

According to the UN GHS revision 8

Creation Date: April 29, 2026

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## 1. IDENTIFICATION

### 1.1 GHS Product identifier

**Product name:** Isoflurane  
**Catalog Number:** T19651  
**CAS Number:** 26675-46-7

### 1.2 Other means of identification

**Other names:** -

### 1.3 Recommended use of the chemical and restrictions on use

**Identified uses:**

### 1.4 Supplier's details

**Company:** Targetmol Chemicals Inc.  
**Address:** 34 Washington Street, Wellesley Hills, Massachusetts 02481 USA  
**Tel/Fax:** (781) 999-4286

### 1.5 Emergency phone number

**Emergency phone number:** 781-999-4286  
**Service hours:** Monday to Friday, 9am-5pm (Standard timezone: UTC/GMT -5 hours).

## 2. HAZARD IDENTIFICATION

### 2.1 Classification of the substance or mixture

Specific target organ toxicity - single exposure, Category 3

### 2.2 GHS label elements, including precautionary statements

**Pictogram(s):**



**Signal word:** Warning

**Hazard statement(s):** H336 May cause drowsiness or dizziness

**Precautionary statement(s):**

**Prevention:**

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.  
P271 Use only outdoors or in a well-ventilated area.

**Response:**

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
P319 Get medical help if you feel unwell.

**Storage:**

P403+P233 Store in a well-ventilated place. Keep container tightly closed.  
P405 Store locked up.

**Disposal:**

P501 Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

### 2.3 Other hazards which do not result in classification

no data available

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1 Substances

Chemical name	Common names and synonyms	CAS number	EC number
Isoflurane	-	26675-46-7	247-897-7

### 4. FIRST-AID MEASURES

#### 4.1 Description of necessary first-aid measures

##### General advice

no data available

##### If inhaled

Fresh air, rest. Artificial respiration may be needed. Refer for medical attention.

##### Following skin contact

Remove contaminated clothes. Rinse and then wash skin with water and soap.

##### Following eye contact

First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then refer for medical attention.

##### Following ingestion

Rinse mouth. Refer for medical attention .

#### 4.2 Most important symptoms/effects, acute and delayed

Treatment /of Malignant Hyperthermia/ includes discontinuance of triggering agents (e.g., isoflurane), administration of intravenous dantrolene sodium, and application of supportive therapy. Such therapy includes vigorous efforts to restore body temperature to normal, respiratory and circulatory support as indicated, and management of electrolyte-fluid-acid-base derangements. Renal failure may appear later, and urine flow should be sustained if possible.

#### 4.3 Indication of immediate medical attention and special treatment needed, if necessary

no data available

### 5. FIRE-FIGHTING MEASURES

#### 5.1 Extinguishing media

As with all fires, evacuate personnel to a safe area. Firefighters should use self-contained breathing equipment and protective clothing.

#### 5.2 Specific hazards arising from the chemical

Not combustible. Gives off irritating or toxic fumes (or gases) in a fire.

#### 5.3 Special protective actions for fire-fighters

In case of fire in the surroundings, use appropriate extinguishing media.

### 6. ACCIDENTAL RELEASE MEASURES

#### 6.1 Personal precautions, protective equipment and emergency procedures

Personal protection: self-contained breathing apparatus. Ventilation. Collect leaking liquid in sealable containers. Absorb remaining liquid in sand or inert absorbent. Then store and dispose of according to local regulations.

#### 6.2 Environmental precautions

Personal protection: self-contained breathing apparatus. Ventilation. Collect leaking liquid in sealable containers. Absorb remaining liquid in sand or inert absorbent. Then store and dispose of according to local regulations.

#### 6.3 Methods and materials for containment and cleaning up

Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Prevent entry into waterways, sewer, basements or confined areas. Wear approved respiratory protection, chemically compatible gloves, and protective clothing. Wipe up spillage or collect spillage using a high-efficiency vacuum cleaner. Avoid breathing vapor. Ventilate area and wash spill site. Place

spillage in appropriately labeled container for disposal. Small quantities of liquid anesthetic agents may evaporate readily at room temperature. Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water. Never return spills in original containers for re-use.

