zoetis

Revision date: 10-Dec-2013

Version: 2.0

Page 1 of 7

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND THE COMPANY/UNDERTAKING

Product Identifier

Material Name: CTC Concentrate

Trade Name:

CTC concentrate

Chemical Family:

Tetracycline derivative

Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Intended Use:

Veterinary pharmaceutical active

Details of the Supplier of the Safety Data Sheet

Zoetis Inc.

100 Campus Drive, P.O. Box 651 Florham Park, New Jersey 07932 (USA)

Rocky Mountain Poison Control Center Phone: 1-866-531-8896

Product Support/Technical Services Phone: 1-800-366-5288

Zoetis Belgium S.A. Mercuriusstraat 20 1930 Zaventem

Belgium

Emergency telephone number:

CHEMTREC (24 hours): 1-800-424-9300

Contact E-Mail:

VMIPSrecords@zoetis.com

Emergency telephone number:

International CHEMTREC (24 hours): +1-703-527-3887

2. HAZARDS IDENTIFICATION

Appearance:

Solid

Classification of the Substance or Mixture

GHS - Classification

Reproductive Toxicity: Category 1A

US OSHA Specific - Classification

Physical Hazard: Combustible Dust

EU Classification:

EU Indication of danger: Toxic

EU Symbol:

T

R60 - May impair fertility.

R61 - May cause harm to the unborn child.

Label Elements

Signal Word:

Danger

Hazard Statements:

H360 - May damage fertility or the unborn child May form combustible dust concentrations in air

700201

Material Name: CTC Concentrate Revision date: 10-Dec-2013

Page 2 of 7 Version: 2.0

Precautionary Statements:

P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking

P201 - Obtain special instructions before use

P202 - Do not handle until all safety precautions have been read and understood P280 - Wear protective gloves/protective clothing/eye protection/face protection

P308 + P313 - IF exposed or concerned: Get medical attention/advice

P405 - Store locked up

P501 - Dispose of contents/container in accordance with all local and national regulations



Other Hazards

Short Term:

Long Term:

Australian Hazard Classification

(NOHSC):

Note:

Harmful if swallowed May cause eye and skin irritation May cause respiratory tract irritation May affect blood, liver, and kidneys.

Hazardous Substance. Non-Dangerous Goods.

This document has been prepared in accordance with standards for workplace safety, which requires the inclusion of all known hazards of the product or its ingredients regardless of the potential risk. The precautionary statements and warning included may not apply in all cases.

Your needs may vary depending upon the potential for exposure in your workplace.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazar	dous
-------	------

Ingredient	CAS Number	EU EINECS/ELINCS List	EU Classification	GHS Classification	%
Chlortetracycline	57-62-5	200-341-7	Repr. Cat.1;R61	Repro. Tox. Cat. 1A (H360)	100

Additional Information:

Ingredient(s) indicated as hazardous have been assessed under standards for workplace

safety.

For the full text of the R phrases and CLP/GHS abbreviations mentioned in this Section, see Section 16

4. FIRST AID MEASURES

Description of First Aid Measures

Eye Contact:

Flush with water while holding eyelids open for at least 15 minutes. Seek medical attention

immediately.

Skin Contact:

Remove contaminated clothing. Flush area with large amounts of water. Use soap. Seek

medical attention.

Ingestion:

Never give anything by mouth to an unconscious person. Wash out mouth with water. Do not induce vomiting unless directed by medical personnel. Seek medical attention immediately.

Inhalation:

Remove to fresh air and keep patient at rest. Seek medical attention immediately.

Material Name: CTC Concentrate Revision date: 10-Dec-2013

Page 3 of 7 Version: 2.0

Most Important Symptoms and Effects, Both Acute and Delayed

Symptoms and Effects of Exposure:

For information on potential signs and symptoms of exposure, See Section 2 - Hazards

Identification and/or Section 11 - Toxicological Information.

Medical Conditions
Aggravated by Exposure:

Breathing dust may worsen asthma symptoms.

Indication of the Immediate Medical Attention and Special Treatment Needed

Notes to Physician:

None

5. FIRE-FIGHTING MEASURES

Extinguishing Media:

Extinguish fires with CO2, extinguishing powder, foam, or water.

