CHLORAMPHENICOL
SAFETY DATA SHEET
Date of Issue: 2020-03-12
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SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Product Identifier	:	Chloramphenicol
Product Number	:	C028, C147, C229, C258
CAS Number	:	[56-75-7]

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified Uses	:	For research use only - restricted to professional users.
Uses Advised Against	:	Not for human or animal use

1.3 Details of the supplier of the safety data sheet

Company	:	TOKU-E Company 715 W Orchard Dr. Suite 3 Bellingham, WA 98225
Phone Number	:	(360) 734-1789
E-mail Address	:	info@toku-e.com
Safety Data Sheet Issued by	:	TOKU-E Company (USA)

1.4 Emergency telephone number

Emergency Phone Number (Internat.)	:	+1 (352) 353-3500 (INFOTRAC, 24-Hour Number)
Emergency Phone Number (US Only)	:	1 (800) 535-5053 (INFOTRAC, 24-Hour Number)

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

GHS classification in accordance with 29 CFR 1910 (OSHA HCS)

Germ Cell Mutagenicity (Category 1), H340
Carcinogenicity (Category 1A), H350
Reproductive Toxicity (Category 2), H361

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

2.2 GHS label elements, including precautionary statements

Pictogram(s):

Signal Word: Danger

Hazard Statement(s)

H340	May cause genetic defects
H350	May cause cancer
H361	Suspected of damaging fertility or the unborn child

Precautionary Statement(s)

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 advice/attention.
P405	Store locked up.
P501	Dispose of contents/container in accordance with governmental regulation

2.3 Hazards otherwise not classified (HNOC) or not covered by GHS

None

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Synonym(s) : 2,2-Dichloro-N-[(1R,-2R)-2-hydroxy-1-(hydroxymethyl)-2-(4-nitrophenyl)ethyl]acetamide

Formula : $C_{11}H_{12}Cl_2N_2O_5$

Molecular weight : 323.13 g/mol

Hazardous components

Component	Classification	Concentration
Chloramphenicol		
CAS Number [56-75-7] EC Number [200-287-4]	Muta 1, H340 Carc. 1A, H350 Repr. 2, H361	≤ 100%

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

SECTION 4: FIRST-AID MEASURES

4.1 Description of first-aid measures

General information

Consult a doctor/physician if exposed - additional medical care may be required. Show this safety data sheet to the medical provider.

If inhaled

If inhaled, move to fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash skin thoroughly with soap and water. Remove any contaminated clothing. Consult a physician.

In case of eye contact

Flush eye with water. After initial flush, remove any contact lenses and continue flushing for at least 15 minutes.

If swallowed

Rinse mouth with water. Immediately call a doctor, physician, or poison control center. Never give anything by mouth to an unconscious person.

4.2 Most important symptoms/effects, 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

SECTION 5: FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media

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

Unsuitable extinguishing media

No data available

5.2 Special hazards arising from the substance or mixture

Hazardous Combustion Products

Carbon and nitrogen oxides, hydrogen chloride gas

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

5.4 Further information
No data available

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures
Consult the safety measures listed in Section 7 and 8. Use personal protective equipment. Avoid breathing dust, vapors, mist or gas. Avoid direct contact with spilled substances. Ensure adequate ventilation. Avoid dust formation.
In the event of a spill, evacuate personnel to safe areas.
For personal protection see Section 8.

6.2 Environmental precautions
Prevent further leakage or spillage if safe to do so. 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
Refer to section 8 for exposure control and personal protection. Refer to section 13 for disposal information.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling
Avoid exposure: obtain special instructions before use. Avoid contact with skin and eyes.
Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.

For precautionary statements see section 2.2

7.2 Conditions for safe storage, including any incompatibilities
Keep container tightly closed in a dry and well-ventilated place. Protect from humidity.
Recommended storage temperature: 2-8 °C
Protect from light.

Incompatibilities:
Acids, acid chlorides, acid anhydrides, oxidizing agents

7.3 Specific end use(s)
Refer to section 1.2

SECTION 8: EXPOSURE CONTROLS/ PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters:

Component	CAS No.	Value	Control Parameters	Basis
Chloramphenicol	[56-75-7]	TWA	0.500000 mg/m^3	USA. Workplace Environmental Exposure Levels (WEEL)

8.2 Exposure controls

Appropriate engineering controls:
Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling this product.

