

**Section 1: Identification**

**Product Name** METHSCOPOLAMINE BROMIDE USP  
**Commercial Name** Not available.  
**Product Use** Not available.  
**Restrictions On Use** Not available.  
**Product Code** 50-4447  
**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:** Specific target organ toxicity, single exposure Category 1 (nerous system)  
**CFR 1910.1200**  
**Signal Word** DANGER  
**Hazard Statement(s)** Fatal if swallowed. Fatal in contact with skin. Fatal if inhaled.  
**Pictogram(s) or Symbol(s)**

**Precautionary Statement(s):**

**Prevention** Wash thoroughly after handling  
**Response** If exposed: Call a poison center/doctor  
**Storage** Store locked up  
**Disposal** Dispose of contents/container in accordance with local/regional/national/international regulations

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

**Substance/Mixture** Substance  
**Components** METHSCOPOLAMINE BROMIDE USP  
**% By Weight** 100  
**CAS#** 155-41-9  
**Molecular Weight** 398.31 g/mole  
**Chemical Formula** C<sub>18</sub>H<sub>24</sub>BrNO<sub>4</sub>  
**Synonym(s)** [7(S)-(1alpha,2beta,4beta,5alpha,7beta)]-alpha-(Hydroxymethyl)benzene acid  
9-methyl-3-oxa-9-azatricyclo[3,3,1,0]non-7-yl ester methyl bromide

**Mixtures**

<b>Name</b>	<b>CAS#</b>	<b>% by Weight</b>	<b>TLV/PEL</b>	<b>LC50/LD50</b>
METHSCOPOLAMINE BROMIDE USP	155-41-9	100	Not available	Not available

**Section 4: First-Aid Measures**

<b>Inhalation</b>	If dust from the material is inhaled, remove the affected person immediately 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>	Decrease in motor functions. Behavioral changes.
<b>Delayed</b>	Decrease in motor functions. Behavioral changes.

**Immediate Medical Attention**

Treatment of anticholinergic overdose should be symptomatic and supportive and may include the following: Do not induce vomiting. Gastric decontamination may be successful, even if delayed. Administer activated charcoal as a slurry. To reverse anticholinergic delirium, administer physostigmine. For tachydysrhythmias with signs of hemodynamic instability, treat with physostigmine or intravenous beta blockers. For QRS widening or ventricular tachycardia, administer sodium bicarbonate. If sodium bicarbonate is unsuccessful, consider lidocaine. For seizures, administer intravenous diazepam or lorazepam. If seizures recur, consider phenobarbital. Monitor for hypotension, dysrhythmias, respiratory depression, and need for endotracheal intubation. Evaluate for hypoglycemia, electrolyte imbalances, and hypoxia. For agitation, with and without hypertension and tachycardia, administer intravenous benzodiazepines. For severe hypertension, administer nitroprusside, labetalol, nitroglycerin, or phentolamine. For hyperthermia, treat with external cooling and avoid phenothiazines. For hypotension, administer isotonic fluid. If hypotension persists, consider dopamine or norepinephrine. For rhabdomyolysis, administer saline. Monitor input and output, serum electrolytes, CK, and renal function. Diuretics may be necessary to maintain urine output. Urinary alkalization is NOT recommended. (Meditext)

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

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

**Unsuitable Extinguishing Media**

Not available

**Products of Combustion**

Not available.

**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

**Section 6: Accidental Release Measures**

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

**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. Use of a designated area is recommended for handling of potent materials.  
**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** Not available.

**Engineering Controls**

Airborne exposure should be controlled primarily by engineering controls such as general dilution ventilation, local exhaust ventilation, or process enclosure. Local exhaust ventilation is generally preferred to general exhaust because it can control the contaminant at its source, preventing dispersion into the work area. An industrial hygiene survey involving air monitoring may be used to determine the effectiveness of engineering controls. Effectiveness of engineering controls intended for use with highly potent materials should be assessed by use of nontoxic surrogate materials. Local exhaust ventilation such as a laboratory fume hood or other vented enclosure is recommended, particularly for grinding, crushing, weighing, or other dust-generating procedures.

