

MATERIAL SAFETY DATA SHEET

ELKINS-SINN, INC.
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24 HR. EMERGENCY MEDICAL INFORMATION:
215-688-4400
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SUBSTANCE IDENTIFICATION

SUBSTANCE: ATROPINE SULFATE INJECTION

TRADE NAMES/SYNONYMS:
ESI76465

CHEMICAL FAMILY:
Mixture

CERCLA RATINGS (SCALE 0-3): HEALTH=U FIRE=1 REACTIVITY=0 PERSISTENCE=1
NFPA RATINGS (SCALE 0-4): HEALTH=U FIRE=1 REACTIVITY=0

COMPONENTS AND CONTAMINANTS

COMPONENT: ATROPINE SULFATE CAS# 5908-99-6	PERCENT: 0.04-0.1
COMPONENT: BENZYL ALCOHOL CAS# 100-51-6	PERCENT: >1
COMPONENT: WATER	PERCENT: >1

EXPOSURE LIMITS:
No occupational exposure limits established by OSHA, ACGIH, or NIOSH.

PHYSICAL DATA

DESCRIPTION: Clear, colorless solution. BOILING POINT: not available
SPECIFIC GRAVITY: not available VAPOR PRESSURE: not available
PH: 3.0-6.5 SOLUBILITY IN WATER: miscible

FIRE AND EXPLOSION DATA

FIRE AND EXPLOSION HAZARD:
Slight fire hazard when exposed to heat or flame.

FLASH POINT: >213 F (>101 C)

FIREFIGHTING MEDIA:
Dry chemical, carbon dioxide, water spray or regular foam
(1993 Emergency Response Guidebook, RSPA P 5800.6).

For larger fires, use water spray, fog or regular foam
(1993 Emergency Response Guidebook, RSPA P 5800.6).

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WHITEWATER, WI 53190

=== MSDS TRACKING INFORMATION ===
MID: 1056682 ATROPINE SULF 400MCG/
PID: 3752921 CUST: 0172674-009
IMG: I:56682_1 PAGE: 1 of 4

PACKET: 52609-3021

FIREFIGHTING:

Move container from fire area if you can do it without risk. Do not scatter spilled material with high-pressure water streams. Dike fire-control water for later disposal (1993 Emergency Response Guidebook, RSPA P 5800.6, Guide Page 31).

Use agents suitable for type of surrounding fire. Avoid breathing hazardous vapors, keep upwind.

TOXICITY**ATROPINE SULFATE:****TOXICITY DATA:**

ANHYDROUS: 20 ug/kg oral-child TDLo; 600 mg/kg oral-rat LD50; 468 mg/kg oral-mouse LD50; 540 mg/kg subcutaneous-rat LD50; 400 mg/kg subcutaneous-mouse LD50; 28 ug/kg/11 hours-intermittent intravenous-man TDLo; 37 mg/kg intravenous-rat LD50; 215 mg/kg intraperitoneal-rat LD50; 180 mg/kg intraperitoneal-mouse LD50; 90 mg/kg intraarterial-guinea pig LDLo; 1 mg/kg intracerebral-rabbit LDLo; 620 mg/kg intraduodenal-rat LD50; 28 ug/kg intramuscular-human TDLo; 602 ug/kg intramuscular-rat LD50; 44 ug/kg/1 day-intermittent multiple-woman TDLo; 20 ug/kg/4 hour-intermittent ocular-woman TDLo; reproductive effects data (RTECS).

MONOHYDRATE: 622 mg/kg oral-rat LD50 (MEIEDD).

CARCINOGEN STATUS: None.

ACUTE TOXICITY LEVEL: Moderately toxic by ingestion.

TARGET EFFECTS: Poisoning may affect the gastrointestinal tract, central nervous system, heart, and eyes.*

AT INCREASED RISK FROM EXPOSURE: Persons with glaucoma; impaired function, particularly obstructive, of the gastrointestinal and genitourinary systems; cardiac and liver abnormalities; hyperthyroidism; hypertension; blonde hair; and light colored irides.*

* Based on general information on anticholinergics.

HEALTH EFFECTS AND FIRST AID**INHALATION:****ATROPINE SULFATE:**

See information on anticholinergics (general).

ANTICHOLINERGICS (GENERAL):

ACUTE EXPOSURE- Contact with mucous membranes may result in absorption and effects due to systemic poisoning as detailed in acute ingestion. Hypersensitivity reactions may occur in persons previously exposed.

CHRONIC EXPOSURE- Repeated exposure may cause systemic effects as detailed in acute ingestion. Hypersensitivity may develop with a variety of manifestations including rash.

FIRST AID- Remove from exposure area to fresh air immediately. Perform artificial respiration if necessary. Keep person warm and at rest. Treat symptomatically and supportively. Get medical attention immediately.

SKIN CONTACT:**ATROPINE SULFATE:**

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=== MSDS TRACKING INFORMATION ===
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IMG: I:56682_2 PAGE: 2 of 4

PACKET: 52609-3021

See information on anticholinergics (general).

ANTICHOLINERGICS (GENERAL):

ACUTE EXPOSURE- Application of anticholinergics to intact skin may produce systemic poisoning as detailed in acute ingestion. Hypersensitivity reactions may occur in persons previously exposed.