### 7. HANDLING AND STORAGE

#### 7.1 Precautions for safe handling

Handling in a well ventilated place. Wear suitable protective clothing. Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Use non-sparking tools. Prevent fire caused by electrostatic discharge steam.

#### 7.2 Conditions for safe storage, including any incompatibilities

Ventilation along the floor. Store at room temperature 15-30 degC (59-86 deg F).

Pure form: -20°C for 3 years | In solvent: -80°C for 1 year

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### 8.1 Control parameters

##### Occupational Exposure limit values

no data available

##### Biological limit values

no data available

#### 8.2 Appropriate engineering controls

Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Set up emergency exits and the risk-elimination area.

#### 8.3 Individual protection measures, such as personal protective equipment (PPE)

##### Eye/face protection

Wear safety spectacles or eye protection in combination with breathing protection.

##### Skin protection

Protective gloves.

##### Respiratory protection

Use ventilation, local exhaust or breathing protection.

##### Thermal hazards

no data available

### 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical state</b>	Solid
<b>Color</b>	no data available
<b>Odour</b>	Slight odor
<b>Melting point/freezing point</b>	-50°C(lit.)
<b>Boiling point or initial boiling point and boiling range</b>	49°C(lit.)
<b>Flammability</b>	Not combustible. Gives off irritating or toxic fumes (or gases) in a fire.
<b>Lower and upper explosion limit/flammability limit</b>	no data available
<b>Flash point</b>	34°C(lit.)
<b>Auto-ignition temperature</b>	no data available

<b>Decomposition temperature</b>	no data available
<b>pH</b>	no data available
<b>Kinematic viscosity</b>	no data available
<b>Solubility</b>	DMSO: 250 mg/mL (1355.09 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
<b>N-octanol-water partition coefficient</b>	2.1
<b>Vapour pressure</b>	330 mm Hg at 25 deg C
<b>Density and/or relative density</b>	1.510 g/cm <sup>3</sup> at 25°C
<b>Relative vapour density</b>	no data available
<b>Particle characteristics</b>	no data available

## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity

Decomposes on contact with hot surfaces or flames. This produces toxic and corrosive fumes including phosgene, hydrogen chloride and hydrogen fluoride.

### 10.2 Chemical stability

Isoflurane contains no additives and has been demonstrated to be stable at room temperature for periods in excess of five years.

### 10.3 Possibility of hazardous reactions

The vapour is heavier than air and may accumulate in lowered spaces causing a deficiency of oxygen.

### 10.4 Conditions to avoid

no data available

### 10.5 Incompatible materials

no data available

### 10.6 Hazardous decomposition products

When heated to decomposition it emits toxic fumes of /fluorine and chlorine/.

## 11. TOXICOLOGICAL INFORMATION

### Acute toxicity

Oral: LD50 Rat oral 4770 mg/kg

Inhalation: LC50 Rat inhalation 15,300 ppm/3 hr

Dermal: no data available

### Skin corrosion/irritation

no data available

### Serious eye damage/irritation

no data available

### Respiratory or skin sensitization

no data available

### Germ cell mutagenicity

no data available

### Carcinogenicity

no data available

### Reproductive toxicity

no data available

### STOT-single exposure

The substance is irritating to the eyes and skin. The vapour is irritating to the respiratory tract. The substance may cause effects on the central nervous system and cardiovascular system. Exposure at high levels could cause unconsciousness.

### STOT-repeated exposure

no data available

### Aspiration hazard

A harmful contamination of the air can be reached very quickly on evaporation of this substance at 20°C.

