

**Safety Data Sheet**

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

Section 1: Identification**Product Name** IPRATROPIUM BROMIDE USP MONOHYDRATE**Commercial Name** Not available**Product Use** Not available**Restrictions On Use** Not available**Product Code** 55-4783**Company** PCCA
9901 South Wilcrest
Houston, TX 77099
Phone: 1-800-331-2498
Fax: 1-800-874-5760In case of emergency contact:
CHEMTREC (24hr) 1-800-424-9300**Section 2: Hazard(s) Identification****OSHA Haz Com:** Resp. Sens. 1 Acute Tox. 4 oral Skin Sens. 1 Acute Tox. 4 inhal.**CFR 1910.1200****Signal Word** DANGER**Hazard Statement(s)** Harmful if swallowed. May cause an allergic skin reaction. Harmful if inhaled.**Pictogram(s) or Symbol(s)****Precautionary Statement(s):****Prevention**

P261 Avoid breathing dust P264 Wash thoroughly after handling P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response

P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. P302 + P352 IF ON SKIN: Wash with plenty of soap and water. P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P333 + P313 If skin irritation or rash occurs: Get medical advice/attention. P342 + P311 If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician. P363 Wash contaminated clothing before reuse.

Storage

P404 Store in a closed container.

Disposal

P501 Dispose of contents/container in a site approved for chemical and hazardous waste or burned in a specialised burning centre.

Section 3: Composition/Information on Ingredients**Substance/Mixture** Substance**Components** 2,4-Dihydro-4-(4-(4-Methoxy phenyl)-1-piperazinyl phenyl) -3H-1,2,4 Triazole-3one**% By Weight** 100**CAS#** 66985-17-9**Molecular Weight** 430.40**Chemical Formula** C₂₀H₃₀BrNO₃.H₂O**Synonym(s)** N/A**Mixtures**

Name	CAS#	% by Weight	TLV/PEL	LC50/LD50
2,4-Dihydro-4-(4-(4-Methoxy phenyl)-1-piperazinyl phenyl) -3H-1,2,4 Triazole-3one	66985-17-9	100	Not available	Not available

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Section 4: First-Aid Measures

Inhalation	Allow the victim to rest in a well ventilated area. Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. In severe cases or if symptoms persists, seek medical attention
Skin Contact	After contact with skin, wash immediately with plenty of water. Gently and thoroughly wash the contaminated skin with running water and non-abrasive soap. Be particularly careful to clean folds, crevices, creases and groin. If irritation persists, seek medical attention. Wash contaminated clothing before reusing.
Eye Contact	Immediately flush eyes with copious amounts of water for at least 15 minutes. If irritation persists, seek medical attention
Ingestion	Do not induce vomiting. Loosen tight clothing such as a collar, tie, belt or waistband. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek immediate medical attention.
Symptoms/Effects	
Acute	Not available
Delayed	Not available
Immediate Medical Attention	
N/A	

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

In case of fire use water, chemical type foam, carbon dioxide, dry chemical. Prevent run off of water from entering drains

Unsuitable Extinguishing Media

N/A

Products of Combustion

The substance evolves toxic fumes due to the presence of CO, CO₂, NO_x, HBr.

Firefighters Special Equipment and Precautions

Wear: -Gas masks scuba -Complete protective equipment composed by: helmet whit face shield and neck protection, fireproof jacket and trousers with straps around arms, legs and waist. As not expected at this point, refer to the personal protective equipment recommended in Section 8 of this sheet

Section 6: Accidental Release Measures

Personal precautions, protective equipment and emergency procedures: Keep away any ignition source. Wear protective equipment. Keep unprotected persons away. Use respiratory protective device against the effects of fumes. Ensure adequate ventilation. Methods and materials for containment and cleaning up: Absorb spillage in earth or sand. Sweep or shovel-up spillage and remove to a safe place. Damp down to avoid dust generation. Environmental precautions: Do not allow to penetrate the ground/soil. Prevent seepage into sewage system, workpits and cellars. Inform respective authorities in case of seepage into water course or sewage system.