CHRONIC EXPOSURE- Repeated exposure may cause systemic effects as detailed in acute ingestion. Hypersensitivity may develop with a variety of manifestations including rash.

FIRST AID- Remove contaminated clothing and shoes immediately. Wash with soap or mild detergent and large amounts of water until no evidence of chemical remains (at least 15-20 minutes). Get medical attention immediately.

EYE CONTACT:

ATROPINE SULFATE:

See information on anticholinergics (general).

ANTICHOLINERGICS (GENERAL):

ACUTE EXPOSURE- Instillation or local application of anticholinergics to the eye may cause transient stinging, dry, red, itchy eyes, dilation of the pupils and cycloplegia with blurring of vision, and photophobia. Pupillary reflexes may not fully recover for 1-3 days. An increase in intraocular pressure has been reported in some persons with open-angle glaucoma. An acute, painful and extremely dangerous attack of narrow-angle glaucoma may be induced in eyes anatomically predisposed because of abnormally shallow anterior chamber and narrow angle. Rarely, systemic poisoning has been reported from use of homatropine eyedrops. Effects are detailed in acute ingestion. Hypersensitivity reactions may occur in persons previously exposed.

CHRONIC EXPOSURE- Prolonged exposure to anticholinergics may produce irritation characterized by allergic lid reactions, hyperemia, follicular conjunctivitis, vascular congestion, edema, exudate, photophobia and eczematoid dermatitis. Repeated exposure may cause systemic effects as detailed in acute ingestion.

FIRST AID- Wash eyes immediately with large amounts of water or normal saline, occasionally lifting upper and lower lids, until no evidence of chemical remains (at least 15-20 minutes). Get medical attention immediately.

INGESTION:

ATROPINE SULFATE:

Atropinic symptoms may include flushed skin; scarlatiniform or maculopapular rash over face, neck, and upper trunk; desquamation; fast pulse; paranoid reactions; and retrosternal pain. See information on anticholinergics (general).

ANTICHOLINERGICS (GENERAL):

ACUTE EXPOSURE- Ingestion of anticholinergics may cause pupillary dilation and cycloplegia with blurring of vision, photophobia and occasional micropsia; a rise in intraocular tension in persons with narrow-angle glaucoma; and temporary blindness. There may be dryness of mouth, nose and throat with intense thirst and difficulty in swallowing and talking, itchy or red eyes and reduced pulse rate. Excessive amounts may cause inhibited activity of the sweat glands, hyperpyrexia, dry, hot, red skin, heat intolerance, decreased gastric secretion, decreased gastrointestinal tone and motility,

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IMG: I:56682_3 PAGE: 3 of 4

PACKET: 52609-3021

ESI76465 PAGE 004 OF 006

decreased bowel sounds, relaxed sphincters, constipation and bowel stasis. In addition, nausea, vomiting, dizziness, tremors, fatigue, speech disturbances, disorientation, mental confusion, memory disturbances, excitement, psychotic behavior, delirium and hallucinations of the visual and auditory type may occur. Central nervous system depression follows with ataxia, drowsiness, dreamless sleep, stupor and unconsciousness. Hypothermia, vasodilation, urinary urgency and retention, leukocytosis, muscular stiffness, weakness and incoordination, motor and sensory paralysis, elevated blood pressure, and sinus and atrial tachycardia with hyperventilation may occur. Late hypotension, rare convulsions, depression of the medullary centers, coma, circulatory depression and failure with asphyxia, and death are possible. The approximate lethal dose is 10-100 mg for the synthetic atropine substitutes. Hypersensitivity reactions may occur in persons previously exposed.

CHRONIC EXPOSURE- Repeated ingestion may cause effects similar to those for acute exposure.

FIRST AID- Remove poison from mucous membranes by washing. If the person is conscious and not convulsing, delay absorption of ingested material by giving activated charcoal and then remove by gastric lavage. Follow with saline catharsis. Efforts to remove these agents are useful for several hours after ingestion, since they depress gastrointestinal motility (Dreisbach, Handbook of Poisoning, 12th Ed.). Treat symptomatically and supportively. Gastric lavage should be performed by qualified medical personnel. Get medical attention immediately.

ANTIDOTE:

The following antidote has been recommended. However, the decision as to whether the severity of poisoning requires administration of any antidote and actual dose required should be made by qualified medical personnel.

POISONING FROM ATROPINE AND SUBSTITUTES:

Give physostigmine salicylate intravenously, 5 mL of a dilution containing 1 mg in 5 mL of saline. Injection should not take less than 2 minutes. Electrocardiographic control is advisable. Dosage can be repeated every 5 minutes up to a total dose of 6 mg in adults every 30 minutes. Physostigmine is contraindicated in hypotensive reactions. Atropine, 1 mg, should be available for immediate injection if physostigmine causes bradycardia, convulsions, or severe bronchoconstriction (Dreisbach, Handbook of Poisoning, 11th Ed.). Antidote should be administered by qualified medical personnel.

REACTIVITY**REACTIVITY:**

Stable under normal temperatures and pressures.

INCOMPATIBILITIES:

May be incompatible with acids, bases, and oxidizers.

DECOMPOSITION:

Thermal decomposition may release toxic and/or hazardous gases.

POLYMERIZATION:

Hazardous polymerization has not been reported to occur under normal temperatures and pressures.

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