SECTION 1. IDENTIFICATION

Product name : Embutramide / Mebezonium / Tetracaine Formulation

Manufacturer or supplier's details
Company name of supplier : Merck & Co., Inc
Address : 126 E. Lincoln Avenue
Rahway, New Jersey U.S.A.  07065
Telephone : 908-740-4000
Emergency telephone : 1-908-423-6000
E-mail address : EHSDATASTEWARD@merck.com

Recommended use of the chemical and restrictions on use
Recommended use : Veterinary product
Restrictions on use : Not applicable

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)
Flammable liquids : Category 4
Acute toxicity (Oral) : Category 4
Acute toxicity (Inhalation) : Category 4
Acute toxicity (Dermal) : Category 4
Eye irritation : Category 2A
Reproductive toxicity : Category 1B
Specific target organ toxicity - single exposure : Category 2 (Nervous system, muscle)
Specific target organ toxicity - single exposure : Category 3

GHS label elements
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.
SAFETY DATA SHEET

Embutramide / Mebezonium / Tetracaine Formulation

Precautionary Statements:

Prevention:
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P210 Keep away from heat, sparks, open flame and hot surfaces. No smoking.
P260 Do not breathe mist or vapors.
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves, protective clothing, eye protection and face protection.

Response:
P301 + P312 + P330 IF SWALLOWED: Call a doctor if you feel unwell. Rinse mouth.
P302 + P352 + P312 IF ON SKIN: Wash with plenty of soap and water. Call a doctor if you feel unwell.
P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a doctor if you feel unwell.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P311 IF exposed or concerned: Call a doctor.
P308 + P313 IF exposed or concerned: Get medical attention.
P337 + P313 IF eye irritation persists: Get medical attention.
P362 + P364 Take off contaminated clothing and wash it before reuse.

Storage:
P403 + P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.

Disposal:
P501 Dispose of contents and container to an approved waste disposal plant.

Other hazards
Vapors may form explosive mixture with air.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Substance / Mixture</th>
<th>Components</th>
</tr>
</thead>
<tbody>
<tr>
<td>Embutramide</td>
<td>15687-14-6</td>
</tr>
<tr>
<td>N,N-Dimethylformamide</td>
<td>68-12-2</td>
</tr>
<tr>
<td>N,N-Dimethylformamide</td>
<td>68-12-2</td>
</tr>
</tbody>
</table>

Date of last issue: 01/20/2023
Date of first issue: 05/25/2017
SAFETY DATA SHEET

Embutramide / Mebezonium / Tetracaine Formulation

<table>
<thead>
<tr>
<th>Mebezonium iodide</th>
<th>7681-78-9</th>
<th>&gt;= 5 - &lt; 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>tetracaine hydrochloride</td>
<td>136-47-0</td>
<td>&gt;= 0.1 - &lt; 1</td>
</tr>
</tbody>
</table>

Actual concentration is withheld as a trade secret

SECTION 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. 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: If swallowed, DO NOT induce vomiting. Get medical attention. Rinse mouth thoroughly with water. Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed: Harmful if swallowed, in contact with skin or if inhaled. Causes serious eye irritation. May cause drowsiness or dizziness. May damage the unborn child. May cause damage to organs.

Protection of first-aiders: 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.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: Water spray Alcohol-resistant foam Carbon dioxide (CO2) Dry chemical

Unsuitable extinguishing media: High volume water jet

Specific hazards during fire fighting: Do not use a solid water stream as it may scatter and spread fire. Flashback possible over considerable distance. Vapors may form explosive mixtures with air. Exposure to combustion products may be a hazard to health.

