

## MATERIAL SAFETY DATA SHEET

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Version 1.5

## Section 1 - Product and Company Information

Product Name IMIPRAMINE HYDROCHLORIDE  
Product Number I7379  
Brand SIGMA

Company Sigma-Aldrich Canada, Ltd  
Address 2149 Winston Park Drive  
Oakville ON L6H 6J8 CA

Technical Phone: 9058299500  
Fax: 9058299292  
Emergency Phone: 800-424-9300

## Section 2 - Composition/Information on Ingredient

Substance Name	CAS #	SARA 313 No
IMIPRAMINE HYDROCHLORIDE	113-52-0	

Formula C19H24N2.ClH  
Synonyms Antideprin hydrochloride \* Chimoreptin \*  
Chrytemin \* Co cap imipramine 25 \* Deprinol \*  
5H-Dibenz(b,f)azepine,  
10,11-dihydro-5-(3-(dimethylamino)propyl)-,  
hydrochloride \*  
5H-Dibenz(b,f)azepine-5-propanamine,  
10,11-dihydro-N,N-dimethyl-, monohydrochloride  
(9CI) \*  
5-(3-Dimethylaminopropyl)-10,11-dihydro-5H-dibenz(  
b,f)azepine hydrochloride \*  
N-(gamma-Dimethylaminopropyl)iminodibenzyl  
hydrochloride \*  
N-(3-Dimethylaminopropyl)iminodibenzyl  
hydrochloride \*  
N-(gamma-Dimetilaminopropil)-iminodibenzile  
cloridrato (Italian) \* Dynazina \* Efuranol \*  
Feinalmin \* Fujisawa \* G 22355 \* IA-Pram \*  
Imavate \* Imidol \* Imilanyle \* Imipramine  
hydrochloride \* Imipramine monohydrochloride \*  
Iprogen \* Janimine \* Melipramine hydrochloride \*  
NSC 114900 \* Persamine \* Pertofram \* Presamine \*  
Pryleugan \* SK-Pramine hydrochloride \* Teperine \*  
Tofranil \* Tofranile

RTECS Number: HO1925000

## Section 3 - Hazards Identification

## EMERGENCY OVERVIEW

Toxic (USA) Harmful (EU).

Harmful if swallowed. Irritating to eyes, respiratory system and skin.

Target organ(s): Heart. Central nervous system.

## HMIS RATING

HEALTH: 2  
FLAMMABILITY: 0  
REACTIVITY: 1

NFPA RATING

FLAMMABILITY: 0  
REACTIVITY: 1

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

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Section 4 - First Aid Measures

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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.

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Section 5 - Fire Fighting Measures

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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.

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Section 6 - Accidental Release Measures

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PROCEDURE TO BE FOLLOWED IN CASE OF LEAK OR SPILL

Evacuate area.

PROCEDURE(S) OF PERSONAL PRECAUTION(S)

Wear respirator, chemical safety goggles, 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.

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## Section 7 - Handling and Storage

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### HANDLING

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

### STORAGE

Suitable: Keep tightly closed.

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## Section 8 - Exposure Controls / PPE

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### ENGINEERING CONTROLS

Safety shower and eye bath. Mechanical exhaust required.

### PERSONAL PROTECTIVE EQUIPMENT

Respiratory: Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Where risk assessment shows air-purifying respirators are appropriate use a dust mask type N95 (US) or type P1 (EN 143) respirator.

Hand: Compatible chemical-resistant gloves.

Eye: Chemical safety goggles.

### GENERAL HYGIENE MEASURES

Wash thoroughly after handling.

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## Section 9 - Physical/Chemical Properties

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Appearance	Physical State: Solid Color: White	
Property	Value	At Temperature or Pressure
Molecular Weight	316.87 AMU	
pH	N/A	
BP/BP Range	N/A	
MP/MP Range	173.0 - 175.0 °C	
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

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## Section 10 - Stability and Reactivity

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### STABILITY

Stable: Stable.

Conditions to Avoid: Light.

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

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## Section 11 - Toxicological Information

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### ROUTE OF EXPOSURE

Skin Contact: Causes skin irritation.

Skin Absorption: Harmful if absorbed through skin.

Eye Contact: Causes eye irritation.

Inhalation: Harmful if inhaled. Material is irritating to mucous membranes and upper respiratory tract.

Ingestion: Harmful if swallowed.

### TARGET ORGAN(S) OR SYSTEM(S)

Central nervous system. Heart. Blood. Endocrine system.

### SIGNS AND SYMPTOMS OF EXPOSURE

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

Adverse reactions: orthostatic hypotension, hypertension, tachycardia, palpitation, myocardial infarction, arrhythmias, heart block, precipitation of congestive heart failure, stroke, hallucinations, disorientation, delusions, anxiety, restlessness, agitation, insomnia, hypomania, numbness, tingling, paresthesias of extremities, ataxia, tremors, incoordination, peripheral neuropathy, seizures, tinnitus, blurred vision, mydriasis, constipation, paralytic ileus, urinary retention, skin rash, petechiae, urticaria, photosensitization, edema, nausea, vomiting, anorexia, epigastric distress, diarrhea, stomatitis, abdominal cramps, black tongue, bone marrow depression, agranulocytosis, purpura, eosinophilia, alopecia, and proneness to falling.

### TOXICITY DATA

Oral

Child

15 mg/kg

LDLO

Remarks: Kidney, Ureter, Bladder:Other changes. Sense Organs and Special Senses (Nose, Eye, Ear, and Taste):Eye:Mydriasis (pupillary dilation). Cardiac:Other changes.

