according to GB/T 16483 and GB/T 17519



## Isometamidium

Version	Revision Date:	SDS Number:	Date of last issue: 2024/04/06
4.0	2024/09/28	5351267-00011	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 ch	em	ical and restrictions on use						
Recommended use Restrictions on use	:	Veterinary product Not applicable						

#### 2. HAZARDS IDENTIFICATION

### **Emergency Overview**

Appearance Colour Odour Toxic if swallowed.	:	powder dark red No data available
GHS Classification Acute toxicity (Oral)	:	Category 3
GHS label elements Hazard pictograms	:	
Signal word	:	Danger
Hazard statements	:	H301 Toxic if swallowed.
Precautionary statements	:	<b>Prevention:</b> P264 Wash skin thoroughly after handling. P270 Do not eat, drink or smoke when using this product.

according to GB/T 16483 and GB/T 17519



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#### **Response:**

P301 + P310 + P330 IF SWALLOWED: Immediately call a POISON CENTER/ doctor. 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-Amidinophenyl)-2-triazeno]-3-amino-5- ethyl-6-phenylphenanthridinium chloride hydro- chloride	6798-24-9	<= 100

#### 4. FIRST AID MEASURES

General advice	<ul> <li>In the case of accident or if you feel unwell, seek medica vice immediately.</li> <li>When symptoms persist or in all cases of doubt seek me advice.</li> </ul>	
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.	
-	-	

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lf swa	allowed	:	If swallowed, DO so by medical pe Call a physician of	ntion if irritation develops and persists. NOT induce vomiting unless directed to do rsonnel. or poison control centre immediately. roughly with water.		
Most important symptoms and effects, both acute and delayed		:	<ul> <li>Never give anything by mouth to an unconscious per</li> <li>Toxic if swallowed.</li> <li>Contact with dust can cause mechanical irritation or the skin.</li> </ul>			
Protection of first-aiders		:	First Aid respond and use the reco	the eyes can lead to mechanical irritation. ers should pay attention to self-protection, mmended personal protective equipment al for exposure exists (see section 8).		
Notes to physician 5. FIREFIGHTING MEASURES		:		ically and supportively.		
Suita	ble extinguishing media	:	Water spray Alcohol-resistant Carbon dioxide ( Dry chemical			
Unsu media	itable extinguishing a	:	None known.			
Spec fightir	ific hazards during fire- ng	:	concentrations, a potential dust exp	dust; fine dust dispersed in air in sufficient nd in the presence of an ignition source is a plosion hazard. bustion products may be a hazard to health.		
Haza ucts	rdous combustion prod-	:	Carbon oxides Nitrogen oxides ( Chlorine compou			
Spec ods	ific extinguishing meth-	:	cumstances and Use water spray	g measures that are appropriate to local cir- the surrounding environment. to cool unopened containers. ged containers from fire area if it is safe to do		
Speci for fire	ial protective equipment	:	In the event of fir Use personal pro	e, wear self-contained breathing apparatus.		

### 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protec- tive equipment and emer- gency procedures	:	Use personal protective equipment. Follow safe handling advice (see section 7) and personal pro- tective equipment recommendations (see section 8).
Environmental precautions	:	Avoid release to the environment.

according to GB/T 16483 and GB/T 17519

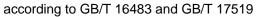


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		Retain and dispo	eakage or spillage if safe to do so. se of contaminated wash water. should be advised if significant spillages ned.
	ethods and materials for intainment and cleaning up	tainer for disposa Avoid dispersal of with compressed Dust deposits sh es, as these may leased into the a Local or national posal of this mat employed in the mine which regu Sections 13 and	of dust in the air (i.e., clearing dust surfaces

#### 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
Local/Total ventilation Advice on safe handling	::	and bonding, or inert atmospheres. Use only with adequate ventilation. 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 as- sessment 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.





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Mater	rials to avoid		ordance with the particular national regulations. with the following product types:
Packa	aging material	: Unsuitable n	naterial: None known.

#### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components	CAS-No.	Value type	Control parame-	Basis
		(Form of	ters / Permissible	
		exposure)	concentration	
8-[3-(m-Amidinophenyl)-2-	6798-24-9	TWA	OEB 4 (>= 1 < 10	Internal
triazeno]-3-amino-5-ethyl-6-			µg/m3)	
phenylphenanthridinium chlo-				
ride hydrochloride				

### Components with workplace control parameters

Engineering measures	:	Containment technologies suitable for controlling compounds are required to control at source and to prevent migration of the compound to uncontrolled areas (e.g., vacuum conveying from a closed system, packout head with inflatable seal from stationary container, ventilated enclosure, etc.). All engineering controls should be implemented by facility design and operated in accordance with GMP principles to protect products, workers, and the environment. Essentially no open handling permitted. Use closed processing systems or containment technologies.
Personal protective equipme	ent	
Respiratory protection Filter type Eye/face protection	::	If adequate local exhaust ventilation is not available or expo- sure assessment demonstrates exposures outside the rec- ommended guidelines, use respiratory 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. Work uniform or laboratory coat. Additional body garments should be used based upon the task being performed (e.g., sleevelets, apron, gauntlets, dis-
		posable suits) to avoid exposed skin surfaces. Use appropriate degowning techniques to remove potentially contaminated clothing.
Hand protection		
Material	:	Chemical-resistant gloves
Remarks	:	Consider double gloving.

according to GB/T 16483 and GB/T 17519



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Hygie	ene measures	eye flushing sys ing place. When using do Wash contamin The effective op engineering cor appropriate deg	hemical is likely during typical use, provide stems and safety showers close to the work- not eat, drink or smoke. lated clothing before re-use. peration of a facility should include review of ntrols, proper personal protective equipment, gowning and decontamination procedures, ne monitoring, medical surveillance and the rative controls.

