

MATERIAL SAFETY DATA SHEET

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Version 1.2

Section 1 - Product and Company Information

Product Name	CINOXACIN
Product Number	C8645
Brand	SIGMA
Company	Sigma-Aldrich Canada, Ltd
Street Address	2149 Winston Park Drive
City, State, Zip, Country	Oakville ON L6H 6J8 CA
Technical Phone:	9058299500
Emergency Phone:	800-424-9300
Fax:	9058299292

Section 2 - Composition/Information on Ingredient

Substance Name	CAS #	SARA 313
CINOXACIN	28657-80-9	No
Formula	C12H10N2O5	
Synonyms	Cinobac * Cinoxacin * Compound 64716 * 1-Ethyl-1,4-dihydro-4-oxo(1,3)dioxolo(4,5-g)cinnoline-3-carboxylic acid * 1-Ethyl-6,7-methylenedioxy-4(1H)-oxocinnoline-3-carboxylic acid	
RTECS Number:	JI4640000	

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Caution: Avoid contact and inhalation.

HMIS RATING

HEALTH: 1
FLAMMABILITY: 0
REACTIVITY: 0

NFPA RATING

HEALTH: 1
FLAMMABILITY: 0
REACTIVITY: 0

For additional information on toxicity, please refer to Section 11.

Section 4 - First Aid Measures

ORAL EXPOSURE

If swallowed, wash out mouth with water provided person is conscious. Call a physician.

INHALATION EXPOSURE

If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.

DERMAL EXPOSURE

In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Call a physician.

EYE EXPOSURE

In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

Section 5 - Fire Fighting Measures

FLASH POINT

N/A

AUTOIGNITION TEMP

N/A

FLAMMABILITY

N/A

EXTINGUISHING MEDIA

Suitable: Carbon dioxide, dry chemical powder, or appropriate foam.

FIREFIGHTING

Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Section 6 - Accidental Release Measures

PROCEDURE(S) OF PERSONAL PRECAUTION(S)

Wear protective equipment.

METHODS FOR CLEANING UP

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

Section 7 - Handling and Storage

Section 8 - Exposure Controls / PPE

ENGINEERING CONTROLS

Mechanical exhaust required.

PERSONAL PROTECTIVE EQUIPMENT

Other: Wear appropriate government approved respirator, chemical-resistant gloves, safety goggles, other protective clothing.

Section 9 - Physical/Chemical Properties

Appearance	Physical State: Solid	
Property	Value	At Temperature or Pressure
Molecular Weight	262.2 AMU	
pH	N/A	
BP/BP Range	N/A	
MP/MP Range	N/A	

Freezing Point	N/A
Vapor Pressure	N/A
Vapor Density	N/A
Saturated Vapor Conc.	N/A
SG/Density	N/A
Bulk Density	N/A
Odor Threshold	N/A
Volatile%	N/A
VOC Content	N/A
Water Content	N/A
Solvent Content	N/A
Evaporation Rate	N/A
Viscosity	N/A
Surface Tension	N/A
Partition Coefficient	N/A
Decomposition Temp.	N/A
Flash Point	N/A
Explosion Limits	N/A
Flammability	N/A
Autoignition Temp	N/A
Refractive Index	N/A
Optical Rotation	N/A
Miscellaneous Data	N/A
Solubility	N/A

N/A = not available

Section 10 - Stability and Reactivity

STABILITY

Stable: Stable.

HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide, Nitrogen oxides.

HAZARDOUS POLYMERIZATION

Hazardous Polymerization: Will not occur

Section 11 - Toxicological Information

ROUTE OF EXPOSURE

Multiple Routes: May be harmful by inhalation, ingestion, or skin absorption. May cause irritation.

SIGNS AND SYMPTOMS OF EXPOSURE

Exposure can cause: Nausea, dizziness, and headache.
Gastrointestinal disturbances. Other symptoms may include rash and itching.

TOXICITY DATA

Oral

Rat

3610 mg/kg

LD50

Remarks: Behavioral:Muscle weakness. Behavioral:Somnolence (general depressed activity). Lungs, Thorax, or Respiration:Respiratory depression.

Subcutaneous

Rat

1380 MG/KG

LD50

Remarks: Behavioral:Somnolence (general depressed activity).
Behavioral:Muscle weakness. Lungs, Thorax, or
Respiration:Respiratory depression.

Intravenous

Rat

860 MG/KG

LD50

Remarks: Sense Organs and Special Senses (Nose, Eye, Ear, and
Taste):Eye:Mydriasis (pupilliary dilation).
Behavioral:Somnolence (general depressed activity). Lungs,
Thorax, or Respiration:Respiratory depression.

Oral

Mouse

2330 mg/kg

LD50

Remarks: Sense Organs and Special Senses (Nose, Eye, Ear, and
Taste):Eye:Mydriasis (pupilliary dilation). Behavioral:Muscle
weakness. Lungs, Thorax, or Respiration:Respiratory depression.

Subcutaneous

Mouse

900 MG/KG

LD50

Remarks: Sense Organs and Special Senses (Nose, Eye, Ear, and
Taste):Eye:Mydriasis (pupilliary dilation).
Behavioral:Somnolence (general depressed activity).
Behavioral:Muscle weakness.

Intravenous

Mouse

850 MG/KG

LD50

Remarks: Behavioral:Somnolence (general depressed activity).
Behavioral:Muscle weakness. Lungs, Thorax, or
Respiration:Respiratory depression.

CHRONIC EXPOSURE - TERATOGEN

Species: Rat

Dose: 550 MG/KG

Route of Application: Oral

Exposure Time: (7-17D PREG)

Result: Specific Developmental Abnormalities: Musculoskeletal
system.

CHRONIC EXPOSURE - REPRODUCTIVE HAZARD

Species: Rat

Dose: 3150 MG/KG

Route of Application: Oral

Exposure Time: (63D MALE)

Result: Paternal Effects: Testes, epididymis, sperm duct.

Species: Rat

Dose: 4 GM/KG

Route of Application: Oral

Exposure Time: (9W MALE/2W PRE-7D PREG)

Result: Effects on Fertility: Other measures of fertility

Effects on Fertility: Pre-implantation mortality (e.g., reduction in number of implants per female; total number of implants per corpora lutea).

Species: Rat

Dose: 1100 MG/KG

Route of Application: Oral

Exposure Time: (7-17D PREG)

Result: Maternal Effects: Other effects. Effects on Embryo or Fetus: Extra embryonic structures (e.g., placenta, umbilical cord). Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus).

Section 12 - Ecological Information

No data available.

Section 13 - Disposal Considerations

APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION

Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

Section 14 - Transport Information

DOT

Proper Shipping Name: None

Non-Hazardous for Transport: This substance is considered to be non-hazardous for transport.

IATA

Non-Hazardous for Air Transport: Non-hazardous for air transport.

Section 15 - Regulatory Information

US CLASSIFICATION AND LABEL TEXT

US Statements: Caution: Avoid contact and inhalation.

UNITED STATES REGULATORY INFORMATION

SARA LISTED: No

CANADA REGULATORY INFORMATION

WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.

DSL: No

NDSL: No

Section 16 - Other Information

DISCLAIMER

For R&D use only. Not for drug, household or other uses.

WARRANTY

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

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