

Product Name:
Issued:

SevoFlo
Feb-05-2009



MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Manufacturer Name and Address: Abbott Laboratories
Animal Health Division
200 Abbott Park Rd.
Building J48
Abbott Park, Illinois 60064

Customer Service Telephone: 1 - 888 - 299 - 7416 (Abbott Animal Health 8:00 am - 5:00 pm CST)

Emergency Telephone: 1 (800) 424-9300 CHEMTREC (USA)
1 (703) 527 3887 CHEMTREC (INTERNATIONAL)

Product Name: SevoFlo

Synonyms: 1,1,1,3,3,3-Hexafluoro-2-(fluoromethoxy) propane; Sevoflurane; Fluoromethyl-2,2,2-trifluoro-1-(trifluoromethyl) ethyl ether

List Number: 5458

Drug Code Number: 74341
98009

2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	Percent	OSHA PEL	ACGIH TLV	AIHA WEEL	Abbott EEL	Skin Notation
Sevoflurane 28523-86-6	100	Not Listed	Not Listed	Not Applicable	60 ppm (500 mg/m ³) TWA	None

Notes: OSHA PEL: US Occupational Safety and Health Administration-Permissible Exposure Limit.
ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value.
AIHA WEEL: American Industrial Hygiene Association - Workplace Environmental Exposure Level.
Abbott EEL: Abbott Laboratories Employee Exposure Limit.
TWA: 8-hour Time Weighted Average.
STEL: 15-minute Short Term Exposure Limit.
C: Ceiling Limit.

3. HAZARDS IDENTIFICATION

Emergency Overview:

Clear, colorless liquid.
Ethereal odor.
Product has sedative/anesthetic effects. May be irritating to skin, eyes and respiratory tract.

Routes of Exposure:

Oral: No
Dermal: Not determined.
Inhalation: Clinical Route

Hazard Information:

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3. HAZARDS IDENTIFICATION

Ingestion Rating: None.
Skin Absorption Rating: Not determined.
Inhalation Rating: None
Corrosiveness Rating: Not determined.
Skin Contact Rating: Not determined.
Skin Sensitization Rating: Not determined.
Eye Contact Rating: None.
Target Organs: Nervous System, Respiratory System, Cardiovascular System , Fetus.

Carcinogenicity Rating:

Ingredients	Percent	OSHA:	NTP:	IARC:	ACGIH:
Sevoflurane	100	Not Listed	Not Listed	Not Listed	Not Listed

NFPA Rating: Not determined.

Signs and Symptoms: Clinical data suggests the following: headaches, incoordination, nausea, breathing difficulty, slow heart rate, sedation, sleep, drowsiness, dizziness, Very rare instances of allergic reactions.

Medical Conditions Aggravated by Exposure: Data suggest any preexisting ailments in the following organs: central nervous system, respiratory system. Hypersensitivity to the material and/or similar materials.

4. FIRST AID MEASURES

Eye Contact: Remove from the source of exposure. Flush eyes with copious amounts of water. If irritation or redness persists or signs of toxicity occur, seek medical attention. Provide symptomatic/supportive care as necessary. No known antidote.

Skin Contact: Remove from source of exposure. Flush with copious amounts of water. If irritation persists or signs of toxicity occur, seek medical attention. Provide symptomatic/supportive care as necessary. No known antidote.

Inhalation: Remove from source of exposure. If signs of toxicity occur, seek medical attention. Provide symptomatic/supportive care as necessary. Maintain airway, provide oxygen and ventilation. Facilities for circulatory resuscitation must be immediately available . No known antidote.

Ingestion: Remove from source of exposure. If signs of toxicity occur, seek medical attention. Provide symptomatic/supportive care as necessary. No known antidote.

Notes To Physician: Maintain ventilation, electrolyte balance and monitor cardiovascular function, as necessary.

5. FIRE FIGHTING MEASURES

Flammability:

Flammability Class: Non-flammable.
Lower Explosive Limit: > 25%
Autoignition Temp. (°C): Not determined.

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Fire-Fighting Information:

Suitable Extinguishing Media: Use appropriate medium for the underlying cause of the fire.

Special Protective Equipment: Full protective clothing and approved self-contained breathing apparatus required for fire fighting personnel.

Special Exposure Hazards: Avoid inhalation of combustion products.

Min. Ignition Energy-Layer (mJ): > 5000

6. ACCIDENTAL RELEASE MEASURES

Methods of Cleaning and Collecting: Ventilate area. Restrict spill area to those equipped with personal protection specified in Section 8. Wash spill area site after wipe up is complete. Place into an appropriate container for disposal.

Personal Precautions: Use personal protective equipment identified in Section 8.

Environmental Precautions: Not determined.

7. HANDLING AND STORAGE

Handling: Avoid contact with eyes, skin, or clothing.

Storage: Store according to label instructions.

Special Precautions: Not determined

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls: Anesthetic gas scavenging systems should be used during typical product application. Handle inside a process enclosure or chemical fume hood during manufacturing or laboratory use.

Respiratory Protection: If engineering controls are in place, respirators are generally not required during normal conditions of use.

Eyes: Eye protection not required during typical product use conditions. Wear eye protection appropriate to exposures during manufacturing/laboratory use.

Gloves: Impervious gloves.

Other PPE Data: Not determined.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Clear, colorless liquid.

Odor: Ethereal odor.

Boiling Pt. @ 760 mm Hg (°C): 58.6

Melting/Freezing Point (°C): Not determined.

