

MATERIAL SAFETY DATA SHEET

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Version 1.2

Section 1 - Product and Company Information

Product Name CHLORDIAZEPOXIDE
HYDROCHLORIDE—DEA &
Product Number C2517
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
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Section 2 - Composition/Information on Ingredient

Substance Name	CAS #	SARA 313 No
CHLORDIAZEPOXIDE HYDROCHLORIDE	438-41-5	

Formula C16H14ClN3O.ClH
Synonyms Ansiacal * A-Poxide * Benzodiapin *
3H-1,4-Benzodiazepin-2-amine,
7-chloro-N-methyl-5-phenyl-, 4-oxide,
monohydrochloride * Calmoden * Cebrum *
Chlordiazachel * Chlordiazepoxide hydrochloride *
Chlordiazepoxide monohydrochloride * Contol *
Diazachel (Obs.) * Droloxol * Equibral * J-Liberty
* Labican * Lentotran * Librium hydrochloride *
Methaminodiazepoxide hydrochloride * Murcil *
Novosed * Psichial * Reliberan * Ro 5-0690 *
Seren vita * SK-Lygen * Sophiamin * Tensinyl *
Timosin * Trakipeal * Viansin

RTECS Number: DE9450000

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Harmful.

Harmful if swallowed. Possible risk of impaired fertility.

Possible risk of harm to the unborn child. Possible risk of irreversible effects.

Calif. Prop. 65 reproductive hazard. Possible mutagen. Target organ(s): Brain.

HMIS RATING

HEALTH: 1*

FLAMMABILITY: 0

REACTIVITY: 0

NFPA RATING

HEALTH: 1

FLAMMABILITY: 0

REACTIVITY: 0

*additional chronic hazards present.

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 not breathing give artificial respiration. If breathing is difficult, give oxygen.

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: Water spray. 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.
Specific Hazard(s): Emits toxic fumes under fire conditions.

Section 6 - Accidental Release Measures

PROCEDURE TO BE FOLLOWED IN CASE OF LEAK OR SPILL

Evacuate area.

PROCEDURE(S) OF PERSONAL PRECAUTION(S)

Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves.

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

HANDLING

User Exposure: Do not breathe dust. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

STORAGE

Suitable: Keep tightly closed.

Section 8 - Exposure Controls / PPE

ENGINEERING CONTROLS

Safety shower and eye bath. Mechanical exhaust required.

PERSONAL PROTECTIVE EQUIPMENT

Respiratory: Government approved respirator.

Hand: Compatible chemical-resistant gloves.

Eye: Chemical safety goggles.

GENERAL HYGIENE MEASURES

Wash thoroughly after handling.

Section 9 - Physical/Chemical Properties

Appearance	Physical State: Solid	
Property	Value	At Temperature or Pressure
Molecular Weight	336.2 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.

Materials to Avoid: Strong oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide, Nitrogen oxides, Hydrogen chloride gas.

HAZARDOUS POLYMERIZATION

Hazardous Polymerization: Will not occur

Section 11 - Toxicological Information

ROUTE OF EXPOSURE

Skin Contact: May cause skin irritation.

Skin Absorption: May be harmful if absorbed through the skin.

Eye Contact: May cause eye irritation.

Inhalation: Material may be irritating to mucous membranes and upper respiratory tract. May be harmful if inhaled.

Ingestion: Harmful if swallowed.

TARGET ORGAN(S) OR SYSTEM(S)

Brain.

SIGNS AND SYMPTOMS OF EXPOSURE

Other effects include confusion, light-headedness, drowsiness, and syncope. CNS depression. Ataxia. Exposure can cause: Prolonged or repeated exposure can lead to habituation or addiction. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

TOXICITY DATA

Oral

Rat

537 mg/kg

LD50

Intraperitoneal

Rat

276 MG/KG

LD50

Subcutaneous

Rat

800 MG/KG

LD50

Intravenous

Rat

165 MG/KG

LD50

Oral

Mouse

530 mg/kg

LD50

Intraperitoneal

Mouse

200 MG/KG

LD50

Subcutaneous

Mouse

530 MG/KG
LD50

Intravenous
Mouse
95 MG/KG
LD50

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

Parenteral
Mouse
700 MG/KG
LD50

Oral
Dog
1000 mg/kg
LD50

Oral
Rabbit
590 mg/kg
LD50

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

Intravenous
Rabbit
36 MG/KG
LD50

Remarks: Behavioral:Rigidity (includes catalepsy). Sense Organs and Special Senses (Nose, Eye, Ear, and Taste):Eye:Other.
Behavioral:Altered sleep time (including change in righting reflex).