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	powder
Colour	:	dark red
Odour	:	No data available
Odour Threshold	:	No data available
рН	:	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, han- dling 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)		

according to GB/T 16483 and GB/T 17519



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W	ater solubility	: No da	ata available	
	ion coefficient: n- ol/water	: No da	ata available	
	ignition temperature	: No da	ata available	
Deco	mposition temperature	: No da	ata available	
Visco Vis	sity scosity, kinematic	: Not a	pplicable	
Explo	sive properties	: Not e	xplosive	
Oxidiz	zing properties	: The s	substance or	mixture is not classified as oxidizing.
Moleo	cular weight	: No da	ata available	
	cle characteristics cle size	: No da	ata available	
0. STABI	ILITY AND REACTIVITY	,		
	tivity nical stability bility of hazardous reac-	: Stable : May f dling	e under norr orm explosivor or other mea	a reactivity hazard. nal conditions. ve dust-air mixture during processing, han ans. ong oxidizing agents.
Cond	itions to avoid		flames and dust format	•
	npatible materials rdous decomposition icts	: Oxidiz	zing agents	composition products are known.
1. TOXIC		ION		
Expo	sure routes	: Inhala Skin c Ingest Eye co	ontact ion	
	e toxicity			
	if swallowed.			
<u>Prod</u> Acute	e oral toxicity		toxicity estir	nate: 300 mg/kg

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#### Components:

# 8-[3-(m-Amidinophenyl)-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.

#### 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:

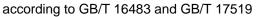
Genotoxicity in vitro	:	Test Type: Bacterial reverse mutation assay (AMES) Result: positive Remarks: Based on data from similar materials Test Type: In vitro mammalian cell gene mutation test Result: negative Remarks: Based on data from similar materials
Genotoxicity in vivo	:	Test Type: Mutagenicity (in vivo mammalian bone-marrow cytogenetic test, chromosomal analysis) Species: Rat Application Route: Intraperitoneal injection Result: equivocal 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.





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#### **Components:**

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

Effects on foetal develop- ment	:	Test Type: Fertility/early embryonic development Species: Rat
inont		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:

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

#### Aspiration toxicity

Not classified based on available information.

#### **12. ECOLOGICAL INFORMATION**

#### Ecotoxicity

#### **Components:**

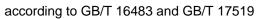
# 8-[3-(m-Amidinophenyl)-2-triazeno]-3-amino-5-ethyl-6-phenylphenanthridinium chloride hydrochloride:

#### Ecotoxicology Assessment

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

#### Persistence and degradability

No data available





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No da	ccumulative potential ata available ility in soil		
No da	ata available		
	r adverse effects ata available		
13. DISPO	DSAL CONSIDERATION	IS	
Wast	osal methods e from residues aminated packaging	Dispose of in ac	of waste into sewer. cordance with local regulations. rs should be taken to an approved waste han-
Cont	aninated packaging	dling site for rec	specified: Dispose of as unused product.
14. TRAN	SPORT INFORMATION		
Inter	national Regulations		
Prop Class Pack	umber er shipping name s ing group	(8-[3-(m-Amidir phenylphenanth : 6.1 : III	ORGANIC, N.O.S. hophenyl)-2-triazeno]-3-amino-5-ethyl-6- hridinium chloride hydrochloride)
Labe Envir	is onmentally hazardous	: 6.1 : no	
UN/II	<b>-DGR</b> D No. er shipping name		anic, n.o.s. hophenyl)-2-triazeno]-3-amino-5-ethyl-6- hridinium chloride hydrochloride)
Labe Pack	ing group Is ing instruction (cargo	: 6.1 : III : Toxic : 677	
	aπ) ing instruction (passen- ircraft)	: 670	
IMDC UN n	<b>G-Code</b> humber er shipping name	(8-[3-(m-Amidin	ORGANIC, N.O.S. ophenyl)-2-triazeno]-3-amino-5-ethyl-6-
Class Pack	s ing group	i 6.1 III	nridinium chloride hydrochloride)

according to GB/T 16483 and GB/T 17519



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

#### 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.

#### **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 cata- logue of hazardous chemicals, but it meets the definition of hazardous chemicals and its principles of de- termination.
Identification of Major Hazard Installations for Hazardou 18218)	ıs C	hemicals (GB : Not listed
Hazardous Chemicals for Priority Management under SAWS	:	Not listed
Regulations on Labour Protection in Workplaces wl	here	• Toxic Substances are Used
Catalogue of Highly Toxic Chemicals	:	Not listed
Regulation of Environmental Management on the Fi and Export of Toxic Chemicals	irst	Import of Chemicals and the Import
China Severely Restricted Toxic Chemicals for Import and Export	:	Not listed



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#### **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.

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

AICS	:	not determined
DSL	:	not determined
IECSC	:	not determined

#### **16. OTHER INFORMATION**

Revision Date	:	2024/09/28
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 Agen- cy, 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 Harmonized 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 Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration 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; 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 - Organization for Economic Co-operation and Develop-



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ment; 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