**Personal Protection**

**Eye/face protection:** Safety glasses with sideshields are recommended. Face shields or goggles may be required if splash potential exists or if corrosive materials are present. Approved eye protection (e.g., bearing the ANSI Z87 or CSA stamp) is preferred. Maintain eyewash facilities in the work area. **Skin protection** **Hand protection:** Chemically compatible gloves. For handling solutions, ensure that the glove material is protective against the solvent being used. Use handling practices that minimize direct hand contact. Employees who are sensitive to natural rubber (latex) should use nitrile or other synthetic nonlatex gloves. Use of powdered latex gloves should be avoided due to the risk of latex allergy. To reduce the risk of contamination of skin and surfaces, wear two pairs of gloves. Remove the outer gloves after handling and cleanup of the material, and remove the inner gloves only after removing other personal protective equipment. **Other:** For handling of laboratory scale quantities, a disposable lab coat or isolation gown over street clothes is recommended. Where significant quantities are handled, work clothing and booties may be necessary to prevent take-home contamination. **Respiratory protection:** Where respirators are deemed necessary to reduce or control occupational exposures, use NIOSH-approved respiratory protection and have an effective respirator program in place (applicable U.S. regulation OSHA 29 CFR 1910.134). **Thermal hazards:** Not available. **General hygiene considerations:** Handle in accordance with good industrial hygiene and safety practice.

**Section 9: Physical and Chemical Properties**

<b>Appearance</b>	White crystals or white crystalline powder		
<b>Odor</b>	Odorless.		
<b>Odor Threshold</b>	Not available.		
<b>Melting Point</b>	417.2 - 437 °F (214 - 225 °C)	<b>pH</b>	Not available.
<b>Freezing Point</b>	Not available.	<b>Vapor Pressure</b>	< 0.0000001 kPa at 25 °C
<b>Boiling Point/Range</b>	Not available.	<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>	Not available.	<b>Flammability or Explosive Limits:</b>	
		<b>Lower</b>	Not available.
		<b>Upper</b>	Not available.
<b>Solubility(ies)</b>	Freely soluble in water.		
<b>Other</b>	Chemical family Tropane derivative. Molecular formula C18-H24-N-O4.Br Molecular weight 398.34 g/mol Solubility (other) Freely soluble in dilute ethanol; insoluble in acetone and in chloroform		

**Section 10: Stability and Reactivity**

<b>Reactivity</b>	Not available.
<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>	Not available.
<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. NH3. Br-

**Section 11: Toxicological Information**

<b>RTECS</b>	YM3675000
<b>Acute Toxicity</b>	
Oral: LD50 Mouse 619 mg/kg Rat 3400 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>	
No data available	
<b>Carcinogenicity</b>	
No data available	
<b>Reproductive Toxicity</b>	
No data available	
<b>Routes of Entry</b>	
Dermal contact. Eye contact. Inhalation. Ingestion.	

**Symptoms Related to Exposure**

Anticholinergics: Dry mouth, throat, nose, skin, or eyes. Flushing. Decreased sweating. Fever. Decreased urination. Fast heartbeat. Headache. Dizziness. Drowsiness. Unsteadiness. Weakness. Restlessness. Confusion. Memory problems. Hallucinations. Insomnia. Seizures. Slurred speech. Blurred vision. Dilated pupils. Decreased sexual interest and ability. Nausea. Indigestion. Constipation. Diarrhea. Difficulty swallowing.

**Potential Health Effects**

Delayed and immediate effects: Anticholinergics: Dependence. High blood pressure. Hyperthermia. Tachycardia. Respiratory depression. Central nervous system excitation. Dehydration. Coma. Death. Anticholinergics: Heart disease. Tachycardia. Hyperthyroidism. High blood pressure. Myasthenia gravis. Gastrointestinal reflux or obstruction. Ulcerative colitis. Paralytic ileus. Urinary retention or obstruction. Glaucoma. Kidney or liver impairment. Bleeding disorders. Prostate enlargement. Epilepsy. Porphyria

**Target Organ(s)** Causes damage to organs (nervous system).

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

Not available

**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. Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner

**Disposal of Container**

Empty containers should be taken to an approved waste handling site for recycling or disposal. 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 CERCLA/SARA Hazardous Substances - Not applicable. All components are on the U.S. EPA TSCA Inventory List. Superfund Amendments and Reauthorization Act of 1986 (SARA) Hazard categories Immediate Hazard - No Delayed Hazard - No Fire Hazard - Yes Pressure Hazard - No Reactivity Hazard - No SARA 302 Extremely hazardous substance No SARA 311/312 Hazardous chemical No Other federal regulations Safe Drinking Water Act (SDWA) Not regulated. Food and Drug Administration (FDA) Not regulated. US state regulations 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.



**Safety Data Sheet**

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

**Other**

Not available.

**Section 16: Other Information**

Not available.