SAFETY DATA SHEET

Revision Date 11/07/2017 Print Date 06/17/2018

1. P	. PRODUCT AND COMPANY IDENTIFICATION		
1.1	Product identifiers Product name :	Chlortetracycline Hydrochloride	
	Product Number :	CT1010	
	CAS-No. :	64-72-2	
1.2 Relevant identified uses of the substance or mixture and uses advised against		substance or mixture and uses advised against	
	Identified uses :	Laboratory chemicals, Synthesis of substances	
1.3	Details of the supplier of the safety data sheet		
	Company :	Gojira Fine Chemicals 5386 Majestic Pkwy, Ste. 7 Bedford heights, OH 44146	
	Telephone : Email :	440-252-5397 docsupport@gojirafc.com	
	Fax :	888-211-5523	
1.4	Emergency telephone number		
	Emergency Phone # :	800-255-3924 (ChemTel, Contract# MIS 7318160)	
2. H	AZARDS IDENTIFICATION		
2.1 Classification of the substance or mixture		e or mixture	
	GHS Classification in accordance with 29 CFR 1910 (OSHA HCS) Skin irritation (Category 2), H315 Eye irritation (Category 2A), H319 Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335		
	For the full text of the H-Stateme	nts mentioned in this Section, see Section 16.	
2.2	GHS Label elements, including precautionary statements		
	Pictogram		
	Signal word	Warning	
	Hazard statement(s) H315 H319 H335	Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation.	
	Precautionary statement(s) P261 P264 P271 P280 P302 + P352 P304 + P340 + P312 P305 + P351 + P338	Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. Wash skin thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves/ eye protection/ face protection. IF ON SKIN: Wash with plenty of soap and water. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell. IF IN EYES: Rinse cautiously with water for several minutes. Remove	

	contact lenses, if present and easy to do. Continue rinsing.
P332 + P313	If skin irritation occurs: Get medical advice/ attention.
P337 + P313	If eye irritation persists: Get medical advice/ attention.
P362	Take off contaminated clothing and wash before reuse.
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P501	Dispose of contents/ container to an approved waste disposal plant

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Synonyms	: 7-Chlorotetracycline
Formula	: C ₂₂ H ₂₃ CIN ₂ O ₈ · HCl
Molecular weight	: 515.34 g/mol
CAS-No.	: 64-72-2
EC-No.	: 200-591-7

Hazardous components

Component	Classification	Concentration	
2-Naphthacenecarboxamide, 7-chloro-4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-			
3,6,10,12,12a -pentahydroxy-6-methyl-1,11-dioxo-, monohydrochloride, [4S-(4α,4aα,5aα,6β,12aα)]-			
	Skin Irrit. 2; Eye Irrit. 2A;	90 - 100 %	
	STOT SE 3; H315, H319,		
	H335		

For the full text of the H-Statements mentioned in this Section, see Section 16.

4. FIRST AID MEASURES

4.1 Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed No data available

5. FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture No data available

5.3 Advice for firefighters Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information No data available

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal see section 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.Normal measures for preventive fire protection. For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place.

Recommended storage temperature 2.0 - 8.0 °C Storage class (TRGS 510): 13: Non Combustible Solids

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

Contains no substances with occupational exposure limit values. Hazardous components without workplace control parameters

8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact Material: Nitrile rubber Minimum layer thickness: 0.11 mm Break through time: 480 min Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Splash contact Material: Nitrile rubber Minimum layer thickness: 0.11 mm Break through time: 480 min Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Body Protection

Impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Do not let product enter drains.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

a)	Appearance	Form: solid
b)	Odour	No data available
c)	Odour Threshold	No data available
d)	рН	No data available
e)	Melting point/freezing point	Melting point/range: 210 - 215 °C (410 - 419 °F) - dec.
f)	Initial boiling point and boiling range	No data available
g)	Flash point	No data available
h)	Evaporation rate	No data available
i)	Flammability (solid, gas)	No data available
j)	Upper/lower flammability or explosive limits	No data available
k)	Vapour pressure	No data available
I)	Vapour density	No data available
m)	Relative density	No data available
n)	Water solubility	No data available
o)	Partition coefficient: n- octanol/water	No data available
p)	Auto-ignition temperature	No data available
q)	Decomposition temperature	No data available
r)	Viscosity	No data available

- s) Explosive properties No data available
 - Oxidizing properties No data available

9.2 Other safety information No data available

10. STABILITY AND REACTIVITY

10.1 Reactivity

t)

No data available

10.2 Chemical stability Stable under recommended storage conditions.

- **10.3 Possibility of hazardous reactions** No data available
- **10.4 Conditions to avoid** No data available
- **10.5** Incompatible materials Strong oxidizing agents

10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Nitrogen oxides (NOx), Hydrogen chloride gas Other decomposition products - No data available

In the event of fire: see section 5

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

LD50 Oral - Mouse - 2,314 mg/kg

Dermal: No data available

No data available

Skin corrosion/irritation No data available

Serious eye damage/eye irritation No data available

Respiratory or skin sensitisation No data available

Germ cell mutagenicity

No data available

Carcinogenicity

- IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
- NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
- OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity

Laboratory experiments have shown teratogenic effects.

