according to the Globally Harmonized System



# **Embutramide / Mebezonium / Tetracaine For-** mulation

Version Revision Date: SDS Number: Date of last issue: 04.12.2024 7.0 14.04.2025 1714390-00023 Date of first issue: 25.05.2017

### 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Embutramide / Mebezonium / Tetracaine Formulation

Manufacturer or supplier's details

Company : MSD

Address : Briahnager - Off Pune Nagar Road

Wagholi - Pune - India 412 207

Telephone : +1-908-740-4000

Emergency telephone number : +1-908-423-6000

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

## Manufacture, Storage and Import of Hazardous Chemicals Rules 1989

### Classification

Flammable liquid

## **GHS Classification**

Flammable liquids : Category 4

Acute toxicity (Oral) : Category 4

Acute toxicity (Inhalation) : Category 4

Acute toxicity (Dermal) : Category 4

Serious eye damage/eye irri-

tation

Category 2A

Reproductive toxicity : Category 1B

Specific target organ toxicity - :

Category 3

single exposure

## **GHS** label elements

according to the Globally Harmonized System



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Hazard pictograms :





Signal word : Danger

Hazard statements : H227 Combustible liquid.

H302 + H312 + H332 Harmful if swallowed, in contact with skin

or if inhaled.

H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness. H360D May damage the unborn child.

Precautionary statements : Prevention:

P203 Obtain, read and follow all safety instructions before use. P210 Keep away from heat, hot surfaces, sparks, open flames

and other ignition sources. No smoking. P261 Avoid breathing mist or vapours.

P264+P265 Wash hands thoroughly after handling. Do not

touch eyes.

P270 Do not eat, drink or smoke when using this product.

P271 Use only outdoors or with adequate ventilation.

P280 Wear protective gloves/ protective clothing/ eye protec-

tion/ face protection.

Response:

P301 + P317 + P330 IF SWALLOWED: Get medical help.

Rinse mouth.

P302 + P352 + P317 IF ON SKIN: Wash with plenty of water.

Get medical help.

P304 + P340 + P317 IF INHALED: Remove person to fresh air

and keep comfortable for breathing. Get medical help.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and

easy to do. Continue rinsing.

P318 IF exposed or concerned, get medical advice. P337 + P317 If eye irritation persists: Get medical help.

P362 + P364 Take off contaminated clothing and wash it before

reuse.

Storage:

P405 Store locked up.

Disposal:

P501 Dispose of contents/ container to an approved waste

disposal plant.

Other hazards which do not result in classification

Vapours may form explosive mixture with air.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

according to the Globally Harmonized System



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Substance / Mixture : Mixture

### Components

Chemical name	CAS-No.	Concentration (%	
		w/w)	
N,N-Dimethylformamide	68-12-2	>= 50 - < 70	
Embutramide	15687-14-6	>= 20 - < 25	
Mebezonium iodide	7681-78-9	>= 5 - < 10	
tetracaine hydrochloride	136-47-0	>= 0.1 - < 1	

### 4. FIRST AID MEASURES

General advice : In the case of accident or if you feel unwell, seek medical ad-

vice immediately.

When symptoms persist or in all cases of doubt seek medical

advice.

If inhaled : If inhaled, remove to fresh air.

If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

Get medical attention.

In case of skin contact : In case of contact, immediately flush skin with plenty of water.

Remove contaminated clothing and shoes.

Get medical attention. Wash clothing before reuse.

Thoroughly clean shoes before reuse.

In case of eye contact : In case of contact, immediately flush eyes with plenty of water

for at least 15 minutes.

If easy to do, remove contact lens, if worn.

Get medical attention.

If swallowed, DO NOT induce vomiting.

Get medical attention.

Rinse mouth thoroughly with water.

Never give anything by mouth to an unconscious person. Harmful if swallowed, in contact with skin or if inhaled.

Most important symptoms and effects, both acute and

Causes serious eve irritation.

May cause drowsiness or dizziness.

May damage the unborn child.