Hazardous combustion product: Carbon oxides
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<table>
<thead>
<tr>
<th>Version</th>
<th>Revision Date:</th>
<th>SDS Number:</th>
<th>Date of last issue:</th>
<th>Date of first issue:</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.1</td>
<td>04/04/2023</td>
<td>1714276-00019</td>
<td>01/20/2023</td>
<td>05/25/2017</td>
</tr>
</tbody>
</table>

**Section 6. Accidental Release Measures**

**Personal precautions, protective equipment and emergency procedures**: Remove all sources of ignition. 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. Prevent spreading over a wide area (e.g., by containment or oil barriers). 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/vapors/mists with a water spray jet. For large spills, provide diking or other appropriate containment to keep material from spreading. If diked material can be pumped, store recovered material in appropriate container. Clean up remaining materials from spill with suitable absorbent. 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.

**Section 7. Handling and Storage**

**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 vapors. 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 assessment. 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 labeled 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
  - Self-reactive substances and mixtures
  - Organic peroxides
  - Explosives
  - Gases

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Value type (Form of exposure)</th>
<th>Control parameters / Permissible concentration</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>N,N-Dimethylformamide</td>
<td>68-12-2</td>
<td>TWA</td>
<td>5 ppm</td>
<td>ACGIH</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA</td>
<td>10 ppm / 30 mg/m³</td>
<td>NIOSH REL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA</td>
<td>10 ppm / 30 mg/m³</td>
<td>OSHA Z-1</td>
</tr>
<tr>
<td>Embutramide</td>
<td>15687-14-6</td>
<td>TWA</td>
<td>ting concentration</td>
<td>ACGIH</td>
</tr>
<tr>
<td></td>
<td></td>
<td>STEL</td>
<td>30 µg/m³</td>
<td>Internal</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wipe limit</td>
<td>100 µg/100 cm²</td>
<td>Internal</td>
</tr>
<tr>
<td>Mebezonium iodide</td>
<td>7681-78-9</td>
<td>TWA</td>
<td>1 µg/m³ (OEB 4)</td>
<td>Internal</td>
</tr>
<tr>
<td></td>
<td></td>
<td>STEL</td>
<td>3 µg/m³ (OEB 4)</td>
<td>Internal</td>
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<tr>
<td>tetracaine hydrochloride</td>
<td>136-47-0</td>
<td>TWA</td>
<td>5 µg/m³ (OEB 4)</td>
<td>Internal</td>
</tr>
</tbody>
</table>

Further information: DSEN, Skin

Wipe limit 50 µg/100 cm² Internal

Biological occupational exposure limits

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Control parameters</th>
<th>Biological specimen</th>
<th>Sampling time</th>
<th>Permissible concentration</th>
<th>Basis</th>
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</thead>
<tbody>
<tr>
<td>N,N-Dimethylformamide</td>
<td>68-12-2</td>
<td>Total N-Methylform</td>
<td>Urine</td>
<td>End of shift (As)</td>
<td>30 mg/l</td>
<td>ACGIH BEI</td>
</tr>
</tbody>
</table>
SAFETY DATA SHEET

Embutramide / Mebezonium / Tetracaine Formulation

<table>
<thead>
<tr>
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<th>SDS Number:</th>
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</tr>
</tbody>
</table>

End of exposure (as soon as exposure ceases)

N-Acetyl-S-(N-methylcarbamoyl) cysteine

<table>
<thead>
<tr>
<th>Engineering measures</th>
<th>Personal protective equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>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.</td>
<td>Respiratory protection: General and local exhaust ventilation is recommended to maintain vapor exposures below recommended limits. Where concentrations are above recommended limits or are unknown, appropriate respiratory protection should be worn. Follow OSHA respirator regulations (29 CFR 1910.134) and use NIOSH/MSHA approved respirators. Protection provided by air purifying respirators against exposure to any hazardous chemical is limited. Use a positive pressure air supplied respirator if there is any potential for uncontrolled release, exposure levels are unknown, or any other circumstance where air purifying respirators may not provide adequate protection.</td>
</tr>
</tbody>
</table>

Hand protection

Material: Chemical-resistant gloves

Remarks: Consider double gloving. Take note that the product is flammable, 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. 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
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.

### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>liquid</td>
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<tr>
<td>Color</td>
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</tr>
<tr>
<td>Odor</td>
<td>No data available</td>
</tr>
<tr>
<td>Odor Threshold</td>
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<tr>
<td>pH</td>
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<td>Melting point/freezing point</td>
<td>No data available</td>
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<td>Initial boiling point and boiling range</td>
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<tr>
<td>Flash point</td>
<td>178 °F / 81 °C</td>
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<td>Evaporation rate</td>
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<tr>
<td>Flammability (solid, gas)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Flammability (liquids)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Upper explosion limit / Upper flammability limit</td>
<td>No data available</td>
</tr>
<tr>
<td>Lower explosion limit / Lower flammability limit</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative vapor density</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative density</td>
<td>No data available</td>
</tr>
<tr>
<td>Density</td>
<td>No data available</td>
</tr>
<tr>
<td>Solubility(ies)</td>
<td></td>
</tr>
<tr>
<td>Water solubility</td>
<td>soluble</td>
</tr>
<tr>
<td>Partition coefficient: n-</td>
<td>No data available</td>
</tr>
</tbody>
</table>
octanol/water
Autoignition 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 size : Not applicable

SECTION 10. STABILITY AND REACTIVITY
Reactivity : Not classified as a reactivity hazard.
Chemical stability : Stable under normal conditions.
Possibility of hazardous reactions
Vapors 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 products : No hazardous decomposition products are known.

SECTION 11. TOXICOLOGICAL INFORMATION
Information on likely routes of exposure
Inhalation
Skin contact
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
Acute inhalation toxicity : Acute toxicity estimate: 19.41 mg/l Exposure time: 4 h Test atmosphere: vapor 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: vapor
  - Method: Expert judgment
  - Remarks: Based on national or regional regulation.
- Acute dermal toxicity:
  - Acute toxicity estimate: 1,100 mg/kg
  - Method: Expert judgment
  - 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 administration):
  - LC50 (Dog): 15 mg/kg
  - Application Route: Intravenous

Tetracaine hydrochloride:
- Acute toxicity (other routes of administration):
  - LD50 (Rat): 6 mg/kg
  - 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: Rabbit
Result: Irritation to eyes, reversing within 21 days

Respiratory or skin sensitization
Skin sensitization
Not classified based on available information.

Respiratory sensitization
Not classified based on available information.

Components:

N,N-Dimethylformamide:
Test Type: Local lymph node assay (LLNA)
Routes of exposure: Skin contact
Species: Mouse
Result: negative

tetracaine hydrochloride:
Routes of exposure: Dermal
Result: Sensitizer

Germ cell mutagenicity
Not classified based on available information.

Components:

N,N-Dimethylformamide:
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 synthesis in mammalian cells (in vitro)
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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 (vapor)
  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 (vapor)
Exposure time:
: 2 Years
Method:
: OECD Test Guideline 451
Result:
: negative

Species:
: Mouse
Application Route:
: inhalation (vapor)
Exposure time:
: 18 Months
Method:
: OECD Test Guideline 451
Result:
: negative

**IARC**
Group 2A: Probably carcinogenic to humans
N,N-Dimethylformamide

**OSHA**
No component of this product present at levels greater than or equal to 0.1% is on OSHA’s list of regulated carcinogens.
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 fetal development: Test Type: Embryo-fetal development
Species: Rabbit
Application Route: inhalation (vapor)
Method: OECD Test Guideline 414
Result: positive

Test Type: Embryo-fetal development
Species: Rabbit
Application Route: Skin contact
Method: OECD Test Guideline 414
Result: positive

Reproductive toxicity - Assessment: 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 fetal development: 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
Application Route: Subcutaneous
Developmental Toxicity: NOAEL: 10 mg/kg body weight
Result: No teratogenic effects.
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Version 5.1  Revision Date: 04/04/2023  SDS Number: 1714276-00019  Date of last issue: 01/20/2023  Date of first issue: 05/25/2017

STOT-single exposure
May cause drowsiness or dizziness.
May cause damage to organs (Nervous system, muscle).