Personal Protective Equipment (PPE):

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate, use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal techniques 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.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the selected EN 374 derived from it.

Eye/Face protection

Wear eye protection. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

Body protection

Wear protective clothing. The type of protective equipment must be selected according to the concentration of the dangerous substance at the specific work place.

Environmental exposure controls

Do not let product enter drains. Discharge into the environment must be avoided.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	:	Light yellow crystalline powder
Odor	:	No data available
Odor Threshold	:	No data available
pH	:	No data available
Melting Point/Freezing Point	:	149 °C
Initial Boiling Point and Range	:	No data available
Flash Point	:	No data available
Evaporation rate	:	No data available
Flammability (solid, gas)	:	No data available
Upper/Lower Flammability or Explosive Limits	:	No data available
Vapor Pressure	:	No data available
Vapor Density	:	No data available
Relative Density	:	No data available
Solubility(ies)	:	Soluble in ethanol. Practically insoluble in water.
Partition Coefficient: n-octanol/water	:	No data available
Auto-Ignition Temperature	:	No data available
Decomposition Temperature	:	No data available
Viscosity	:	No data available
Explosive Properties	:	No data available
Oxidizing Properties	:	No data available

9.2 Other safety information

No data available

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

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
Exposure to light

10.5 Incompatible materials
Acids, acid chlorides, acid anhydrides, oxidizing agents

10.6 Hazardous decomposition products
No data available
See Section 5 for hazardous combustion products.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute Toxicity

Oral LD_{50}	:	Rat: 2500 mg/kg, Mouse: 1500 mg/kg
Intraperitoneal LD_{50}	:	Rat: 1811 mg/kg, Mouse: 1100 mg/kg

Skin Corrosion/Irritation
No data available

Serious Eye Damage/ Eye Irritation
No data available

Respiratory or Skin Sensitization
Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals.

Germ Cell Mutagenicity
Laboratory experiments have shown mutagenic effects.
Rat Liver: 2 mmol/L - DNA damage

Carcinogenicity
This is or contains a component that has been reported to be carcinogenic based on its IARC, OSHA, ACGIH, NTP, or EPA classification. Probable human carcinogen.
IARC: 2A - Group 2A: Probably carcinogenic to humans (Chloramphenicol)
NTP: RAHC - Reasonably anticipated to be a human carcinogen (Chloramphenicol)
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
No data available

Specific Target Organ Toxicity: Single Exposure
No data available

Specific Target Organ Toxicity: Repeated Exposure
No data available

Aspiration Hazard
No data available

Additional Information
RTECS # AB6825000
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Toxicity to daphnia and and other aquatic invertebrates	Daphnia magna (water flea)	:	EC50: 345 mg/L - 48 h

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

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

No data available

In the absence of complete ecological information, treat product as environmentally hazardous.
Use proper storage, handling, and disposal to prevent unintentional release into the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product

Offer surplus and non-recyclable products 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. Avoid disposal of material in drains or sewers.

Contaminated Packaging

Dispose of as unused product.

SECTION 14: TRANSPORT INFORMATION

DOT (US)

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

SECTION 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

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 313.

SARA 311/312 Hazards

Chronic Health Hazard

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

Pennsylvania Right to Know
Chloramphenicol: CAS Number [56-75-7]
Revision Date: 1989-12-01

New Jersey Right to Know
No components are subject to the New Jersey Right to Know Act.

California Prop. 65 Components
WARNING! This product contains a chemical known to the State of California to cause cancer.

SECTION 16: OTHER INFORMATION

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

H340	May cause genetic defects
H350	May cause cancer
H361	Suspected of damaging fertility or the unborn child

Further information
Revision Date: 2020-03-12

The above information is based upon the present state of our knowledge and is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information is believed to be correct but does not purport to be all inclusive. It does not represent any guarantees of the properties of the product. TOKU-E Company shall not be held liable for damage or injury resulting from contact, handling, or storage of the above product.