Oral
Quail
1000 mg/kg
LD50

CHRONIC EXPOSURE - TERATOGEN

Result: Possible risk of congenital malformation in the fetus.

Species: Rat

Dose: 525 MG/KG

Route of Application: Oral

Exposure Time: (1-21D PREG)

Result: Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus). Effects on Newborn: Viability index (e.g., # alive at day 4 per # born alive). Effects on Newborn: Growth statistics (e.g., reduced weight gain).

Species: Rat

Dose: 1050 MG/KG

Route of Application: Oral

Exposure Time: (1-21D PREG)

Result: Specific Developmental Abnormalities: Musculoskeletal system. Effects on Newborn: Stillbirth. Effects on Newborn: Live birth index (# fetuses per litter; measured after birth).

Species: Mouse
Dose: 48 GM/KG
Route of Application: Oral
Exposure Time: (30D MALE)
Result: Effects on Embryo or Fetus: Fetal death.

Species: Hamster
Dose: 28500 UG/KG
Route of Application: Intraperitoneal
Exposure Time: (8D PREG)
Result: Specific Developmental Abnormalities: Central nervous system.

Species: Hamster
Dose: 2410 MG/KG
Route of Application: Parenteral
Exposure Time: (8D PREG)
Result: Specific Developmental Abnormalities: Body wall.

CHRONIC EXPOSURE - MUTAGEN

Result: Laboratory experiments have shown mutagenic effects.

Species: Mouse
Route: Oral
Dose: 188 MG/KG
Mutation test: Micronucleus test

Species: Mouse
Route: Intraperitoneal
Dose: 67 MG/KG
Mutation test: Micronucleus test

Species: Mouse
Route: Oral
Dose: 96 GM/KG
Exposure Time: 30D
Mutation test: Dominant lethal test

Species: Mouse
Dose: 188 MG/KG
Cell Type: S. typhimurium
Mutation test: Host-mediated assay

CHRONIC EXPOSURE - REPRODUCTIVE HAZARD

Species: Rat
Dose: 2100 MG/KG
Route of Application: Oral
Exposure Time: (1-21D PREG)
Result: Effects on Fertility: Post-implantation mortality (e.g., dead and/or resorbed implants per total number of implants).

Species: Hamster
Dose: 28500 UG/KG
Route of Application: Intraperitoneal
Exposure Time: (8D PREG)
Result: Effects on Fertility: Post-implantation mortality (e.g., dead and/or resorbed implants per total number of implants).
Specific Developmental Abnormalities: Urogenital system.

Species: Hamster
Dose: 280 MG/KG

Route of Application: Parenteral
Exposure Time: (8D PREG)
Result: Effects on Fertility: Post-implantation mortality (e.g., dead and/or resorbed implants per total number of implants).
Specific Developmental Abnormalities: Central nervous system.

Section 12 - Ecological Information

No data available.

Section 13 - Disposal Considerations

APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION

Contact the Drug Enforcement Administration concerning the disposal of controlled substances. 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

EU ADDITIONAL CLASSIFICATION

Symbol of Danger: Xn
Indication of Danger: Harmful.
R: 22-62-63-68
Risk Statements: Harmful if swallowed. Possible risk of impaired fertility. Possible risk of harm to the unborn child. Possible risk of irreversible effects.
S: 22-36/37
Safety Statements: Do not breathe dust. Wear suitable protective clothing and gloves.

US CLASSIFICATION AND LABEL TEXT

Indication of Danger: Harmful.
Risk Statements: Harmful if swallowed. Possible risk of impaired fertility. Possible risk of harm to the unborn child. Possible risk of irreversible effects.
Safety Statements: Do not breathe dust. Wear suitable protective clothing, gloves, and eye/face protection.
US Statements: Calif. Prop. 65 reproductive hazard. Possible mutagen. Target organ(s): Brain.

UNITED STATES REGULATORY INFORMATION

SARA LISTED: No

UNITED STATES - STATE REGULATORY INFORMATION

CALIFORNIA PROP - 65

California Prop - 65: This product is or contains chemical(s) known to the state of California to cause developmental toxicity. This product is or contains chemical(s) known to the state of California to cause developmental toxicity.

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 guarantee of the properties of the product. Sigma-Aldrich Inc., 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. Copyright 2006 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.