Protection of first-aiders : First Aid responders should pay attention

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 (CO2)

Dry chemical

Unsuitable extinguishing

media

delayed

High volume water jet

Specific hazards during fire- : Do not use a solid water stream as it may scatter and spread

according to the Globally Harmonized System



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fighting fire.

Flash back possible over considerable distance. Vapours may form explosive mixtures with air.

Exposure to combustion products may be a hazard to health.

Hazardous combustion prod: :

ucts

Carbon oxides

Nitrogen oxides (NOx)

Specific extinguishing meth-

ods

Use extinguishing measures that are appropriate to local cir-

cumstances 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 emer-

gency procedures

Remove all sources of ignition.

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.

Prevent further leakage or spillage if safe to do so.

Prevent spreading over a wide area (e.g. by containment or oil

parriers).

Retain and dispose of contaminated wash water.

Local authorities should be advised if significant spillages

cannot be contained.

Methods and materials for containment and cleaning up

Non-sparking tools should be used.

Soak up with inert absorbent material.

Suppress (knock down) gases/vapours/mists with a water

spray jet.

For large spills, provide dyking or other appropriate containment to keep material from spreading. If dyked material can be pumped, store recovered material in appropriate container. Clean up remaining materials from spill with suitable absor-

bent.

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 deter-

mine which regulations are applicable.

Sections 13 and 15 of this SDS provide information regarding

certain local or national requirements.

## 7. HANDLING AND STORAGE

according to the Globally Harmonized System



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Technical measures : See Engineering measures under EXPOSURE

CONTROLS/PERSONAL PROTECTION section.

Local/Total ventilation : If sufficient ventilation is unavailable, use with local exhaust

ventilation.

Advice on safe handling : Do not get on skin or clothing.

Do not breathe mist or vapours.

Do not swallow. Do not get in eyes.

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.

Keep away from heat, hot surfaces, sparks, open flames and

other ignition sources. No smoking.

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.

Conditions for safe storage : Keep in properly labelled containers.

Store locked up. Keep tightly closed.

Keep in a cool, well-ventilated place.

Store in accordance with the particular national regulations.

Keep away from heat and sources of ignition.

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

Strong oxidizing agents

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Components with workplace control parameters

Components	CAS-No.	Value type	Control parame-	Basis	
		(Form of	ters / Permissible		
		exposure)	concentration		
N,N-Dimethylformamide	68-12-2	TWA	5 ppm	ACGIH	
Embutramide	15687-14-6	TWA	10 μg/m3 (OEB 3)	Internal	
		STEL	30 μg/m3	Internal	
		Wipe limit	100 µg/100 cm <sup>2</sup>	Internal	
Mebezonium iodide	7681-78-9	TWA	1 μg/m3 (OEB 4)	Internal	
		STEL	3 μg/m3 (OEB 4)	Internal	
		Wipe limit	10 μg/100 cm2	Internal	
tetracaine hydrochloride	136-47-0	TWA	5 μg/m3 (OEB 4)	Internal	
	Further inform	Further information: DSEN, Skin			
		Wipe limit	50 μg/100 cm <sup>2</sup>	Internal	

## **Biological occupational exposure limits**

Components	CAS-No.	Control	Biological	Sam-	Permissible	Basis
		parameters	specimen	pling	concentra-	
			-	time	tion	
N,N-Dimethylformamide	68-12-2	Total N-	Urine	End of	30 mg/l	ACGIH

according to the Globally Harmonized System



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Methylfor- mamide		shift (As soon as possible after exposure ceases)		BEI
N-Acetyl-S- (N- methylcar- bamoyl) cysteine	Urine	End of shift at end of work- week	30 mg/l	ACGIH BEI

**Engineering measures** 

The information below is intended for larger pilot/commercial-scale operations and manufacturing. For smaller scale, clinical, or pharmacy settings, site-specific internal risk assessment practices should be conducted to determine appropriate exposure control measures. The health hazard risks of handling this material are dependent on multiple factors, including but not limited to physical form and quantity handled. If applicable, use process enclosures, local exhaust ventilation (e.g., Biosafety Cabinet, Ventilated Balance Enclosures), or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels as low as reasonably achievable.