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

Species : Rat
NOAEL : 0.08 mg/l
LOAEL : 0.3 mg/l
Application Route : inhalation (vapor)
Exposure time : 2 y

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

Mebezonium iodide:
Inhalation : Symptoms: Weakness, Fatigue, Breathing difficulties

tetracaine hydrochloride:
Inhalation: Target Organs: Cardio-vascular system, Central nervous system. Symptoms: Central nervous system depression, Dizziness, Headache, hypotension, Vomiting.

Skin contact: Symptoms: Redness, pruritis.

SECTION 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 (Chronic toxicity): NOEC (Daphnia magna (Water flea)): 1,500 mg/l Exposure time: 21 d

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:
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

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods
Waste from residues
Dispose of in accordance with local regulations. Do not dispose of waste into sewer.

Contaminated packaging
Empty containers should be taken to an approved waste handling 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.

SECTION 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 Annex II of MARPOL 73/78 and the IBC Code
Not applicable for product as supplied.

Domestic regulation

49 CFR
UN/ID/NA number: UN 3082
Proper shipping name: Environmentally hazardous substance, liquid, n.o.s. (N,N-Dimethylformamide)
SAFETY DATA SHEET

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Class: 9
Packing group: III
Labels: CLASS 9
ERG Code: 171
Marine pollutant: no
Remarks: THE ABOVE INFORMATION ONLY APPLIES TO PACKAGE SIZES WHERE THE HAZARDOUS SUBSTANCE MEETS THE REPORTABLE QUANTITY.

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.

SECTION 15. REGULATORY INFORMATION

CERCLA Reportable Quantity

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Component RQ (lbs)</th>
<th>Calculated product RQ (lbs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>N,N-Dimethylformamide</td>
<td>68-12-2</td>
<td>100</td>
<td>176</td>
</tr>
</tbody>
</table>

SARA 304 Extremely Hazardous Substances Reportable Quantity
This material does not contain any components with a section 304 EHS RQ.

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity
This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards
- Flammable (gases, aerosols, liquids, or solids)
- Acute toxicity (any route of exposure)
- Reproductive toxicity
- Specific target organ toxicity (single or repeated exposure)
- Serious eye damage or eye irritation

SARA 313
- The following components are subject to reporting levels established by SARA Title III, Section 313:
  - N,N-Dimethylformamide 68-12-2 >= 50 - < 70 %

US State Regulations

Pennsylvania Right To Know
- N,N-Dimethylformamide 68-12-2
- Embutramide 15687-14-6
- Water 7732-18-5
- Mebezonium iodide 7681-78-9

California Prop. 65
WARNING: This product can expose you to chemicals including N,N-Dimethylformamide, which is/are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.
SAFETY DATA SHEET

Embutramide / Mebezonium / Tetracaine Formulation

Version: 5.1
Revision Date: 04/04/2023
SDS Number: 1714276-00019
Date of last issue: 01/20/2023
Date of first issue: 05/25/2017

California List of Hazardous Substances
N,N-Dimethylformamide 68-12-2

California Permissible Exposure Limits for Chemical Contaminants
N,N-Dimethylformamide 68-12-2

The ingredients of this product are reported in the following inventories:
AICS: not determined
DSL: not determined
IECSC: not determined

SECTION 16. OTHER INFORMATION

Further information

NFPA 704:
Flammability
Health
Instability
Special hazard

HMIS® IV:
HEALTH
FLAMMABILITY
PHYSICAL HAZARD

HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "*" represents a chronic hazard, while the "/'" represents the absence of a chronic hazard.

Full text of other abbreviations
ACGIH : USA. ACGIH Threshold Limit Values (TLV)
ACGIH BEI : ACGIH - Biological Exposure Indices (BEI)
NIOSH REL : USA. NIOSH Recommended Exposure Limits
OSHA Z-1 : USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
ACGIH / TWA : 8-hour, time-weighted average
NIOSH REL / TWA : Time-weighted average concentration for up to a 10-hour workday during a 40-hour workweek
OSHA Z-1 / TWA : 8-hour time weighted average

AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the
SAFETY DATA SHEET

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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.

US / Z8