

SECTION-1: Identification of the substance / mixture and the company / undertaking

Catalogue Number	CS-O-49272
Product Name	Tiletamine
CAS No.	14176-49-9
Category	API
Synonyms	Not available
Brand	Clearsynth Labs Ltd.
Identified uses	Laboratory Chemicals
Uses advised against	Not available
Company	Clearsynth Labs Ltd. Mumbai, India
Emergency Phone #	+91-22-245045900
REACH No.	Not available

SECTION 2: Hazards identification

Disclaimer: This is sample MSDS. Please email sales@clearsynth.com for more details.

2.1 Classification of the substance or mixture-Regulation (EC) No 1272/2008:

Acute toxicity (Category 4)

2.2 Label Elements

Signal Word: Warning



Hazard Statement(s)

Code	Statement
H302	Harmful if swallowed.
H332	Harmful if inhaled.

Precautionary Statement(s)

Code	Statement
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264	Wash hands thoroughly after handling.
P270	Not available
P271	Use only outdoors or in a well-ventilated area.
P301+P317	Not available
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P317	Not available
P330	Not available
P501	Dispose of contents/container in accordance with local/regional/national/international regulation

SECTION 3: Composition / information on ingredients

3.1 Substance

Component : Tiletamine

CAS Number : 14176-49-9

Molecular Formula : C₁₂H₁₇NOS

Molecular Weight : 223.33

Parent Chemical : Tiletamine

Synonyms : Not available

Concentration : Not available

SECTION 4: First aid measures

SECTION 4: First-aid measures

4.1 Description of first aid measures

General advice: Seek medical attention if symptoms occur or persist. Show this Safety Data Sheet to the physician in attendance.

Inhalation: Move person to fresh air. If breathing is difficult, seek medical attention.

Skin contact: Wash with plenty of soap and water. Remove contaminated clothing and wash before reuse. Seek medical attention if irritation develops.

Eye contact: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Seek medical attention if irritation persists.

Ingestion: Rinse mouth. Do NOT induce vomiting unless directed by medical personnel. Seek medical attention.

4.2 Most important symptoms and effects, both acute and delayed

Not available.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically. Not available.

SECTION 5: Firefighting measures

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media: Water spray, alcohol-resistant foam, dry chemical, carbon dioxide (CO₂).

Unsuitable extinguishing media: Not available.

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products: Not available.

Specific hazards: Not available.

5.3 Advice for firefighters

Wear self-contained breathing apparatus (SCBA) and full protective gear. Use water spray to cool unopened containers. Avoid inhalation of combustion products.

SECTION 6: Accidental release measures

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid breathing dust. Avoid contact with skin and eyes. Use appropriate personal protective equipment (see Section 8). Ensure adequate ventilation.

6.2 Environmental precautions

Avoid release to the environment. Prevent entry into drains, surface waters, or soil.

6.3 Methods and material for containment and cleaning up

Contain spill. Sweep up or collect using methods that minimize dust generation and place in a suitable, labeled container for disposal. Clean spill area with water and detergent as appropriate.

6.4 Reference to other sections

See Section 8 for personal protective equipment and Section 13 for disposal considerations.

SECTION-7: Handling and storage

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Handle in accordance with good industrial hygiene and safety practice. Avoid formation of dust. Avoid breathing dust. Avoid contact with skin, eyes, and clothing. Use with adequate ventilation.

7.2 Conditions for safe storage, including any incompatibilities

Store in a tightly closed container in a cool, dry, well-ventilated place. Protect from moisture. Keep away from incompatible materials.

Incompatible materials: Not available.

7.3 Specific end use(s)

API. Not available.

SECTION 8: Exposure controls / personal protection

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits: Not available.

Biological limit values: Not available.

8.2 Exposure controls

Engineering controls: Provide adequate general and/or local exhaust ventilation to control airborne levels.

Personal protective equipment (PPE):

- Eye/face protection: Safety glasses with side shields or chemical splash goggles.
- Skin protection: Protective gloves. Protective clothing as appropriate.
- Respiratory protection: If ventilation is inadequate or dust is generated, use a suitable particulate respirator in accordance with applicable regulations.
- Hygiene measures: Wash hands thoroughly after handling. Do not eat, drink, or smoke when using this product. Remove contaminated clothing and wash before reuse.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Test	Result
Appearance	No data available
IR spectrum	No data available
pH	No data available
Solubility	No data available

Property	Value
a) Physical State	No data available
b) Color	No data available
c) Odor	No data available
d) pH	No data available
e) Vapour Pressure	No data available
f) Viscosity	No data available
g) Initial Boiling Point and boiling range	No data available
h) Melting Point / Freezing Point	No data available
i) Auto Ignition Temperature	No data available
j) Flash Point	No data available

Property	Value
k) Explosion Limit, Lower	No data available
l) Explosion Limit, Upper	No data available
m) Decomposition Temperature	No data available
n) Loss on Drying	No data available
o) Relative Density	No data available
p) Solubility (in DMSO)	No data available
q) Oxidizing Properties	No data available

SECTION 10: Stability and reactivity

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10.1 Reactivity

Not available.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

Not available.