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. If handled in a laboratory, use a properly designed biosafety cabinet, fume hood, or other containment device if the potential exists for aerosolization. If this potential does not exist, handle over lined trays or benchtops.

### Personal protective equipment

Respiratory protection : If adequate local exhaust ventilation is not available or expo-

sure assessment demonstrates exposures outside the rec-

ommended guidelines, use respiratory protection.

Filter type : Combined particulates, ammonia/amines and organic vapour

type

Hand protection

Material : Chemical-resistant gloves

Remarks : Consider double gloving. Take note that the product is flam-

mable, which may impact the selection of hand protection.

Eye protection : 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.

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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.

Hygiene measures : 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.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid

Colour : No data available

Odour : No data available

Odour Threshold : No data available

pH : 5-6

Melting point/freezing point : No data available

Initial boiling point and boiling :

range

No data available

Flash point : 81 °C

Evaporation rate : No data available

Flammability (solid, gas) : Not applicable

Flammability (liquids) : Not applicable

Upper explosion limit / Upper

flammability limit

No data available

Lower explosion limit / Lower :

flammability limit

No data available

Vapour pressure : No data available

Relative vapour density : No data available

Relative density : No data available

according to the Globally Harmonized System



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Density : No data available

Solubility(ies)

Water solubility : soluble

Partition coefficient: n-

octanol/water

: No data available

Auto-ignition temperature : No data available

Decomposition temperature : No data available

Viscosity

Viscosity, kinematic : No data available

Explosive properties : Not explosive

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

Molecular weight : Not applicable

Particle characteristics

Particle size : Not applicable

## 10. STABILITY AND REACTIVITY

Reactivity : Not classified as a reactivity hazard. Chemical stability : Stable under normal conditions.

Possibility of hazardous reac-

..

tions

Combustible liquid.

Vapours may form explosive mixture with air. Can react with strong oxidizing agents.

Conditions to avoid : Heat, flames and sparks.

Incompatible materials : Oxidizing agents

Hazardous decomposition : No hazardous d

products

No hazardous decomposition products are known.

## 11. TOXICOLOGICAL INFORMATION

Information on likely routes of : Inhalation

exposure Skin contact Ingestion

Ingestion Eye contact

**Acute toxicity** 

Harmful if swallowed, in contact with skin or if inhaled.

**Product:** 

Acute oral toxicity : Acute toxicity estimate: 1,224 mg/kg

Method: Calculation method

according to the Globally Harmonized System



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Acute toxicity estimate: 19.41 mg/l Acute inhalation toxicity

> Exposure time: 4 h Test atmosphere: vapour Method: Calculation method

Acute dermal toxicity Acute toxicity estimate: 1,942 mg/kg

Method: Calculation method

Components:

N,N-Dimethylformamide:

Acute oral toxicity LD50 (Rat): 3,010 mg/kg

Acute inhalation toxicity

Acute toxicity estimate: 11 mg/l

Exposure time: 4 h Test atmosphere: vapour Method: Expert judgement

Remarks: Based on national or regional regulation.

Acute dermal toxicity

Acute toxicity estimate: 1,100 mg/kg

Method: Expert judgement

Remarks: Based on national or regional regulation.

**Embutramide:** 

Acute oral toxicity LD50 (Rat): 1,550 mg/kg

Acute toxicity (other routes of:

administration)

LD50 (Dog): 31 mg/kg

Application Route: Intravenous

TDLo (Dog): 15.5 mg/kg Application Route: Intravenous

Symptoms: narcosis

LD50 (Horse): 20 mg/kg Application Route: Intravenous

LD50 (sheep): 80 mg/kg Application Route: Intravenous

LD50 (Pig): 100 mg/kg

Application Route: Intravenous

Mebezonium iodide:

Acute oral toxicity LD50 (Rat, female): 200 - 300 mg/kg

Acute toxicity (other routes of : LC50 (Dog): 15 mg/kg

administration)

Application Route: Intravenous

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### tetracaine hydrochloride:

Acute toxicity (other routes of : LD50 (Rat): 6 mg/kg

administration)

Application Route: Intravenous

LD50 (Mouse): 6 mg/kg

Application Route: Intravenous

#### Skin corrosion/irritation

Not classified based on available information.