Vapor Pressure (mm Hg) 245.5 mm Hg at 30 deg C

Vapor Density (Air = 1): 6.94

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9. PHYSICAL AND CHEMICAL PROPERTIES

Evaporation Rate at 20°C: Highly volatile.
Bulk Density at 20°C: Not determined.
Solubility: Slightly soluble in: water,
Miscible with ethanol, ether, chloroform, benzene,
Specific Gravity: 1.525 (H2O = 1)
pH: 7.0 - 7.5
Viscosity (centipoise): Not determined.

10. STABILITY AND REACTIVITY

Chemical Stability: Stable.
Self-Heating Tendency: Not determined.
Materials to Avoid: Alkaline metals. Strong bases.
Hazardous Decomposition Products: When heated to decomposition it emits : CO₂, CO, HF.
Hazardous Polymerization: Not determined.
Conditions to Avoid: Not determined.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity - Oral: Data for component (s) given below.

Ingredients	Percent	Acute Test	Value	Units	Species
Sevoflurane	100	LD50 =	16,450-25,300 18,200	mg/kg mg/kg	Rats Mice

Acute Toxicity - Dermal: Not determined.

Acute Toxicity - Inhalation: Data for component (s) given below.

Ingredients	Percent	Test	Value	Units	Species
Sevoflurane	100	LC 50 =	29,000 28,000-83,000	ppm ppm	Rats Rat (Male) Mice

Notes to Toxicologist: Sevoflurane LD50 in dogs = 73,000 - 106,000 ppm.

Corrosivity: Not determined.

Dermal Irritation: Not determined.

Eye Irritation: A similar material is an eye irritant.

Sensitization: Not determined.

Target Organ Effects: In clinical use target organ effects include: central nervous system.

Reproductive Effects: In animals adverse reproductive effects include: maternal toxicity, reduced fetal growth, fetal abnormalities.

Carcinogenicity: Not determined.

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Mutagenicity: Negative in the Ames assay. Negative in the micronucleus test. Negative in the chromosomal aberration assay. Negative in the mouse lymphoma assay.

Ingredients	Percent	Ames Test:	Mouse Lymphoma Assay	Micronucleus Assay	Chromosomal Abbr. Assay
Sevoflurane	100	Negative	Negative	Negative	Negative

Notes:

1. ALD: Approximate lethal dosage
2. LC50: Concentration in air that produces 50% mortality
3. LD50: Oral or dermal dosage that produces 50% mortality

12. ECOLOGICAL INFORMATION

Aquatic Toxicity: Data for component (s) given below.

Ingredients	Percent	LC 50 (mg/l)	Species	Duration
Sevoflurane	100	43	Fathead Minnow	96 Hours

Ingredients	Percent	EC50 (mg/l)	Species	Duration
Sevoflurane	100	48	Daphnia magna	48 Hours

Ingredients	Percent	Eb50/ErC50 (mg/l)	Species	Duration
Sevoflurane	100	> 100	Pseudokirchneriella subcapitata	72 Hours

Biodegradation: Not determined.

Ingredients	Percent	% Degradation	Duration
Sevoflurane	100	4.4	28 days

General Notes: Do not allow undiluted material or large quantities to reach groundwater, bodies of water or sewer system.

Notes:

1. EC50: Concentration in water that produces 50% mortality in Daphnia sp.
2. LC50: Concentration in water that produces 50% mortality in fish.
3. EbC50/ErC50: Concentration in water that produces 50% inhibition of growth and in algae.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods: Disposal should be made in accordance with federal, state and local regulations.

14. TRANSPORT INFORMATION

DOT/ADR:
Status: Not Regulated.

ICAO/IATA:
Status: Regulated.
Proper Shipping Name: Aviation regulated liquid, n.o.s (1,1,1,3,3,3-Hexafluoro-2-(fluoromethoxy)propane)

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14. TRANSPORT INFORMATION

Hazard Class: 9
UN ID: UN3334

IMDG:
Status: Not Regulated.

TDG (Canada):
Status: Not Regulated.

15. REGULATORY INFORMATION

SARA 313 Information

Ingredients	Percent	SARA 313 Chemical:	CERCLA RQ/SARA EHS RQ (lbs):	SARA EHS TPQ (lbs):
Sevoflurane	100	No	Not Applicable	Not applicable

SARA 311/312 Hazard Categories:

Immediate Health: Yes
Delayed Health: No
Fire: No
Sudden Pressure: No
Reactivity: No

TSCA Inventory Status: Exempt.

CERCLA Status: Not determined.

RCRA Status: Not determined.

Proposition 65 Status: Does not contain chemicals known to the state of California to cause cancer or reproductive harm.

EC HAZARD CLASSIFICATION:

Category of Danger: Exempt.
Indication of danger: Exempt.

GHS CLASSIFICATION: Not Determined.

CANADIAN REGULATIONS:

Canadian Inventory: Not determined.
Canadian NDSL: Not determined.
WHMIS Hazard Class: Not determined.

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Notes:

1. SARA = Superfund Amendments and the Reauthorization Act.
2. CERCLA = Comprehensive Environmental Response, Compensation and Liability Act.
3. FIFRA = Federal Insecticide, Fungicide and Rodenticide Act.
4. TSCA = Toxic Substances Control Act.
5. EC = European Community.
6. WHMIS = Canadian Workplace Hazardous Materials Information System.
7. UN GHS = United Nations Globally Harmonized System for Hazard Identification.

16. OTHER INFORMATION

Document Authored By: Global Occupational Toxicology (D-03QW)

Supersedes the MSDS dated: Jan-23-2009

Disclaimer:

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