Section 7: Handling and Storage

Precautions for safe handling: This product should be handled only by, or under the close supervision of, those properly qualified in the handling and use of potentially hazardous chemicals, who should take into account the fire, health and chemical hazard data given on this sheet. It should always be handled in an efficient fume hood or equivalent system and, if necessary, wear protective equipment. Care should be taken to prevent the chemical from coming into contact with the skin or eyes and from contaminating personal clothing. Conditions for safe storage, including any incompatibilities: Avoid contact with oxidising substances For safety purposes, the substance does not require any special storage conditions. As an indication, the information provided by official monographs are: USP: Preserve in tight containers, and store at room temperature EP: Preserve in the original packaging tightly closed For storage of the substance for pharmaceutical use, or for registration purposes please refer to the stability data conducted in-house and reported in the document regulatory "Active Substance Master File" (ASMF or DMF).

Section 8: Exposure Controls/Personal Protection

Exposure Limits	Not available
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Engineering Controls

Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Avoid contact with skin, eyes and clothing.

Personal Protection

Eye/face protection: Tightly fitting safety goggles. Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Hand protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. Skin and body protection: The type of protective equipment (es. Tyvek suit) must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Complete suit protecting against chemicals, flame retardant antistatic protective clothing. Respiratory protection: Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N99 (US) or type P2 (EN 143) with cartridges P1 (inert substances) P2 (harmful substances) P3 (toxic substances). Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

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Section 9: Physical and Chemical Properties

Appearance	crystalline powder, white to off-white		
Odor	odorless		
Odor Threshold	N/A		
Melting Point	above 230 °C with decompos	pH	pH: 5.0-7.5 (1% in water)
Freezing Point	N/A	Vapor Pressure	N/A
Boiling Point/Range	N/A	Vapor Density	N/A
Decomposition temperature	above 230°C	Viscosity	N/A
Partition Coefficient: n-octanol/water	Log Pow: -0.7	Evaporation Rate	N/A
Flash Point	N/A	Autoignition temperature	N/A
Flammability	N/A	Flammability or Explosive Limits:	
		Lower	N/A
		Upper	N/A
Solubility(ies)	Soluble in water.		
Other	N/A		

Section 10: Stability and Reactivity

Reactivity	Not available
Chemical Stability	The product is stable in usual working conditions
Hazardous Polymerization	Not available
Conditions to Avoid	Heat, flames and sparks
Incompatible Materials	Strong oxidising agents. Alkali metals, bases, strong acids, halogens
Hazardous Decomposition Products	The substance evolves toxic fumes due to the presence of CO, CO2, NOx, HBr.

Section 11: Toxicological Information

RTECS	Not available
Acute Toxicity	
Acute Oral LD 50 rat mg/kg	1074
Skin Corrosion/Irritation	
Not available	
Serious Eye Damage/Irritation	
Not available	
Respiratory or Skin Sensitization	
May cause sensitisation by inhalation and skin contact.	
Germ Cell Mutagenicity	
Not available	
Carcinogenicity	
Not available	
Reproductive Toxicity	
Not available	
Routes of Entry	
Skin. Inhalation. Ingestion.	
Symptoms Related to Exposure	
Not available	

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Potential Health Effects

Inhalation The bioavailability of a swallowed dose is low. However, if inhaled, it reaches the circulation rapidly. Does not cross the blood barrier. Its plasma half-life is about 1.6 hours. Ingestion May cause headache, dizziness and skin rashes. May cause respiratory disorders. May affect the gastro-intestinal tract. May cause fast heart rate.

Target Organ(s) Not available

Section 12: Ecological Information**Ecotoxicity**

N/A

Persistence and Degradability

N/A

Bioaccumulative Potential

N/A

Mobility in Soil

N/A

Other Adverse Effects

N/A

Section 13: Disposal Considerations**Waste Disposal**

Do not empty into drains. Use appropriate containment to avoid environmental contamination. Disposal should be in accordance with local, state or national regulation.

Disposal of Container

The containers and packing materials contaminated with dangerous substances or preparations, have the same treatment products.

Other Considerations

N/A

Section 14: Transport Information**DOT Classification**

Not available

Section 15: Regulatory Information**Regulations**

Not available.

Other

N/A

Section 16: Other Information

N/A