



SDS: Cogentin® (benztropine mesylate injection)

SAFETY DATA SHEET

1. Identification

Product Identifier: Cogentin® (benztropine mesylate injection)

Synonyms: Cogentin®; Benztropine Mesylate Injection; 8-azabicyclo[3.2.1] octane, 3-(diphenylmethoxy)-,endo, methanesulfonate.

National Drug Code (NDC): 76478-611-02

Recommended Use: Pharmaceutical.

Company: Oak Pharmaceuticals, Inc. (Subsidiary of Akorn, Inc.)
1925 West Field Court, Suite 300
Lake Forest, Illinois 60045

Contact Telephone: 1-800-932-5676

E mail: customer.service@akorn.com

Emergency Phone Number: CHEMTREC 1-800-424-9300 (U.S. and Canada)

2. Hazard(s) Identification

Physical Hazards: Not classifiable.

Health Hazards: Not classifiable.

Symbol(s): None.

Signal Word: None.

Hazard Statement(s): None.

Precautionary Statement(s): None.

Hazards Not Otherwise Classified: Not classifiable.

Supplementary Information: While this material is not classifiable as hazardous under the OSHA standard, this SDS contains valuable information critical to safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.

3. Composition/Information on Ingredients

Chemical Name	CAS Number	Synonyms	Chemical Formula	Molecular Weight	Percentage
8-azabicyclo[3.2.1] octane, 3-(diphenylmethoxy)-,endo, methanesulfonate	205-048-8	Benztropine Mesylate	C ₂₁ H ₂₅ NO•CH ₄ O ₃ S	403.54	0.1%

*The formula also contains Sodium Chloride, 0.9% and Water for Injection.



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4. First Aid Measures

Ingestion:

If a person vomits place them in the recovery position so that vomit will not reenter the mouth and throat. Rinse mouth with water. If swallowed, seek medical advice immediately and show the container or label. Treat symptomatically and supportively. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

Eye Contact:

Remove from source of exposure. Flush with copious amounts of water for at least 15 minutes. If irritation persists or signs of toxicity occur, seek medical attention. Provide symptomatic/supportive care as necessary. Ensure that medical personnel are aware of the material(s) involved and are aware of precautions to protect themselves.

Skin Contact:

Remove from source of exposure. Remove and isolate contaminated clothing and shoes. Flush with copious amounts of water for at least 20 minutes. Use soap. If irritation persists or signs of toxicity occur, seek medical attention. Provide symptomatic/supportive care as necessary. Ensure that medical personnel are aware of the material(s) involved and are aware of precautions to protect themselves.

Inhalation:

Remove from source of exposure. Move individual(s) to fresh air. Give artificial respiration if individual(s) are not breathing and call emergency medical service. If signs of toxicity occur, seek medical attention. Provide symptomatic/supportive care as necessary. Ensure that medical personnel are aware of the material(s) involved and are aware of precautions to protect themselves.

Protection of First-Aiders:

Use personal protective equipment (see section 8).

Signs and Symptoms:

Inhalation of mists or sprays may mildly irritate the respiratory system, causing coughing and sneezing; prolonged or repeated skin contact may cause dermatitis; eye contact may mildly irritate contaminated eyes, causing tearing and discomfort; acute ingestion of large quantities may cause CNS depression, preceded or followed by stimulation; intensification of mental symptoms or toxic dizziness; giddiness; staggering; rapid breathing; drowsiness; stupor; palpitations; difficulty swallowing; allergic reactions, skin rash; headache; hot, dry, flushed skin; delirium; shock; convulsions; coma; circulatory failure; respiratory arrest; glaucoma; constipation; persons who are hypersensitive to this product may have an allergic reaction. Adverse effects from therapeutic doses have included the following: Nervousness, impaired memory, numbness of fingers, listlessness, depression, mental confusion, excitement, and visual hallucinations; dry mouth, constipation, nausea, vomiting, and paralytic ileus;



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blurred vision, excessive dilatation of the pupil of the eye, and sensitivity to light; abnormally high fever, abnormal deficiency or absence of sweating, and heat stroke; urinary retention and/or difficult or painful urination; weakness and inability to move particular muscle groups; dermal sensitivity to light; excessively rapid heartbeat.

Medical Conditions Aggravated by Exposure:

There is no information on pre-existing medical conditions that may be aggravated by occupational exposure to this product. With therapeutic use, pre-existing narrow angle glaucoma and mental symptoms or toxic psychosis in patients with psychiatric illness may be aggravated.

Notes to Physician:

Physostigmine salicylate, 1 to 2 mg, SC or IV, reportedly will reverse symptoms of anticholinergic intoxication. A second injection may be given after 2 hours if required. Otherwise treatment is symptomatic and supportive. Induce emesis or perform gastric lavage (contraindicated in precomatose, convulsive, or psychotic states). Maintain respiration. A short-acting barbiturate may be used for CNS excitement, but with caution to avoid subsequent depression; supportive care for depression (avoid convulsant stimulants such as picrotoxin, pentylenetetrazol, or bemegride); artificial respiration for severe respiratory depression; a local miotic for mydriasis and cycloplegia; ice bags or other cold applications and alcohol sponges for hyperpyrexia, a vasopressor and fluids for circulatory collapse. Darken room for photophobia.

5. Firefighting Measures

Suitable Extinguishing Media: Use extinguishing media for type of surrounding fire.

Unsuitable Extinguishing Media: Not determined.

Specific Hazards Arising from the Chemical:

Hazardous Combustion Products: These products include carbon oxides, nitrogen oxides, and sulfur oxides.

Other Specific Hazards: Closed containers may explode from the heat of fire.

Special Protective Equipment/Precautions for Firefighters: Wear self-contained breathing apparatus and full and protective gear.