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

Toxicity to fish: no data available

Toxicity to daphnia and other aquatic invertebrates: no data available

Toxicity to algae: no data available

Toxicity to microorganisms: no data available

### 12.2 Persistence and degradability

no data available

### 12.3 Bioaccumulative potential

An estimated BCF of 11 was calculated in fish for isoflurane(SRC), using a log Kow of 2.06(1) and a regression-derived equation(2). According to a classification scheme(3), this BCF suggests the potential for bioconcentration in aquatic organisms is low(SRC).

### 12.4 Mobility in soil

The Koc of isoflurane is estimated as 94(SRC), using a log Kow of 2.06(1) and a regression-derived equation(2). According to a classification scheme(3), this estimated Koc value suggests that isoflurane is expected to have high mobility in soil.

### 12.5 Other adverse effects

no data available

## 13. DISPOSAL CONSIDERATIONS

### 13.1 Disposal methods

#### Product

The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.

#### Contaminated packaging

Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.

## 14. TRANSPORT INFORMATION

### 14.1 UN Number

no data available

### 14.2 UN Proper Shipping Name

no data available

### 14.3 Transport hazard class(es)

no data available

### 14.4 Packing group, if applicable

no data available

**14.5 Environmental hazards**

no data available

**14.6 Special precautions for user**

no data available

**14.7 Transport in bulk according to IMO instruments**

no data available

**15. REGULATORY INFORMATION****15.1 Safety, health and environmental regulations specific for the product in question**

European Inventory of Existing Commercial Chemical Substances (EINECS)	Listed.
EC Inventory	Listed.
United States Toxic Substances Control Act (TSCA) Inventory	Not Listed.
China Catalog of Hazardous chemicals 2015	Not Listed.
New Zealand Inventory of Chemicals (NZIoC)	Listed.
Philippines Inventory of Chemicals and Chemical Substances (PICCS)	Not Listed.
Vietnam National Chemical Inventory	Not Listed.
Chinese Chemical Inventory of Existing Chemical Substances (China IECSC)	Not Listed.
Korea Existing Chemicals List (KECL)	Not Listed.

**16. OTHER INFORMATION****Information on revision****Creation Date** April 29, 2026**Revision Date** April 29, 2026**Abbreviations and acronyms**

- CAS: Chemical Abstracts Service
- ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
- RID: Regulation concerning the International Carriage of Dangerous Goods by Rail
- IMDG: International Maritime Dangerous Goods
- IATA: International Air Transportation Association
- TWA: Time Weighted Average
- STEL: Short term exposure limit
- LC50: Lethal Concentration 50%
- LD50: Lethal Dose 50%
- EC50: Effective Concentration 50%

**References**

IPCS - The International Chemical Safety Cards (ICSC), website: <http://www.ilo.org/dyn/icsc/showcard.home>  
 HSDB - Hazardous Substances Data Bank, website: <https://toxnet.nlm.nih.gov/newtoxnet/hsdb.htm>  
 IARC - International Agency for Research on Cancer, website: <http://www.iarc.fr/>  
 eChemPortal - The Global Portal to Information on Chemical Substances by OECD, website: [http://www.echemportal.org/echemportal/index?pageID=0&request\\_locale=en](http://www.echemportal.org/echemportal/index?pageID=0&request_locale=en)  
 CAMEO Chemicals, website: <http://cameochemicals.noaa.gov/search/simple>  
 ChemIDplus, website: <http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp>  
 ERG - Emergency Response Guidebook by U.S. Department of Transportation, website: <http://www.phmsa.dot.gov/hazmat/library/erg>  
 Germany GESTIS-database on hazard substance, website: <http://www.dguv.de/ifa/gestis/gestis-stoffdatenbank/index-2.jsp>  
 ECHA - European Chemicals Agency, website: <https://echa.europa.eu/>

**Other Information**

Check oxygen content before entering area. High concentrations in the air cause a deficiency of oxygen with the risk of unconsciousness or death.

*Disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. We as supplier shall not be held liable for any damage resulting from handling or from contact with the above product. All products are for Research Use Only · Not For Human or Veterinary or Therapeutic Use*