Special Hazards Arising from the Substance or Mixture

Hazardous Combustion Products:

Formation of toxic gases is possible during heating or fire.

Fire / Explosion Hazards:

Fine particles (such as dust and mists) may fuel fires/explosions. Dust can form an explosive

mixture in air.

Advice for Fire-Fighters

Wear approved positive pressure, self-contained breathing apparatus and full protective turn out gear.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Personnel involved in clean-up should wear appropriate personal protective equipment (see Section 8). Minimize exposure. Avoid dust formation.

Environmental Precautions

Place waste in an appropriately labeled, sealed container for disposal. Care should be taken to avoid environmental release.

Methods and Material for Containment and Cleaning Up

Measures for Cleaning /

Collecting:

Eliminate possible ignition sources (e.g., heat, sparks, flame, impact, friction, electricity), and follow appropriate grounding procedures. Contain the source of spill if it is safe to do so. Collect spilled material by a method that controls dust generation. A damp cloth or a filtered

vacuum should be used to clean spills of dry solids. Clean spill area thoroughly.

Additional Consideration for

Large Spills:

Eliminate possible ignition sources (e.g., heat, sparks, flame, impact, friction, electricity), and follow appropriate grounding procedures. Non-essential personnel should be evacuated from affected area. Report emergency situations immediately. Clean up operations should only be

undertaken by trained personnel.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Keep away from heat, sparks, and flame. Minimize dust generation and accumulation. Avoid breathing dust. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Prevent environmental releases. Use appropriate personal protective equipment.

Conditions for Safe Storage, Including any Incompatibilities

Storage Conditions:

Store at 2 - 8 °C in properly labeled containers. Keep container tightly closed when not in use.

Incompatible Materials:

Strong acids and strong bases

Specific end use(s):

No data available

Material Name: CTC Concentrate Revision date: 10-Dec-2013

Page 4 of 7 Version: 2.0

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control Parameters

Refer to available public information for specific member state Occupational Exposure Limits.

Chlortetracycline

Zoetis OEL TWA 8-hr Latvia OEL - TWA

0.5 mg/m³ 0.1 mg/m³

Exposure Controls

Engineering Controls:

Engineering controls should be used as the primary means to control exposures. General

room ventilation is adequate unless the process generates dust, mist or fumes.

Personal Protective

Equipment:

Refer to applicable national standards and regulations in the selection and use of personal

protective equipment (PPE).

Hands: Eyes: Wear impervious gloves if skin contact is possible.

Safety glasses or goggles

Skin:

Use protective clothing (uniforms, lab coats, disposable coveralls, etc.) in both production and

laboratory areas.

Respiratory protection:

If the applicable Occupational Exposure Limit (OEL) is exceeded, wear an appropriate respirator with a protection factor sufficient to control exposures to below the OEL.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:

Solid

Color:

Brown

Odor:

Slight

Odor Threshold:

No data available.

Molecular Formula:

C22H23CIN2O8

Molecular Weight:

Mixture

Solvent Solubility: Water Solubility:

No data available Slightly Soluble:

pH:

No data available. No data available

Melting/Freezing Point (°C): Boiling Point (°C):

No data available.

Partition Coefficient: (Method, pH, Endpoint, Value)
No data available

Decomposition Temperature (°C):

No data available.

Evaporation Rate (Gram/s): Vapor Pressure (kPa):

No data available No data available No data available No data available

Vapor Density (g/ml): Relative Density:

No data available

Flammablity:

Viscosity:

Autoignition Temperature (Solid) (°C): Flammability (Solids):

No data available No data available No data available

Flash Point (Liquid) (°C):

No data available No data available

Upper Explosive Limits (Liquid) (% by Vol.): Lower Explosive Limits (Liquid) (% by Vol.):

10. STABILITY AND REACTIVITY

Reactivity:

No data available

Chemical Stability:

Stable under normal conditions of use.

700201

Material Name: CTC Concentrate Revision date: 10-Dec-2013

Page 5 of 7 Version: 2.0

10. STABILITY AND REACTIVITY

Possibility of Hazardous Reactions

Oxidizing Properties:

No data available

Conditions to Avoid:

Fine particles (such as dust and mists) may fuel fires/explosions. Keep away from heat, spark,

flames and all other sources of ignition.

