

Issuing Date: 27-Jun-2011

Revision Date: 27-Oct-2021

**1. Identification****Product identifier**

**SDS Number:** 1087966  
**Product Name:** Sevoflurane

**Other means of identification**

**Product Code(s):** NDC 10019-651-03, NDC 10019-651-02, NDC 10019-651-64, NDC 10019-653-64  
**Synonyms:** ether, fluoromethyl 2,2,2-trifluoro-1-(trifluoromethyl)ethyl-, fluoromethyl 2,2,2-trifluoro-1-(trifluoromethyl)ethyl ether, 1,1,1,3,3,3-hexafluoro-2-(fluoromethoxy)propane, MR6S4, propane, 1,1,1,3,3,3-hexafluoro-2-(fluoromethoxy)-, Sevofrane, Travenol, Sevorane, general inhalation volatile anaesthetic halogenated ether

**Recommended use of the chemical and restrictions on use**

**Product Use:** Anesthetic.  
**Product Type:** Regulated Prescription Drug  
**Uses advised against** No information available

**Details of manufacturer or importer**

Baxter Healthcare Pty. Ltd.  
1 Baxter Drive  
Old Toongabbie NSW 2146 Australia  
Telephone : (02) 98481111

**Emergency telephone number**

Australia: 1 800 229 837 and Poison Information Centre 13 11 26  
Verisk 3E Global Incident Response Hotline +1 760 476 3962; Access Code 335625

**2. Hazard(s) identification****GHS Classification**

None	
Serious eye damage/eye irritation	Category 2 - (H319)
Reproductive toxicity	Category 2 - (H361)
Specific target organ toxicity (repeated exposure)	Category 2 - (H373)

**Label elements**

Exclamation mark  
Health hazard



**Signal word**  
Warning

**Hazard statements**

H319 - Causes serious eye irritation  
H361 - Suspected of damaging fertility or the unborn child  
H373 - May cause damage to organs through prolonged or repeated exposure

**Precautionary Statements - Prevention**

Obtain special instructions before use  
Do not handle until all safety precautions have been read and understood  
Use personal protective equipment as required  
Wash face, hands and any exposed skin thoroughly after handling  
Do not breathe dust/fume/gas/mist/vapors/spray

**Precautionary Statements - Response**

IF exposed or concerned: Get medical advice/attention  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
If eye irritation persists: Get medical advice/attention

**Precautionary Statements - Storage**

Store locked up

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Other hazards which do not result in classification**

**General Hazards** No information available

**3. Composition/information on ingredients**

Chemical Name	CAS No.	Weight-%
Sevoflurane 28523-86-6	28523-86-6	100

**4. First-aid measures****Description of first aid measures**

<b>General Advice</b>	Treat symptomatically and supportively.
<b>Inhalation:</b>	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
<b>Eye contact:</b>	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.
<b>Skin contact:</b>	In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if irritation develops.
<b>Ingestion:</b>	Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately.
<b>Self-protection of the first aider</b>	Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8).

**Most important symptoms and effects, both acute and delayed**

A dose less than that needed to produce anesthesia (approximately 2%) may result in symptoms such as dizziness. Causes eye irritation. Contains a known or suspected reproductive toxin. See patient package insert in shipping carton for complete information.

**Indication of any immediate medical attention and special treatment needed**

Treat symptomatically. See patient package insert in shipping carton for complete information.

**5. Fire-fighting measures**

**Suitable Extinguishing Media**

Use extinguishing media suitable for surrounding materials.

**Specific hazards arising from the chemical**

No information available

**Special protective actions for fire-fighters**

Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

## 6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures**

Keep unnecessary personnel away. Depending on local ventilation, clean-up crews may need to wear a chemical cartridge respirator, with a cartridge for organic vapors. Self-contained breathing apparatus may be needed in extreme circumstances. Use suitable protective equipment (Section 8). Follow all fire fighting procedures (Section 5).

**Other information**

Refer to protective measures listed in Sections 7 and 8.

**Environmental precautions**

Do not allow material to contaminate ground water system.

**Methods and material for containment and cleaning up****Methods for Containment:**

Small volumes of liquid anesthetic agents may evaporate readily at normal room temperatures, and may dissipate before any clean up attempts are initiated. For large spills, one or more bottles break, ensure adequate ventilation or evacuate area. Large volumes of anesthetic agents may cause sedative effects.

