Ephedrine Sulfate USP	134-72-5	100	Not Available.	Not Available.

**Section 4: First-Aid Measures**

<b>Inhalation</b>	Move to fresh air. Call a physician if symptoms develop or persist.
<b>Skin Contact</b>	Rinse skin with water/shower. Get medical attention if irritation develops and persists.
<b>Eye Contact</b>	Rinse with water. Get medical attention if irritation develops and persists.
<b>Ingestion</b>	Rinse mouth. If ingestion of a large amount does occur, call a poison control center immediately
<b>Symptoms/Effects</b>	
<b>Acute</b>	Cardiovascular effects. Nervous system effects. Pharmacologically active material. Occupational exposure may cause physiological effects.
<b>Delayed</b>	Cardiovascular effects. Nervous system effects. Pharmacologically active material. Occupational exposure may cause physiological effects.

**Immediate Medical Attention**

Provide general supportive measures and treat symptomatically. Treatment of oral sympathomimetic overdose may include the following: Do NOT induce vomiting. Administer activated charcoal as a slurry. Monitor ECG, 12 lead ECG, and vital signs. Monitor urinary output and serum electrolytes in symptomatic patients. For acute lung injury, maintain ventilation and oxygenation and evaluate with frequent arterial blood gas oximetry monitoring. Early use of PEEP and mechanical ventilation may be needed. For seizures, administer intravenous diazepam or lorazepam. Consider phenobarbital if seizures recur. For severe agitation, treat with incremental doses of intravenous diazepam. Administer intravenous benzotropine for dystonic reaction. Administer as follows: for hyperthermia, treat with external cooling and AVOID phenothiazines; for severe hyperthermia, treat with paralysis and ventilation; for hemodynamically significant tachydysrhythmias, treat with a short-acting cardioselective agent such as esmolol; and for ventricular tachycardia, treat with lidocaine. Treatment is generally not necessary for mild/moderate asymptomatic hypertension. In agitated patients with hypertension and tachycardia, sedate with benzodiazepine. For severe hypertension, treat with nitroprusside. Alternative treatments include labetalol, nitroglycerin, and phentolamine. For hypotension, infuse patient with isotonic fluid. If hypotension persists, administer dopamine or norepinephrine. For rhabdomyolysis, administer saline to maintain urine output. Monitor input and output, serum electrolytes, CK, and renal function. Diuretics may be necessary, but urinary alkalinization is NOT recommended.

**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: For waste disposal, see section 13 of the SDS. 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. 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****Exposure Limits**TWA 0.1 mg/m<sup>3</sup>**Engineering Controls**

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.

**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. Chose respiratory protection appropriate to the task and the level of existing engineering controls. **Thermal hazards:** Wear appropriate thermal protective clothing, when necessary. **General hygiene consideration:** 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>	Solid White.Powder. Crystals		
<b>Odor</b>	Odorless.		
<b>Odor Threshold</b>	Not available.		
<b>Melting Point</b>	473 °F (245 °C) (decompose	<b>pH</b>	Not available.
<b>Freezing Point</b>	Not available.	<b>Vapor Pressure</b>	0.0003 kPa at 25 °C
<b>Boiling Point/Range</b>	Decomposes.	<b>Vapor Density</b>	Not available.
<b>Decomposition temperature</b>	Not available.	<b>Viscosity</b>	Not available.
<b>Partition Coefficient: n-octanol/water</b>	Not available.	<b>Evaporation Rate</b>	Not available.
<b>Flash Point</b>	Not available.	<b>Autoignition temperature</b>	Not available.
<b>Flammability</b>	May be combustible at high t	<b>Flammability or Explosive Limits:</b>	
		<b>Lower</b>	Not available.
		<b>Upper</b>	Not available.
<b>Solubility(ies)</b>	Freely soluble in water. Alcohol: Sparingly soluble		
<b>Other</b>	Chemical family Phenethylamine derivative. Molecular formula (C10H15NO)2 . H2SO4 Molecular weight 428.54		

**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>	Strong oxidizing agents
<b>Hazardous Decomposition Products</b>	Irritating and/or toxic fumes or gases. Emits toxic fumes under fire conditions. NOx. SOx

**Section 11: Toxicological Information**

<b>RTECS</b>	KB2600000
<b>Acute Toxicity</b>	Harmful if swallowed. Oral LD50 Mouse 812 mg/kg Rat 404 mg/kg
<b>Skin Corrosion/Irritation</b>	Not available
<b>Serious Eye Damage/Irritation</b>	Not available
<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>	Ingestion.

**Symptoms Related to Exposure**

Sympathomimetics: Central nervous system stimulation. Cardiovascular effects. Gastrointestinal disturbances. Difficulty breathing.  
Seizures

**Potential Health Effects**

Pharmacologically active material. Occupational exposure may cause physiological effects

**Target Organ(s)** May cause damage to organs (cardiovascular system, nervous 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 available

**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**

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**

US federal regulations: This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200 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 1910.1001-1050) Not regulated. Superfund Amendments and Reauthorization Act of 1986 (SARA) Immediate Hazard - Yes Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No Hazard categories SARA 302 Extremely hazardous substance Not listed. Yes SARA 311/312 Hazardous chemical 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) 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.

**Other**



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55-1471

WHMIS CLASS D-2B: Material causing other toxic (Canada) effects (TOXIC); DSCL (EEC) R38- Irritating to skin. R41- Risk of serious damage to eyes.; Gloves.; Lab coat.; Dust respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.; Splash goggles.

### Section 16: Other Information

Not available.