### **Components:**

## N,N-Dimethylformamide:

**Species** : Rabbit

Result : No skin irritation

## Serious eye damage/eye irritation

Causes serious eye irritation.

## **Components:**

## N,N-Dimethylformamide:

Species

Result Irritation to eyes, reversing within 21 days

## Respiratory or skin sensitisation

### Skin sensitisation

Not classified based on available information.

### Respiratory sensitisation

Not classified based on available information.

### **Components:**

### N,N-Dimethylformamide:

Test Type Local lymph node assay (LLNA)

Exposure routes Skin contact Mouse Species Result : negative

## tetracaine hydrochloride:

Exposure routes Dermal Result Sensitiser

## Germ cell mutagenicity

Not classified based on available information.

## **Components:**

## N,N-Dimethylformamide:

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Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)

Result: negative

Test Type: In vitro mammalian cell gene mutation test

Result: negative

Test Type: Chromosome aberration test in vitro

Result: negative

Test Type: DNA damage and repair, unscheduled DNA syn-

thesis in mammalian cells (in vitro)

Result: negative

Genotoxicity in vivo : Test Type: Mammalian erythrocyte micronucleus test (in vivo

cytogenetic assay) Species: Mouse

Application Route: Intraperitoneal injection

Result: negative

Test Type: Rodent dominant lethal test (germ cell) (in vivo)

Species: Rat

Application Route: inhalation (vapour)

Result: negative

Test Type: Rodent dominant lethal test (germ cell) (in vivo)

Species: Mouse

Application Route: Intraperitoneal injection

Result: negative

tetracaine hydrochloride:

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)

Result: negative

Test Type: Chromosomal aberration

Result: equivocal

Genotoxicity in vivo : Test Type: Micronucleus test

Species: Rat Result: negative

## Carcinogenicity

Not classified based on available information.

### **Components:**

### N,N-Dimethylformamide:

Species : Rat

Application Route : inhalation (vapour)

Exposure time : 2 Years

Method : OECD Test Guideline 451

Result : negative

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Species : Mouse

Application Route : inhalation (vapour)

Exposure time : 18 Months

Method : OECD Test Guideline 451

Result : negative

Reproductive toxicity

May damage the unborn child.

**Components:** 

N,N-Dimethylformamide:

Effects on fertility : Test Type: Two-generation study

Species: Mouse

**Application Route: Ingestion** 

Result: negative

Test Type: One-generation reproduction toxicity study

Species: Rat

Application Route: Skin contact

Result: negative

Effects on foetal develop-

ment

Test Type: Embryo-foetal development

Species: Rabbit

Application Route: inhalation (vapour) Method: OECD Test Guideline 414

Result: positive

Test Type: Embryo-foetal development

Species: Rabbit

Application Route: Skin contact Method: OECD Test Guideline 414

Result: positive

Reproductive toxicity - As-

sessment

Clear evidence of adverse effects on development, based on

animal experiments.

tetracaine hydrochloride:

Effects on fertility : Test Type: Fertility

Species: Rat, male and female Application Route: Subcutaneous Fertility: NOAEL: 7.5 mg/kg body weight

Result: No effects on fertility

Effects on foetal develop-

ment

Test Type: Development

Species: Rat

Application Route: Subcutaneous

Developmental Toxicity: NOAEL: 5 mg/kg body weight

Result: No teratogenic effects

Test Type: Development

Species: Rabbit

according to the Globally Harmonized System



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Application Route: Subcutaneous

Developmental Toxicity: NOAEL: 10 mg/kg body weight

Result: No teratogenic effects

## STOT - single exposure

May cause drowsiness or dizziness.

### Components:

**Embutramide:** 

Assessment May cause drowsiness or dizziness.

Mebezonium iodide:

Target Organs : Nervous system, muscle Assessment : May cause damage to organs.

tetracaine hydrochloride:

Target Organs : Central nervous system, Cardio-vascular system

Assessment : Causes damage to organs.