**Methods for cleaning up:**

Restrict persons not wearing protective equipment from areas of spills or leaks until clean up is complete. Large spills should be absorbed using a sorbent that is designed for clean up of organic chemicals. Spill pillows, vermiculite, and carbon-based sorbents are some suitable materials. Keep in suitable, closed containers for disposal

**Precautions to prevent secondary hazards**

**Prevention of secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

## 7. Handling and storage

**Precautions for safe handling**

**Technical measures/precautions:** Wash thoroughly after handling.

**General hygiene considerations**

Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection.

**Conditions for safe storage, including any incompatibilities**

**Technical measures and storage conditions:** Keep container tightly closed. Keep in a cool, well-ventilated place. Store between 15-30°C (59 to 86°F). Do not freeze.

**Incompatible materials:**

Strong bases. Alkaline earth metals

## 8. Exposure controls/personal protection

**Control parameters****Exposure Limits**

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Chemical Name	Australia nohsc :	ACGIH TLV
Sevoflurane - 28523-86-6	-	-

**Appropriate engineering controls****Engineering Measures**

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. Well designed and maintained scavenging system on the anesthesia equipment (combined with a good general room ventilation) is important in limiting the exposures of all personnel.

**Individual protection measures, such as personal protective equipment****Eye/face protection**

Normal final product use: wear safety glasses during the vaporizer filling process. Use in manufacturing or laboratory setting: safety glasses with face shield, chemical splash goggles, or other full face protection should be available for use if potential exists for splashes.

**Skin and body protection**

Work uniform or laboratory coat. Additional body garments should be used based upon the task being performed (e.g., sleevelets, apron, gauntlets, disposable suits).

**Hand protection**

Use chemical resistant, impervious gloves.

**Respiratory protection**

Personal respiratory protection equipment not typically required if engineering controls are in place. If exposure levels may exceed regulatory limits, implement a respiratory protection program including respiratory protection that is in compliance with OSHA 29 CFR1910.134 (in the US) or equivalent regulation in other regions.

## 9. Physical and chemical properties

**Information on basic physical and chemical properties**

<b>Physical state:</b>	Liquid
<b>Appearance:</b>	Aqueous solution.
<b>Color:</b>	Clear, Colorless.
<b>Odor:</b>	No information available
<b>Odor Threshold:</b>	No information available
<b>pH:</b>	No information available
<b>Melting point / melting range:</b>	25 °C
<b>Boiling point / boiling range:</b>	58.6°C (137.5°F)
<b>Flash point:</b>	Not determined
<b>Evaporation rate:</b>	>1
<b>Flammability (solid, gas):</b>	No information available
<b>Flammable limits</b>	No information available
<b>in air-upper (%):</b>	
<b>Flammable limits</b>	No information available
<b>in air-lower (%):</b>	
<b>Vapor pressure:</b>	157 mm Hg @ 20°C 197 mm Hg @ 25°C 317 mm Hg @ 36°C
<b>Vapor density</b>	No information available
<b>Density:</b>	No information available
<b>Solubility:</b>	Slightly soluble in water.
<b>Partition coefficient</b>	logP = 1.750
<b>(n-octanol/water):</b>	
<b>Autoignition temperature:</b>	No information available
<b>Decomposition temperature</b>	No information available
<b>Viscosity:</b>	No information available
<b>Explosive Properties:</b>	No information available
<b>Oxidizing Properties:</b>	No information available

**Other information**

**Molecular weight:** 200.05 g/mole

## 10. Stability and reactivity

### Reactivity

No information available.

### Chemical stability

Stable under recommended storage conditions

### Possibility of hazardous reactions

None under normal use conditions

### Conditions to Avoid

Do not freeze. Avoid excessive heat.

### Incompatible materials

Alkali metals. Strong bases.

### Hazardous decomposition products

These products are halogenated compounds (hydrochloric and hydrofluoric acids).

## 11. Toxicological information

### Acute toxicity

#### Information on likely routes of exposure

#### **Product Information**

**Inhalation:** Practically non-toxic by inhalation. Cardiovascular effects (may include fluctuations in heart rate, changes in blood pressure, chest pain). Respiratory effects (may include shortness of breath, bronchospasms, laryngospasms, respiratory depression). Gastrointestinal effects (may include nausea, upset stomach, loss of appetite). Nervous System effects (may include ataxia, tremor, disturbance of speech, lethargy, headache, dizziness, blurred vision). Hypersensitivity (may include drug fever, rash, itching, anaphylaxis).

