

Safety Data Sheet

according to Regulation (EC) No. 1907/2006



GENAXXON

b i o s c i e n c e

Product number : M3148

Product name :

Tetracyclin hydrochloride

1. Identification of the substance/preparation and of the company

Product details

Trade Name: Tetracyclin hydrochloride, research grade

Product Name: Tetracyclin hydrochloride

Catalogue-No.: M3148

Manufacturer /Supplier:

Genaxxon bioscience GmbH, Söflinger Str. 100, 89077 Ulm/Germany.
Tel.: +49 (0)731 3608 123

Further information available from:

Genaxxon bioscience GmbH, Söflinger Str. 100, 89077 Ulm/Germany.
Tel.: +49 (0)731 3608 123

Information in case of emergency:

Genaxxon bioscience GmbH, Söflinger Str. 100, 89077 Ulm/Germany.
Tel.: +49 (0)731 3608 123

MSDS-No: tetracyc_hcl_1/e

NOTE: If this product is a kit or supplied with more than one material, please refer to the MSDS for each component for hazard information.

Product Use:

This products are for laboratory research use only and are not intended for human or animal diagnostics, therapeutics or other clinical uses.

2. Composition/information on ingredients

Chemical characterisation

Product Name	Hazardous Symbol	CAS #	EC no	Annex I / Index Number
Tetracyclin hydrochloride	Xn	64-75-5	200-593-8	----
Formula	C ₂₂ H ₂₄ N ₂ O ₈ x HCl			
Molecular Weight	480.90g/mol			
Synonyms				

3. Hazardous identification

Hazard description:



Xn - Harmful

Information concerning particular hazards for human and environment:

R22: Harmful if swallowed.

R40: Limited evidence of a carcinogenic effect.

R63: Possible risk of harm to the unborn child.

GHS label elements



Warning

H302 – Harmful if swallowed

Prevention:

Wash thoroughly after handling.

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

Zuständig : GF

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Response:

IF SWALLOWED: Call a poison centre or physician if you feel unwell.
Rinse mouth. Give plenty of water to drink.

Disposal:

Dispose of contents/container in accordance with local/regional/national/international regulations.

4. First-aid measures

After inhalation: If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing becomes difficult, call a physician.

After contact with skin: In case of contact, immediately wash skin with soap and copious amounts of water.

After contact with eyes: Rinse immediately with plenty of water and seek medical advice. Assure adequate flushing by separating eyelids with fingers.

After swallowing: If swallowed, wash out mouth with plenty of water provided person is conscious. Call for doctor immediately.

5. Fire-fighting measures

Suitable extinguishing agents: Water Spray. Carbon Dioxide. Dry chemical powder, or appropriate foam.

Special risks: Specific Hazard(s): Not inflammable. Fumes heavier than air. Emits toxic fumes under fire conditions.

Protective equipment (For fire fighters): Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

6. Accidental release measures

Personal precaution procedures to be followed in case of leak or spill:

Evacuate area.

Person related safety precautions:

Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves.

Measures for environmental protection:

Do not allow product to reach sewage system or any water course.

Measures for cleaning/collecting:

Sweep up, place in bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

Additional information: None.

7. Handling and storage

Handling

Information for safe handling: Provide appropriate exhaust ventilation at places where dust is formed. Do not breathe dust.

Handle container with care. Open bottle carefully. Avoid inhalation. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure. Do not rise dust while opening container

Information about fire – and explosion protection: No special measures required.

Storage:

Requirements to be met by storerooms and receptacles: Keep bottles well closed.

Information about storage in one common storage facility: Keep bottles well closed.

Further information about storage conditions: Keep tightly closed. Store at -20°C.

Special requirements: No special measures required.

8. Exposure controls / personal protection

Additional information about design of technical facilities: No further data. See item 7.

Engineering controls: Safety shower and eye bath.

Personal protective equipment: Respirator, chemical safety goggles, heavy rubber gloves.

General protective and hygienic measures:

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The usual precautionary measures are to be adhered to when handling chemicals.

Keep away from food, drink and animal food.

Remove spoiled clothing immediately. Wash contaminated clothing before reuse.

Wash thoroughly after handling.

Avoid contact with eyes and skin.

Respiratory protection: Use respirator.

Protection of hands: Protective compatible chemical-resistant gloves.

Materials of gloves: The selection of suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

Eye protection: Tightly sealed goggles.

9. Physical and chemical properties

General Information

Form: powder
Colour: yellow
Odour: odourless

Change in conditions

Melting point/Melting range: 215° to 220°C
Boiling point/Boiling range: Undetermined

Flash point: Not applicable

Self-ignition: Product is not self-igniting

Danger of explosion: Product does not present an explosion hazard

Density at 20°C: 0.72g/cm³

Solubility in / Miscibility with Water: soluble

pH value at 20°C: 2.0-3.0 (1%, H₂O)

Water Content: not applicable

10. Stability and reactivity

Thermal composition / conditions to be avoided:

No decomposition if used according to specifications.

Stability

Stability: Stable

Materials to avoid: Strong oxidizing agents.

Dangerous decomposition products: Carbon monoxide, Carbon dioxide, Nitrogen oxides, Hydrochloric acid

Hazardous Polymerisation: Will not occur.

11. Toxicological information

RTECS NUMBER: QI8750000

Acute Toxicity

LDLO – Multiple – Woman: 310mg/kg

Remarks: Liver: Jaundice, other or unclassified.