10.4 Conditions to avoid

Heat, moisture, and dust generation. Not available.

10.5 Incompatible materials

Not available.

10.6 Hazardous decomposition products

Not available.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

- Acute toxicity: /CASE REPORTS/ A 45-year-old male veterinarian was found dead in bed. Police investigation showed no evidence of trauma or other suspicious circumstances. Autopsy was unremarkable except for cardiomegaly and hepatosplenomegaly. Toxicological analysis revealed the presence of Telazol and ketamine. Telazol is a veterinary anesthetic agent that is composed of equal parts of tiletamine and zolazepam. Tiletamine is a disassociative anesthetic similar to ketamine and phencyclidine, and zolazepam is a diazepam derivative tranquilizer used to minimize the muscle hypertonicity and seizures associated with tiletamine. Quantitation of tiletamine and zolazepam was performed using gas chromatography-mass spectrometry in the selected ion monitoring mode following a solid-phase extraction. Postmortem blood, urine, and liver concentrations of tiletamine were 295 ng/mL, 682 ng/mL, and 196 ng/g, respectively, whereas postmortem concentrations of zolazepam for the same tissues were 1.71 ug/mL, 1.33 ug/mL, and 15.5 ug/g, respectively. Blood and urine ketamine levels were 37 ng/mL and 381 ng/mL, respectively. The cause of death was ruled an acute mixed drug intoxication of tiletamine, zolazepam, and ketamine with the manner of death ruled as unclassified. /LABORATORY ANIMALS: Acute Exposure/ To determine

cardiorespiratory effects of a tiletamine/zolazepam-ketamine-detomidine (TZKD) combination in horses...8 healthy adult horses .../were/ given xylazine (0.44 mg/kg of body weight, IV) 10 to 15 minutes prior to induction of recumbency by administration of the TZKD combination. Cardiorespiratory, acid-base, and electrolyte values were measured at 5-minute intervals for \geq 30 minutes. ...All horses became recumbent within 1 minute after IV administration of TZKD. Mean \pm SD duration of recumbency was 40 \pm 8 minutes. All horses regained standing position after \leq 2 attempts.... Xylazine induced decreases in respiratory rate, heart rate, cardiac output, maximum rate of increase of right ventricular pressure, and rate pressure product. The PaCO₂, right atrial pressure, and peripheral vascular resistance increased, whereas blood temperature, PO₂, pHa, HCO₃⁻, PCV, total solids, Na, and K values remained unchanged. Subsequent administration of TZKD caused right atrial pressure and PaCO₂ to increase and PaO₂ to decrease, compared with values obtained after xylazine administration. Remaining cardiorespiratory, acid-base, hematologic, and electrolyte values did not differ from those obtained after xylazine administration.

- Skin corrosion/irritation: No data available.
- Serious eye damage/eye irritation: No data available.
- Respiratory or skin sensitization: No data available.
- Germ cell mutagenicity: No data available.
- Carcinogenicity: No data available.
- Reproductive toxicity: No data available.
- STOT-single exposure: No data available.
- STOT-repeated exposure: No data available.
- Aspiration hazard: No data available.

Likely routes of exposure

- No data available.

Symptoms related to the physical, chemical and toxicological characteristics

- /SIGNS AND SYMPTOMS/ Potential organ systems affected are: Central Nervous System. Adverse effects could include: dizziness, light headedness, headache, nausea, and blurred vision. /Telazol/

SECTION 12: Ecological information

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12.1 Toxicity

Not available.

12.2 Persistence and degradability

Not available.

12.3 Bioaccumulative potential

Not available.

12.4 Mobility in soil

Not available.

12.5 Results of PBT and vPvB assessment

Not available.

12.6 Endocrine disrupting properties

Not available.

12.7 Other adverse effects

Not available.

SECTION 13: Disposal considerations

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Dispose of contents/container in accordance with local/regional/national/international regulations. Do not discharge to drains.

Waste classification: Not available.

Contaminated packaging: Dispose of as unused product or according to local regulations.

SECTION 14: Transport information

SECTION 14: Transport information

14.1 UN number

Not available.

14.2 UN proper shipping name

Not available.

14.3 Transport hazard class(es)

Not available.

14.4 Packing group

Not available.

14.5 Environmental hazards

Not available.

14.6 Special precautions for user

Not available.

14.7 Maritime transport in bulk according to IMO instruments

Not available.

SECTION 15: Regulatory information

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

Not available.

SECTION 16: Other information

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Product name: Tiletamine

Catalog No.: CS-O-49272

CAS No.: 14176-49-9

Supplier: Clearsynth Labs Ltd., Mumbai, India

Emergency phone: +91-22-245045900

Revision date: Not available.

Disclaimer: The information provided in this Safety Data Sheet is based on data believed to be accurate; however, no warranty is expressed or implied regarding the accuracy or completeness of this information. The user is responsible for determining suitability for a particular purpose and for complying with applicable laws and regulations.

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