Incompatible Materials:

Hazardous Decomposition

Strong acids and strong bases

Carbon oxides Nitrogen oxides (nox) Hydrogen chloride gas oxides of sulfur

Products:

11. TOXICOLOGICAL INFORMATION

Information on Toxicological Effects

General Information:

The following information is available for the individual ingredients.

Chlortetracycline

Rat Oral LD50 3000 mg/kg

Irritation / Sensitization: (Study Type, Species, Severity)

Chlortetracycline

Oral 100 mg/kg/day 6 Week(s) Mouse No effects at maximum dose NOAEL Mouse 14 Week(s) Oral 200 mg/kg/day **NOAEL** No effects at maximum dose 14 Week(s) Rat Oral 200 mg/kg/day NOAEL No effects at maximum dose

Chlortetracycline

2 Generation Reproductive Toxicity Rat Oral 500 mg/kg/day **NOAEL** Negative

Chlortetracycline

In Vitro Bacterial Mutagenicity (Ames) Salmonella , E. coli Negative

In Vitro HGPRT Forward Gene Mutation Assay Chinese Hamster Ovary (CHO) cells Negative

In Vitro Unscheduled DNA Synthesis Rat Hepatocyte Negative

In Vivo Chromosome Aberration Negative

Chiortetracycline

2 Year(s) Rat Oral 700 mg/kg/day NOAEL Not carcinogenic

Carcinogen Status:

None of the components of this formulation are listed as a carcinogen by IARC, NTP or OSHA.

Material Name: CTC Concentrate

Revision date: 10-Dec-2013

Page 6 of 7 Version: 2.0

12. ECOLOGICAL INFORMATION

Environmental Overview:

Environmental properties have not been investigated. Releases to the environment should be

avoided.

Toxicity:

No data available

Persistence and Degradability:

No data available

Bio-accumulative Potential:

No data available

Mobility in Soil:

No data available

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods:

Dispose of waste in accordance with all applicable laws and regulations. Member State specific and Community specific provisions must be considered. Considering the relevant known environmental and human health hazards of the material, review and implement appropriate technical and procedural waste water and waste disposal measures to prevent occupational exposure and environmental release. It is recommended that waste minimization be practiced. The best available technology should be utilized to prevent environmental releases. This may include destructive techniques for waste and wastewater.

14. TRANSPORT INFORMATION

The following refers to all modes of transportation unless specified below.

Not regulated for transport under USDOT, EUADR, IATA, or IMDG regulations.

15. REGULATORY INFORMATION

Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture

Canada - WHMIS: Classifications
WHMIS hazard class:

Class D, Division 2, Subdivision A



Chlortetracycline

Material Name: CTC Concentrate Revision date: 10-Dec-2013

Page 7 of 7 Version: 2.0

15. REGULATORY INFORMATION

CERCLA/SARA 313 Emission reporting

California Proposition 65

Inventory - United States TSCA - Sect. 8(b)

Australia (AICS):

Standard for the Uniform Scheduling

for Drugs and Poisons: EU EINECS/ELINCS List Not Listed Not Listed

Present

Present

Schedule 4

Schedule 5

200-341-7

16. OTHER INFORMATION

Text of R phrases and GHS Classification abbreviations mentioned in Section 3

H360 - May damage fertility or the unborn child

R61 - May cause harm to the unborn child.

Data Sources:

The data contained in this MSDS may have been gathered from confidential internal sources,

raw material suppliers, or from the published literature.

Reasons for Revision:

New data sheet. Updated Section 2 - Hazard Identification. Updated Section 3 - Composition / Information on Ingredients. Updated Section 4 - First Aid Measures. Updated Section 7 - Handling and Storage. Updated Section 8 - Exposure Controls / Personal Protection. Updated

Section 11 - Toxicology Information. Updated Section 15 - Regulatory Information.

Prepared by:

Toxicology and Hazard Communication
Zoetis Global Risk Management

Zoetis Inc. believes that the information contained in this Material Safety Data Sheet is accurate, and while it is provided in good faith, it is without warranty of any kind, expressed or implied. If data for a hazard are not included in this document there is no known information at this time.

End of Safety Data Sheet