

# SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519



## Isometamidium

Version  
7.0

Revision Date:  
2025/11/10

SDS Number:  
5351267-00015

Date of last issue: 2025/06/18  
Date of first issue: 2019/12/11

### 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Isometamidium

#### Manufacturer or supplier's details

Company : MSD

Address : No. 485 Jing Tai Road  
Pu Tuo District - Shanghai - China 200331

Telephone : +1-908-740-4000

Emergency telephone number : 86-571-87268110

E-mail address : EHSDATASTEWARD@msd.com

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

Recommended use : Veterinary product

Restrictions on use : Not applicable

### 2. HAZARDS IDENTIFICATION

#### Emergency Overview

Appearance : powder  
Colour : dark red  
Odour : No data available

Toxic if swallowed.

#### GHS Classification

Acute toxicity (Oral) : Category 3

#### GHS label elements

Hazard pictograms : A red diamond-shaped hazard pictogram containing a white skull and crossbones symbol, indicating extreme toxicity.

Signal word : Danger

Hazard statements : H301 Toxic if swallowed.

Precautionary statements : **Prevention:**

P264 Wash skin thoroughly after handling.  
P270 Do not eat, drink or smoke when using this product.

**Response:**

# SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519



## Isometamidium

Version 7.0	Revision Date: 2025/11/10	SDS Number: 5351267-00015	Date of last issue: 2025/06/18 Date of first issue: 2019/12/11
----------------	------------------------------	------------------------------	---

P301 + P316 + P330 IF SWALLOWED: Get emergency medical help immediately. Rinse mouth.

### Storage:

P405 Store locked up.

### Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

### Physical and chemical hazards

Not classified based on available information.

### Health hazards

Toxic if swallowed.

### Environmental hazards

Not classified based on available information.

### Additional Labelling

The following percentage of the mixture consists of ingredient(s) with unknown hazards to the aquatic environment: 100 %

### Other hazards which do not result in classification

Dust contact with the eyes can lead to mechanical irritation.

Contact with dust can cause mechanical irritation or drying of the skin.

May form explosive dust-air mixture during processing, handling or other means.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

### Components

Chemical name	CAS-No.	Concentration (% w/w)
8-[3-(m-Aminophenyl)-2-triazeno]-3-amino-5-ethyl-6-phenylphenanthridinium chloride hydrochloride	6798-24-9	<= 100

## 4. FIRST AID MEASURES

General advice : In the case of accident or if you feel unwell, seek medical advice immediately.  
When symptoms persist or in all cases of doubt seek medical advice.

If inhaled : If inhaled, remove to fresh air.  
Get medical attention if symptoms occur.

In case of skin contact : Wash with water and soap.  
Get medical attention if symptoms occur.

In case of eye contact : If in eyes, rinse well with water.  
Get medical attention if irritation develops and persists.

If swallowed : If swallowed, DO NOT induce vomiting unless directed to do so by medical personnel.  
Call a physician or poison control centre immediately.

# SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519



## Isometamidium

Version 7.0	Revision Date: 2025/11/10	SDS Number: 5351267-00015	Date of last issue: 2025/06/18 Date of first issue: 2019/12/11
----------------	------------------------------	------------------------------	---

Most important symptoms and effects, both acute and delayed	Rinse mouth thoroughly with water. Never give anything by mouth to an unconscious person. : Toxic if swallowed. Contact with dust can cause mechanical irritation or drying of the skin.
Protection of first-aiders	Dust contact with the eyes can lead to mechanical irritation. : First Aid responders should pay attention to self-protection, and use the recommended personal protective equipment when the potential for exposure exists (see section 8).
Notes to physician	Treat symptomatically and supportively.

## 5. FIREFIGHTING MEASURES

Suitable extinguishing media	: Water spray Alcohol-resistant foam Carbon dioxide (CO <sub>2</sub> ) Dry chemical
Unsuitable extinguishing media	: None known.
Specific hazards during fire-fighting	: Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard. Exposure to combustion products may be a hazard to health.
Hazardous combustion products	: Carbon oxides Nitrogen oxides (NO <sub>x</sub> ) Chlorine compounds
Specific extinguishing methods	: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use water spray to cool unopened containers. Remove undamaged containers from fire area if it is safe to do so. Evacuate area.
Special protective equipment for firefighters	: In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment.

## 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	: Use personal protective equipment. Follow safe handling advice (see section 7) and personal protective equipment recommendations (see section 8).
Environmental precautions	: Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Retain and dispose of contaminated wash water. Local authorities should be advised if significant spillages cannot be contained.

# SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519



## Isometamidium

Version 7.0	Revision Date: 2025/11/10	SDS Number: 5351267-00015	Date of last issue: 2025/06/18 Date of first issue: 2019/12/11
----------------	------------------------------	------------------------------	---

Methods and materials for containment and cleaning up : Sweep up or vacuum up spillage and collect in suitable container for disposal. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which regulations are applicable. Sections 13 and 15 of this SDS provide information regarding certain local or national requirements.

## 7. HANDLING AND STORAGE

### Handling

Technical measures : Static electricity may accumulate and ignite suspended dust causing an explosion. Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres.

Local/Total ventilation : Use only with adequate ventilation.

Advice on safe handling : Do not breathe dust. Do not swallow. Avoid contact with eyes. Avoid prolonged or repeated contact with skin. Wash skin thoroughly after handling. Handle in accordance with good industrial hygiene and safety practice, based on the results of the workplace exposure assessment. Keep container tightly closed. Minimize dust generation and accumulation. Keep container closed when not in use. Keep away from heat and sources of ignition. Take precautionary measures against static discharges. Do not eat, drink or smoke when using this product. Take care to prevent spills, waste and minimize release to the environment.

Avoidance of contact : Oxidizing agents

### Storage

Conditions for safe storage : Keep in properly labelled containers. Store locked up. Keep tightly closed. Store in accordance with the particular national regulations.

Materials to avoid : Do not store with the following product types: Explosives

Packaging material : Unsuitable material: None known.

# SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519



## Isometamidium

Version  
7.0

Revision Date:  
2025/11/10

SDS Number:  
5351267-00015

Date of last issue: 2025/06/18  
Date of first issue: 2019/12/11

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parame- ters / Permissible concentration	Basis
8-[3-(m-Aminophenyl)-2-triazeno]-3-amino-5-ethyl-6-phenylphenanthridinium chloride hydrochloride	6798-24-9	TWA	OEB 3 (>= 10 < 100 µg/m <sup>3</sup> )	Internal

**Engineering measures** : All engineering controls should be implemented by facility design and operated in accordance with GMP principles to protect products, workers, and the environment. Containment technologies suitable for controlling compounds are required to control at source and to prevent migration of the compound to uncontrolled areas (e.g., open-face containment devices). Minimize open handling.

#### Personal protective equipment

Respiratory protection : If adequate local exhaust ventilation is not available or exposure assessment demonstrates exposures outside the recommended guidelines, use respiratory protection.

##### Filter type

Eye/face protection : Particulates type  
: Wear safety glasses with side shields or goggles. If the work environment or activity involves dusty conditions, mists or aerosols, wear the appropriate goggles. Wear a faceshield or other full face protection if there is a potential for direct contact to the face with dusts, mists, or aerosols.

##### 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) to avoid exposed skin surfaces. Use appropriate degowning techniques to remove potentially contaminated clothing.

##### Hand protection

##### Material

: Chemical-resistant gloves

##### Remarks

Hygiene measures : Consider double gloving.  
: If exposure to chemical is likely during typical use, provide eye flushing systems and safety showers close to the working place.

When using do not eat, drink or smoke.

Wash contaminated clothing before re-use.

The effective operation of a facility should include review of engineering controls, proper personal protective equipment, appropriate degowning and decontamination procedures, industrial hygiene monitoring, medical surveillance and the use of administrative controls.

# SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519



## Isometamidium

Version 7.0      Revision Date: 2025/11/10      SDS Number: 5351267-00015      Date of last issue: 2025/06/18  
Date of first issue: 2019/12/11

### 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	powder
Colour	:	dark red
Odour	:	No data available
Odour Threshold	:	No data available
pH	:	No data available
Melting point/freezing point	:	No data available
Initial boiling point and boiling range	:	No data available
Flash point	:	No data available
Evaporation rate	:	Not applicable
Flammability (solid, gas)	:	May form explosive dust-air mixture during processing, handling or other means.
Flammability (liquids)	:	Not applicable
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Vapour pressure	:	Not applicable
Relative vapour density	:	Not applicable
Relative density	:	No data available
Density	:	No data available
Solubility(ies)		
Water solubility	:	No data available
Partition coefficient: n-octanol/water	:	No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Viscosity		
Viscosity, kinematic	:	Not applicable
Explosive properties	:	Not explosive

# SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519



## Isometamidium

Version  
7.0

Revision Date:  
2025/11/10

SDS Number:  
5351267-00015

Date of last issue: 2025/06/18  
Date of first issue: 2019/12/11

---

Oxidizing properties : The substance or mixture is not classified as oxidizing.

Molecular weight : No data available

Particle characteristics

Particle size : <= 15 µm

<= 30 µm

---

## 10. STABILITY AND REACTIVITY

Reactivity : Not classified as a reactivity hazard.

Chemical stability : Stable under normal conditions.

Possibility of hazardous reactions : May form explosive dust-air mixture during processing, handling or other means.