6. Accidental Release Measures

Personal Precautions: Keep unnecessary personnel away. Do not touch damaged containers or spilled material unless wearing appropriate personal protective equipment and clothing.



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- Personal Protective Equipment:** For personal protection see section 8.
- Methods for Cleaning Up:** Dike ahead of liquid spills for later disposal. Absorb with inert material. Recover product and place in an appropriate container for disposal in accordance with local, state and federal regulations.
- Environmental Precautions:** Contain material and prevent release to basements, confined spaces, waterways or soil.
- Reference to Other Sections:** Refer to Sections 8, 12 and 13 for further information.

7. Handling and Storage

- Precautions for Safe Handling:** Handle in accordance with product label and/or product insert information. Handle in accordance with good industrial hygiene and safety practices.
- Conditions for Safe Storage, Including Any Incompatibilities:** Store according to label and/or product insert information. Store away from oxidizers, acids, and bases.
- Specific End Use:** Pharmaceuticals.

8. Exposure Controls/Personal Protection

Occupational Exposure Guidelines:

Common or Chemical Name	Employee Exposure Limits
Bentropine Mesylate	OEL*: 0.01 mg/m ³ , 8 Hour TWA

* An Occupational Exposure Level (OEL) has been established by private industry.

- Engineering Controls:** Engineering controls should be used as the primary means to control exposures.
- 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).
- Eyes Protection:** Safety glasses with side shields 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.
- 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



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non-latex gloves. Use of powdered latex gloves should be avoided due to the risk of latex allergy.

Skin Protection: Protective laboratory coat, apron, or disposable garment.

9. Physical and Chemical Properties

Physical State/Color:

Odor: Liquid/Colorless.

Odor Threshold: No data available.

pH: 6.0.

Melting Point: No data available.

Freezing Point: No data available.

Boiling Point: No data available.

Flash Point: No data available.

Evaporation Rate: No data available.

Flammability (solid, gas): No data available.

Flammability Limit - Lower: No data available.

Flammability Limit - Upper: No data available.

Vapor Pressure: No data available.

Vapor Density: No data available.

Relative Density: No data available.

Solubility(ies): Miscible in water.

Partition Coefficient

(n-octanol/water): No data available.

Auto-Ignition Temperature: No data available.

Decomposition Temperature: No data available.

Viscosity: No data available.

10. Stability and Reactivity

Reactivity: No data available.

Chemical Stability: Stable under recommended storage conditions.

Possibility of Hazardous Reactions: No data available.

Conditions to Avoid (e.g., static discharge, shock, or vibration): No data available.

Incompatible Materials: Oxidizers, acids and bases.

Hazardous Decomposition Products: No data available.

11. Toxicological Information

Information on the Likely Routes of Exposure:

Inhalation: May be harmful if inhaled. May cause respiratory tract irritation.

Ingestion: May be harmful if swallowed.

Skin Contact: May be harmful if in contact with the skin. May cause skin irritation.



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Eye Contact: May cause eye irritation.

Symptoms Related to the Physical, Chemical and Toxicological Characteristics:

See Section 4. To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.

Delayed and Immediate Effects of Exposure:

See Section 4.

Acute Toxicity:

Compound	Species	Route	Test Type	Dose
Benzotropine Mesylate	Mouse	Oral	LD ₅₀	91 mg/kg
Benzotropine Mesylate	Rat	Oral	LD ₅₀	940 mg/kg
Benzotropine Mesylate	Rat	Subcutaneous	LD ₅₀	353 mg/kg

Acute Toxicity – Inhalation: No data available.
Corrosivity: No data available.
Dermal Irritation: No data available.
Eye Irritation: No data available.
Sensitization: No data available.
Toxicokinetics/Metabolism: No data available.
Target Organ Effects: No data available.
Reproductive Effects: No data available.
Carcinogenicity: No data available.

National Toxicology Program (NTP): Not considered to be a carcinogen.

International Agency for Research on Cancer (IARC): Not considered to be a carcinogen.

Occupational Safety and Health Administration (OSHA): Not considered to be a carcinogen.

Mutagenicity: No data available.
Aspiration Hazard: No data available.

12. Ecological Information

Ecotoxicity

Aquatic: No data available.
Terrestrial: No data available.
Persistence and Degradability: No data available.
Bioaccumulative Potential: No data available.
Mobility in Soil: No data available.
Mobility in Environment: No data available.
Other Adverse Effects: No data available.

13. Disposal Considerations

Dispose of all waste in accordance with Federal, State and Local regulations.



14. Transport Information

UN Number:	Not applicable.
UN Proper Shipping Name:	Not applicable.
Transport Hazard Class(es):	Not applicable.
Packing Group:	Not applicable.
 Department of Transportation:	 Not regulated as a hazardous material.
 International Air Transport Association (IATA):	 Not regulated as a dangerous good.
 International Maritime Dangerous Good (IMDG):	 Not regulated as a dangerous good.

15. Regulatory Information

US Federal Regulations:

Toxic Substance Control Act (TSCA):	This product is a drug regulated by the Food and Drug Administration (FDA), and is not regulated by TSCA.
CERCLA Hazardous Substance and Reportable Quantity:	Not listed.
SARA 313:	Not listed.
SARA 302:	Not listed.

State Regulations

Massachusetts:	Not listed.
New Jersey:	Benzotropine Mesylate.
Pennsylvania:	Benzotropine Mesylate.
California Proposition 65:	Not listed.

16. Other Information

Not made with natural rubber latex.

NFPA Rating:		HMIS Classification:	
Health: 2		Health: 2	
Flammability: 0		Flammability: 0	
Reactivity: 0		Physical Hazard: 0	

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