Gastrointestinal: Nausea or vomiting. Nutritional and Gross

Metabolic: Changes in metabolic acidosis.

LD50 – Oral – Rat: 807mg/kg

LD50 – Intraperitoneal – Rat: 310mg/kg

LD50 – Intravenous – Rat: 129mg/kg

LD50 – Oral – Mouse: 678mg/kg

LD50 – Intraperitoneal – Mouse: 120mg/kg

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LD50 – Subcutaneous – Mouse: 400mg/kg

LD50 – Intravenous – Mouse: 157mg/kg

LD50 – Oral - Guinea pig: 1875mg/kg

Target organ information:

Liver. Teeth. Bones.

Chronic Exposure – Carcinogen

Result: This product is or contains a component that is probably not carcinogenic based on its IARC, ACGIH, NTP, or EPA classification.

Chronic Exposure – Mutagen

Mouse – Intraperitoneal: 110 mg/kg / 24h - Micronucleus test

S. typhimurium – ZNEG - Histidine reversion (Ames)

Chronic Exposure – Teratogen

Result: Possible risk of congenital malformation in the fetus.

Species: Rat

Dose: 100µg/m³ / 24h

Route of Application: Inhalation

Exposure Time: (1-20D PREG)

Result: Effects on Embryo or Fetus: Fetal death.

Species: Rat

Dose: 1 mg/m³ / 24h

Route of Application: Inhalation

Exposure Time: (1-20D PREG)

Result: Effects on Embryo or Fetus: Extra embryonic structures (e.g., placenta, umbilical cord).

Species: Rat

Dose: 3gm/kg

Route of Application: Unreported

Exposure Time: (9-14D PREG)

Result: Effects on Embryo or Fetus: Fetal death.

Species: Mouse

Dose: 700mg/kg

Route of Application: Oral

Exposure Time: (14D POST)

Result: Specific Developmental Abnormalities: Skin and skin appendages.

Species: Mammal

Dose: 55mg/kg

Route of Application: Intravenous

Exposure Time: (8-18D PREG)

Result: Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus).

Chronic Exposure – Reproductive Hazard

Species: Woman

Dose: 200mg/kg

Route of Application: Unreported

Exposure Time: (34-35W PREG)

Result: Effects on Newborn: Delayed effects.

Species: Woman

Dose: 80mg/kg

Route of Application: Unreported

Exposure Time: (1-39W PREG)

Result: Effects on Newborn: Other postnatal measures or effects.

Species: Rat

Dose: 10gm/kg

Route of Application: Oral

Exposure Time: (8-21D PREG/7D POST)

Result: Effects on Newborn: Behavioural.

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Species: Rat
Dose: 863mg/kg
Route of Application: Oral
Exposure Time: (4D POST)
Result: Effects on Newborn: Behavioural. Effects on Newborn: Physical.

Species: Rat
Dose: 413mg/kg
Route of Application: Oral
Exposure Time: (3D POST)
Result: Effects on Newborn: Behavioral. Effects on Newborn: Physical.

Species: Rat
Dose: 700mg/kg
Route of Application: Intramuscular
Exposure Time: (8-14D PREG)
Result: Effects on Fertility: Post-implantation mortality (e.g., dead and/or resorbed implants per total number of implants).

Irritation and corrosion: No data available.

Sensitisation: Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals.
Skin: Can cause skin photosensitization.

Potential Health Effects:

Route of Exposure.

Inhalation: May be harmful if inhaled. Material may be irritating to mucous membranes and upper respiratory tract.
Skin Absorption: Possible resorption by skin. May be harmful if absorbed through the skin. May cause irritation of skin.
Eye contact: May cause irritation of eyes.
Ingestion: Harmful if swallowed.

Signs and symptoms of exposure: Can cause phototoxic reactions, gastrointestinal disturbances, turn teeth yellow and reduce mineralization.

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

12. Ecological Information

General notes:

No quantitative data available.

Water hazard class 3 (German Regulation) (Self assessment): strongly hazardous to water.
Do not allow product to reach ground water, water course or sewage system even not in small quantities or diluted.

13. Disposal considerations

Product:

Recommendation: Must not be disposed together with household garbage. Contact a licensed professional waste disposal service to dispose of this material. Observe all federal, state, and local environmental regulations.

Uncleaned packaging:

Recommendation: Disposal must be made according to official regulations.
Recommended cleaning agents: Water, if necessary together with cleansing agents.

14. Transport information

Land transport ADR/RID (cross border)

ADR/RID class: Non-hazardous for road transport.

Maritime transport IMDG:

IMDG Class: Non-hazardous for sea transport.

Marine pollutant: No

Air transport ICAO-TI and IATA-DGR:

ICAO/IATA Class: Non-hazardous for air transport.

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15. Regulatory information

Labelling according to EU guidelines:

The product has been classified and marked in accordance with EU-Directives / Ordinance on Hazardous Materials.

Code letter and hazard designation of product:



Xn - Harmful

Risk phrases:

R22: Harmful if swallowed.

R40: Limited evidence of a carcinogenic effect.

R63: Possible risk of harm to the unborn child.

S-Phrases:

36/37/39- 45

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. After contact with skin, wash immediately of soap and water. Wear suitable protective clothing and gloves. In case of accident or if you feel unwell, seek medical advice immediately (show label where possible).

GHS label elements



Warning

H302 – Harmful if swallowed

National Regulations: Germany

Waterhazard class: Water hazard class 3 (Self-assessment): strongly hazardous to water.

16. Other information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Genaxxon bioscience GmbH, shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale.

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