Can react with strong oxidizing agents.

Conditions to avoid : Heat, flames and sparks.

Avoid dust formation.

Incompatible materials : Oxidizing agents

Hazardous decomposition products : No hazardous decomposition products are known.

---

## 11. TOXICOLOGICAL INFORMATION

Exposure routes : Inhalation  
Skin contact  
Ingestion  
Eye contact

### Acute toxicity

Toxic if swallowed.

### Product:

Acute oral toxicity : Acute toxicity estimate: 300 mg/kg  
Method: Calculation method

### Components:

**8-[3-(m-Aminophenyl)-2-triazeno]-3-amino-5-ethyl-6-phenylphenanthridinium chloride hydrochloride:**

Acute oral toxicity : LD50 (Rabbit): 300 mg/kg

### **Skin corrosion/irritation**

Not classified based on available information.

### **Serious eye damage/eye irritation**

Not classified based on available information.

# SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519



## Isometamidium

Version  
7.0

Revision Date:  
2025/11/10

SDS Number:  
5351267-00015

Date of last issue: 2025/06/18  
Date of first issue: 2019/12/11

### Respiratory or skin sensitisation

#### Skin sensitisation

Not classified based on available information.

#### Respiratory sensitisation

Not classified based on available information.

#### Germ cell mutagenicity

Not classified based on available information.

#### Components:

##### **8-[3-(m-Amidinophenyl)-2-triazeno]-3-amino-5-ethyl-6-phenylphenanthridinium chloride hydrochloride:**

Genotoxicity in vitro	: Test Type: Bacterial reverse mutation assay (AMES) Result: positive Remarks: Based on data from similar materials
	Test Type: In vitro mammalian cell gene mutation test Result: negative Remarks: Based on data from similar materials
Germ cell mutagenicity - Assessment	: Weight of evidence does not support classification as a germ cell mutagen.

#### Carcinogenicity

Not classified based on available information.

#### Reproductive toxicity

Not classified based on available information.

#### Components:

##### **8-[3-(m-Amidinophenyl)-2-triazeno]-3-amino-5-ethyl-6-phenylphenanthridinium chloride hydrochloride:**

Effects on foetal development	: Test Type: Fertility/early embryonic development Species: Rat Application Route: Ingestion Result: negative Remarks: Based on data from similar materials
-------------------------------	---

#### STOT - single exposure

Not classified based on available information.

#### STOT - repeated exposure

Not classified based on available information.

#### Repeated dose toxicity

#### Components:

##### **8-[3-(m-Amidinophenyl)-2-triazeno]-3-amino-5-ethyl-6-phenylphenanthridinium chloride hydrochloride:**

# SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519



## Isometamidium

Version 7.0      Revision Date: 2025/11/10      SDS Number: 5351267-00015      Date of last issue: 2025/06/18  
Date of first issue: 2019/12/11

---

Species	:	Rat
NOAEL	:	> 10 - 100 mg/kg
LOAEL	:	> 100 mg/kg
Application Route	:	Ingestion
Exposure time	:	13 Weeks
Remarks	:	Based on data from similar materials

### Aspiration toxicity

Not classified based on available information.

---

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

#### Components:

**8-[3-(m-Amidinophenyl)-2-triazeno]-3-amino-5-ethyl-6-phenylphenanthridinium chloride hydrochloride:**

#### Ecotoxicology Assessment

Acute aquatic toxicity	:	Toxic effects cannot be excluded
Chronic aquatic toxicity	:	Toxic effects cannot be excluded

### Persistence and degradability

No data available

### Bioaccumulative potential

No data available

### Mobility in soil

No data available

### Other adverse effects

No data available

---

## 13. DISPOSAL CONSIDERATIONS

### Disposal methods

Waste from residues	:	Do not dispose of waste into sewer. Dispose of in accordance with local regulations.
Contaminated packaging	:	Empty containers should be taken to an approved waste handling site for recycling or disposal. If not otherwise specified: Dispose of as unused product.

---

## 14. TRANSPORT INFORMATION

### International Regulations

#### UNRTDG

UN number	:	UN 2811
Proper shipping name	:	TOXIC SOLID, ORGANIC, N.O.S.

# SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519



## Isometamidium

Version  
7.0

Revision Date:  
2025/11/10

SDS Number:  
5351267-00015

Date of last issue: 2025/06/18  
Date of first issue: 2019/12/11

Chemical name: (8-[3-(m-Amidinophenyl)-2-triazeno]-3-amino-5-ethyl-6-phenylphenanthridinium chloride hydrochloride)

Class : 6.1  
Packing group : III  
Labels : 6.1  
Environmentally hazardous : no

### IATA-DGR

UN/ID No. : UN 2811  
Proper shipping name : Toxic solid, organic, n.o.s.  
(8-[3-(m-Amidinophenyl)-2-triazeno]-3-amino-5-ethyl-6-phenylphenanthridinium chloride hydrochloride)

Class : 6.1  
Packing group : III  
Labels : Toxic  
Packing instruction (cargo aircraft) : 677  
Packing instruction (passenger aircraft) : 670

### IMDG-Code

UN number : UN 2811  
Proper shipping name : TOXIC SOLID, ORGANIC, N.O.S.  
(8-[3-(m-Amidinophenyl)-2-triazeno]-3-amino-5-ethyl-6-phenylphenanthridinium chloride hydrochloride)

Class : 6.1  
Packing group : III  
Labels : 6.1  
EmS Code : F-A, S-A  
Marine pollutant : no

### Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

### National Regulations

#### GB 6944/12268

UN number : UN 2811  
Proper shipping name : TOXIC SOLID, ORGANIC, N.O.S.  
(8-[3-(m-Amidinophenyl)-2-triazeno]-3-amino-5-ethyl-6-phenylphenanthridinium chloride hydrochloride)

Class : 6.1  
Packing group : III  
Labels : 6.1  
Marine pollutant : no

### Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

# SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519



## Isometamidium

Version  
7.0

Revision Date:  
2025/11/10

SDS Number:  
5351267-00015

Date of last issue: 2025/06/18  
Date of first issue: 2019/12/11

## 15. REGULATORY INFORMATION

### National regulatory information

#### Law on the Prevention and Control of Occupational Diseases

#### Regulations on Safety Management of Hazardous Chemicals

Catalogue of Hazardous Chemicals : This product is not listed in the catalogue of hazardous chemicals, but it meets the definition of hazardous chemicals and its principles of determination.

Identification of Major Hazard Installations for Hazardous Chemicals (GB 18218) : Not listed

Hazardous Chemicals for Priority Management under SAWS : Not listed

Catalogue of Specially Controlled Hazardous Chemicals : Not listed

List of Explosive Precursors : Not listed

#### Regulations on Labour Protection in Workplaces where Toxic Substances are Used

Catalogue of Highly Toxic Chemicals : Not listed

#### Regulation of Environmental Management on the First Import of Chemicals and the Import and Export of Toxic Chemicals

China Severely Restricted Toxic Chemicals for Import and Export : Not listed

#### Regulation on the Administration of Precursor Chemicals

Catalogue and Classification of Precursor Chemicals : Not listed

#### Yangtze River Protection Law

This product does not contain any dangerous chemicals prohibited for inland river transport.

#### Regulations of Ozone Depleting Substances Management

List of Controlled Ozone Depleting Substances Import and Export : Not listed

List of Controlled Ozone Depleting Substances : Not listed

#### Environmental Protection Law

List of Priority Controlled Chemicals : Not listed

List of Key Controlled New Pollutants : Not listed

||| List of Toxic and Hazardous Water Pollutants : Not listed

# SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519



## Isometamidium

Version 7.0      Revision Date: 2025/11/10      SDS Number: 5351267-00015      Date of last issue: 2025/06/18  
Date of first issue: 2019/12/11

---

|| List of Toxic and Hazardous Air Pollutants : Not listed  
|| List of Toxic and Hazardous Soil Pollutants : Not listed

### Measures for the Administration of Non-Medical Use of Narcotic Drugs and Psychotropic Substances

|| Catalogue of Controlled Narcotic Drugs and Psychotropic Substances with Non-Medical Use : Not listed

### Measures for the Administration on Import and Export Licenses for Dual-Use Items and Technologies

|| Catalogue for Dual-Use Items and Technologies : Not listed

### The components of this product are reported in the following inventories:

AICS : not determined

CA. DSL : not determined

IECSC : not determined

---

## 16. OTHER INFORMATION

Revision Date : 2025/11/10

### Further information

Sources of key data used to compile the Safety Data Sheet : Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agency, <http://echa.europa.eu/>

Items where changes have been made to the previous version are highlighted in the body of this document by two vertical lines.

Date format : yyyy/mm/dd

### Full text of other abbreviations

AIIC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonised System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organisation; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardisation; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Con-

# SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519



## Isometamidium

Version  
7.0

Revision Date:  
2025/11/10

SDS Number:  
5351267-00015

Date of last issue: 2025/06/18  
Date of first issue: 2019/12/11

---

centration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MERCOSUR - The Agreement for the Facilitation of the Transport of Dangerous Goods; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organisation for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

### Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provided relates only to the specific material identified at the top of this SDS and may not be valid when the SDS material is used in combination with any other materials or in any process, unless specified in the text. Material users should review the information and recommendations in the specific context of their intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the SDS material in the user's end product, if applicable.

CN / EN