## STOT - repeated exposure

Not classified based on available information.

## Repeated dose toxicity

### **Components:**

## N,N-Dimethylformamide:

Species : Rat : 238 mg/kg : 475 mg/kg NOAEL LOAEL Application Route Ingestion Exposure time : 28 Days

: Rat Species : 0.08 mg/l NOAEL : 0.3 mg/l : inhalation (vapour) LOAEL

Application Route

Exposure time : 2 yr

## **Aspiration toxicity**

Not classified based on available information.

### **Experience with human exposure**

## **Components:**

### **Embutramide:**

Inhalation Target Organs: Central nervous system

Symptoms: Drowsiness, Central nervous system depression,

muscle weakness, Shortness of breath

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Mebezonium iodide:

Inhalation : Symptoms: Weakness, Fatigue, Breathing difficulties

tetracaine hydrochloride:

Inhalation : Target Organs: Cardio-vascular system

Target Organs: Central nervous system

Symptoms: Central nervous system depression, Dizziness,

Headache, hypotension, Vomiting

Skin contact : Symptoms: Redness, pruritis

## 12. ECOLOGICAL INFORMATION

## **Ecotoxicity**

### **Components:**

N,N-Dimethylformamide:

Toxicity to fish : LC50 (Lepomis macrochirus (Bluegill sunfish)): 7,100 mg/l

Exposure time: 96 h

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 13,100 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

Toxicity to algae/aquatic

plants

: ErC50 ( Desmodesmus subspicatus (green algae)): > 1,000

mg/l

Exposure time: 72 h

EC10 (Desmodesmus subspicatus (green algae)): > 1,000

mg/l

Exposure time: 72 h

Toxicity to daphnia and other : aquatic invertebrates (Chron-

ic toxicity)

NOEC: 1,500 mg/l Exposure time: 21 d

Species: Daphnia magna (Water flea)

**Embutramide:** 

Toxicity to fish : LC50: 21 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

Toxicity to microorganisms : EC50: > 1,000 mg/l

Exposure time: 24 h

Test Type: Respiration inhibition of activated sludge

Method: OECD Test Guideline 209

### Persistence and degradability

### **Components:**

N,N-Dimethylformamide:

Biodegradability : Result: Readily biodegradable.

according to the Globally Harmonized System



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Biodegradation: 100 % Exposure time: 21 d

Method: OECD Test Guideline 301E

## **Bioaccumulative potential**

### Components:

### N,N-Dimethylformamide:

Bioaccumulation : Species: Cyprinus carpio (Carp)

Bioconcentration factor (BCF): 0.3 - 1.2 Method: OECD Test Guideline 305C

Partition coefficient: n-

octanol/water

: log Pow: -0.93

Remarks: Calculation

### 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 han-

dling site for recycling or disposal.

Empty containers retain residue and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, or other sources of ignition. They may explode and cause injury and/or death. If not otherwise specified: Dispose of as unused product.

## 14. TRANSPORT INFORMATION

## International Regulations

#### **UNRTDG**

Not regulated as a dangerous good

## IATA-DGR

Not regulated as a dangerous good

## **IMDG-Code**

Not regulated as a dangerous good

## Transport in bulk according to IMO instruments

Not applicable for product as supplied.

## Special precautions for user

Not applicable

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### 15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

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 : 14.04.2025

**Further information** 

Sheet

Sources of key data used to compile the Safety Data

: 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 : dd.mm.yyyy

Full text of other abbreviations

ACGIH : USA. ACGIH Threshold Limit Values (TLV)
ACGIH BEI : ACGIH - Biological Exposure Indices (BEI)

ACGIH / TWA : 8-hour, time-weighted average

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-

according to the Globally Harmonized System



## **Embutramide / Mebezonium / Tetracaine Formulation**

Version Revision Date: SDS Number: Date of last issue: 04.12.2024 7.0 14.04.2025 1714390-00023 Date of first issue: 25.05.2017

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

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.

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