**Eye contact:** May cause eye irritation.

**Skin contact:** May cause skin irritation.

**Ingestion:** Practically non-toxic if swallowed. No specific hazards other than therapeutic effects.

**Symptoms:** No information available

#### **Numerical measures of toxicity - Product Information**

No information available

**Unknown acute toxicity** No information available

#### **Component Information**

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Sevoflurane 28523-86-6	= 10800 mg/kg ( Rat )	-	28800 ppm 3 h (Rat)

#### **Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Corrosivity:** None

<b>Irritation:</b>	Irritating to eyes. Mild skin irritation.
<b>Sensitization:</b>	Not classified.
<b>Mutagenic effects:</b>	Not mutagenic in a standard battery of genetic toxicological tests.
<b>Carcinogenic effects:</b>	Not classified.
<b>Reproductive toxicity:</b>	Contains a known or suspected reproductive toxin. Epidemiological studies suggest higher than normal incidences of problem pregnancies (particularly spontaneous abortions) among exposed personnel.
<b>STOT - single exposure:</b>	Not classified.
<b>STOT - repeated exposure:</b>	Target organs
<b>Aspiration Hazard:</b>	Not classified.

## 12. Ecological information

### Ecotoxicity

No information available

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Sevoflurane 28523-86-6	-	-	-	-

### Persistence and degradability

No information available.

### Bioaccumulative potential

No information available.

Chemical Name	Partition coefficient
Sevoflurane 28523-86-6	-

### Mobility

No information available

### Other adverse effects

This product does not contain any known or suspected endocrine disruptors.

Chemical Name	EU - Endocrine Disruptors Candidate List	EU - Endocrine Disruptors - Evaluated Substances	Endocrine disrupting potential
Sevoflurane 28523-86-6	-	-	-

## 13. Disposal considerations

### Waste treatment methods

**Waste from residues/unused products** In accordance with local and national regulations

**Contaminated Packaging** In accordance with local and national regulations

**14. Transport information**

<b>ADG</b>	Not regulated
<b>IATA</b>	Not regulated
<b>UN number</b>	UN3334
<b>Packing Group</b>	III
<b>IMDG</b>	Not regulated

**15. Regulatory information****Safety, health and environmental regulations/legislation specific for the substance or mixture****National regulations****Australia**

See section 8 for national exposure control parameters

**Standard for Uniform Scheduling of Medicines and Poisons (SUSMP)**

No poisons schedule number allocated

**International Inventories**

<b>TSCA</b>	Does not comply
<b>DSL/NDSL</b>	Does not comply
<b>EINECS/ELINCS</b>	Does not comply
<b>ENCS</b>	Does not comply
<b>IECSC</b>	Does not comply
<b>KECL</b>	Does not comply
<b>PICCS</b>	Does not comply
<b>AICS</b>	Does not comply
<b>NZIOC</b>	Complies

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**IECSC** - China Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**AICS** - Australian Inventory of Chemical Substances

**NZIOC** - New Zealand Inventory of Chemicals and Chemical Substances

**International Regulations**

**The Montreal Protocol on Substances that Deplete the Ozone Layer** Not applicable

**The Stockholm Convention on Persistent Organic Pollutants** Not applicable

**The Rotterdam Convention** Not applicable

## 16. Other information

**Prepared by:** Baxter Research & Development  
**Issuing Date:** 27-Jun-2011  
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### Revision Note:

New GHS format. Changes to Section 9. Changes to Section 1. Changes to Section 14. Additional product codes. Change to product codes. Changes to Section 2.

### Key or legend to abbreviations and acronyms

#### Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)
STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value
*	Skin designation
C	Carcinogen

### Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)  
U.S. Environmental Protection Agency ChemView Database  
European Food Safety Authority (EFSA)  
EPA (Environmental Protection Agency)  
Acute Exposure Guideline Level(s) (AEGL(s))  
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act  
U.S. Environmental Protection Agency High Production Volume Chemicals  
Food Research Journal  
Hazardous Substance Database  
International Uniform Chemical Information Database (IUCLID)  
Japan GHS Classification  
Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)  
NIOSH (National Institute for Occupational Safety and Health)  
National Library of Medicine's ChemID Plus (NLM CIP)  
National Library of Medicine's PubMed database (NLM PUBMED)  
National Toxicology Program (NTP)  
New Zealand's Chemical Classification and Information Database (CCID)  
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications  
Organization for Economic Co-operation and Development High Production Volume Chemicals Program  
Organization for Economic Co-operation and Development Screening Information Data Set  
RTECS (Registry of Toxic Effects of Chemical Substances)  
World Health Organization

### Disclaimer

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**End of Safety Data Sheet**