Reproductive toxicity - Mouse - Subcutaneous

Effects on Newborn: Viability index (e.g., # alive at day 4 per # born alive). Effects on Newborn: Growth statistics (e.g., reduced weight gain).

No data available

Specific target organ toxicity - single exposure

Inhalation - May cause respiratory irritation.

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard No data available

Additional Information

RTECS: QI7800000

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

Stomach - Irregularities - Based on Human Evidence Stomach - Irregularities - Based on Human Evidence

12. ECOLOGICAL INFORMATION

12.1 Toxicity

No data available

- **12.2 Persistence and degradability** No data available
- **12.3 Bioaccumulative potential** No data available
- 12.4 Mobility in soil No data available

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Other adverse effects

No data available

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT (US) Not dangerous goods

IMDG Not dangerous goods

ΙΑΤΑ

Not dangerous goods

15. REGULATORY INFORMATION

SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

Acute Health Hazard, Chronic Health Hazard

Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components	CAS-No.	Revision Date
2-Naphthacenecarboxamide, 7-chloro-4-(dimethylamino)- 1,4,4a,5,5a,6,11,12a-octahydro-3,6,10,12,12a -pentahydroxy- 6-methyl-1,11-dioxo-, monohydrochloride, [4S- (4α,4aα,5aα,6β,12aα)]-	64-72-2	
2-Naphthacenecarboxamide, 7-chloro-4-(dimethylamino)- 1,4,4a,5,5a,6,11,12a-octahydro-3,6,10,12,12a -pentahydroxy- 6-methyl-1,11-dioxo-, monohydrochloride, [4S- (4α,4aα,5aα,6β,12aα)]-	CAS-No. 64-72-2	Revision Date
2-Naphthacenecarboxamide, 7-chloro-4-(dimethylamino)- 1,4,4a,5,5a,6,11,12a-octahydro-3,6,10,12,12a -pentahydroxy- 6-methyl-1,11-dioxo-, monohydrochloride, [4S- (4α,4aα,5aα,6β,12aα)]-	CAS-No. 64-72-2	Revision Date
New Jersey Right To Know Components		
2-Naphthacenecarboxamide, 7-chloro-4-(dimethylamino)- 1,4,4a,5,5a,6,11,12a-octahydro-3,6,10,12,12a -pentahydroxy- 6-methyl-1,11-dioxo-, monohydrochloride, [4S- (4α,4aα,5aα,6β,12aα)]-	CAS-No. 64-72-2	Revision Date
	CAS-No.	Revision Date
2-Naphthacenecarboxamide, 7-chloro-4-(dimethylamino)- 1,4,4a,5,5a,6,11,12a-octahydro-3,6,10,12,12a -pentahydroxy- 6-methyl-1,11-dioxo-, monohydrochloride, [4S- (4α,4aα,5aα,6β,12aα)]-	64-72-2	
California Prop. 65 Components		
 WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm. 2-Naphthacenecarboxamide, 7-chloro-4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,6,10,12,12a -pentahydroxy-6-methyl-1,11-dioxo-, monohydrochloride, [4S-(4α,4aα,5aα,6β,12aα)]- 	CAS-No. 64-72-2	Revision Date 2007-09-28

16. OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3.

Eye irritation
Causes skin irritation.
Causes serious eye irritation.
May cause respiratory irritation.

Skin Irrit. Skin irritation STOT SE Specific target organ toxicity - single exposure

> 2 0 0

HMIS Rating

Health hazard:		
Chronic Health Hazard:		
Flammability:		
Physical Hazard		
IFPA Rating		

Ν

Health hazard:	2
Fire Hazard:	0
Reactivity Hazard:	0

Further information

The above information is believed to be accurate and represents the best information currently available to Gojira Fine Chemicals. However, we make no warranty or merchantability or any other warranty, express or Implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Gojira Fine Chemicals be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Gojira Fine Chemicals has been advised of the possibility of such damages.