Oral

Rat

305 mg/kg

LD50

Intraperitoneal  
Rat  
72 MG/KG  
LD50

Subcutaneous  
Rat  
217 MG/KG  
LD50

Intravenous  
Rat  
18 MG/KG  
LD50

Oral  
Mouse  
275 mg/kg  
LD50

Intraperitoneal  
Mouse  
104 MG/KG  
LD50

Subcutaneous  
Mouse  
189 MG/KG  
LD50

Intravenous  
Mouse  
27 MG/KG  
LD50

Intravenous  
Rabbit  
14 MG/KG  
LD50

Intraperitoneal  
Guinea pig  
85 MG/KG  
LD50

Subcutaneous  
Guinea pig  
190 MG/KG  
LD50

#### CHRONIC EXPOSURE - TERATOGEN

Species: Rat  
Dose: 800 MG/KG  
Route of Application: Oral  
Exposure Time: (1-16D PREG)  
Result: Effects on Embryo or Fetus: Fetotoxicity (except death,  
e.g., stunted fetus).

Species: Rat  
Dose: 65 MG/KG

Route of Application: Subcutaneous  
Exposure Time: (8-20D PREG)  
Result: Effects on Newborn: Biochemical and metabolic. Specific  
Developmental Abnormalities: Central nervous system.

Species: Rat  
Dose: 130 MG/KG  
Route of Application: Subcutaneous  
Exposure Time: (8-20D PREG)  
Result: Specific Developmental Abnormalities: Cardiovascular  
(circulatory) system.

Species: Mouse  
Dose: 125 MG/KG  
Route of Application: Subcutaneous  
Exposure Time: (9D PREG)  
Result: Specific Developmental Abnormalities: Central nervous  
system. Effects on Embryo or Fetus: Fetal death. Effects on  
Embryo or Fetus: Fetotoxicity (except death, e.g., stunted  
fetus).

Species: Hamster  
Dose: 35 MG/KG  
Route of Application: Intraperitoneal  
Exposure Time: (8D PREG)  
Result: Specific Developmental Abnormalities: Musculoskeletal  
system. Specific Developmental Abnormalities: Body wall.  
Specific Developmental Abnormalities: Central nervous system.

#### CHRONIC EXPOSURE - REPRODUCTIVE HAZARD

Species: Rat  
Dose: 285 MG/KG  
Route of Application: Oral  
Exposure Time: (14D PRE-21D POST)  
Result: Effects on Newborn: Behavioral.

Species: Rat  
Dose: 200 MG/KG  
Route of Application: Oral  
Exposure Time: (7-16D PREG)  
Result: 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: 1 GM/KG  
Route of Application: Oral  
Exposure Time: (7-16D PREG)  
Result: Effects on Fertility: Post-implantation mortality (e.g.,  
dead and/or resorbed implants per total number of implants).

Species: Rat  
Dose: 180 MG/KG  
Route of Application: Oral  
Exposure Time: (14D PRE/1-22D PREG)  
Result: Effects on Newborn: Live birth index (# fetuses per  
litter; measured after birth). Effects on Newborn: Stillbirth.

Species: Rat  
Dose: 225 MG/KG  
Route of Application: Intraperitoneal

Exposure Time: (23D PRE/1-22D PREG)  
Result: Effects on Newborn: Stillbirth. Effects on Newborn: Live birth index (# fetuses per litter; measured after birth). Effects on Newborn: Weaning or lactation index (e.g., # alive at weaning per # alive at day 4).

Species: Rat  
Dose: 210 MG/KG  
Route of Application: Intraperitoneal  
Exposure Time: (15-21D PREG)  
Result: Effects on Newborn: Live birth index (# fetuses per litter; measured after birth). Effects on Newborn: Growth statistics (e.g., reduced weight gain).

Species: Rat  
Dose: 65 MG/KG  
Route of Application: Subcutaneous  
Exposure Time: (8-20D PREG)  
Result: Effects on Newborn: Behavioral. Effects on Newborn: Biochemical and metabolic.

Species: Mouse  
Dose: 9700 MG/KG  
Route of Application: Oral  
Exposure Time: (75D PRE/1-22D PREG)  
Result: Effects on Newborn: Viability index (e.g., # alive at day 4 per # born alive). Effects on Newborn: Growth statistics (e.g., reduced weight gain). Effects on Newborn: Stillbirth.

Species: Mouse  
Dose: 9200 MG/KG  
Route of Application: Oral  
Exposure Time: (10W PRE/1-22D PREG)  
Result: Effects on Newborn: Weaning or lactation index (e.g., # alive at weaning per # alive at day 4).

Species: Rabbit  
Dose: 165 MG/KG  
Route of Application: Subcutaneous  
Exposure Time: (3-18D PREG)  
Result: Effects on Newborn: Viability index (e.g., # alive at day 4 per # born alive). Effects on Newborn: Physical.

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## Section 12 - Ecological Information

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No data available.

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## Section 13 - Disposal Considerations

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### APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION

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. Observe all federal, state, and local environmental regulations.

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## Section 14 - Transport Information

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### 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.

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Section 15 - Regulatory Information

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EU ADDITIONAL CLASSIFICATION

Symbol of Danger: Xn

Indication of Danger: Harmful.

R: 22-36/37/38

Risk Statements: Harmful if swallowed. Irritating to eyes, respiratory system and skin.

S: 26-36

Safety Statements: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing.

US CLASSIFICATION AND LABEL TEXT

Indication of Danger: Toxic (USA) Harmful (EU).

Risk Statements: Harmful if swallowed. Irritating to eyes, respiratory system and skin.

Safety Statements: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing.

US Statements: Target organ(s): Heart. Central nervous system.

UNITED STATES REGULATORY INFORMATION

SARA LISTED: No

TSCA INVENTORY ITEM: Yes

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: Yes

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Section 16 - Other Information

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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 2007 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.