Section 1 - Product and Company Information

Product Name                       DESIPRAMINE HYDROCHLORIDE
Product Number                     D3900
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                   DESIPRAMINE HYDROCHLORIDE
CAS #                             58-28-6
SARA 313                         No

Formula                          C18H22N2 · HCl
Synonyms                         Demethylimipramine hydrochloride * Desipramine hydrochloride *
                                 Desmethylimipramine hydrochloride * 5H-Dibenz(b,f)azepine,
                                 10,11-dihydro-5-(3-(methylamino)propyl)-,
                                 hydrochloride *
                                 10,11-Dihydro-5-(3-(methylamino)propyl)-5H-dibenz( b,f)azepine hydrochloride * DMI hydrochloride *
                                 EX 4355 * G 35020 * GMI * Imipraminedemethylhydrochloride *
                                 hydrochloride * JB 8181 *
                                 N-(gamma-Methylaminopropyl)iminodibenzylhydrochloride *
                                 Norpramin * NSC-114901 *
                                 Pertofran * Pertofrane * RMI 9,384A

RTECS Number:                    HO0525000

Section 3 - Hazards Identification

EMERGENCY OVERVIEW
Harmful.
Harmful if swallowed. Irritating to eyes, respiratory system and skin. May cause sensitization by inhalation and skin contact.
Target organ(s): Central nervous system. Heart.

HMIS RATING
HEALTH: 3*
FLAMMABILITY: 0
REACTIVITY: 1

NFPA RATING
HEALTH: 3
FLAMMABILITY: 0
REACTIVITY: 1

*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 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.

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. Store in a cool dry place. Store with desiccant. Store at 2-8°C

SPECIAL REQUIREMENTS
Moisture sensitive.

Section 8 - Exposure Controls / PPE

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.

Section 9 - Physical/Chemical Properties

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<th>Property</th>
<th>Value</th>
<th>At Temperature or Pressure</th>
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<td>Physical State</td>
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Solubility
Solubility in Water: Soluble.
Other Solvents: ETHANOL, CHLOROFORM, METHANOL
Section 10 - Stability and Reactivity

STABILITY
Stable: Stable.
Conditions to Avoid: Moisture.
Materials to Avoid: Strong oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS

HAZARDOUS POLYMERIZATION
Hazardous Polymerization: Will not occur

Section 11 - Toxicological Information

ROUTE OF EXPOSURE
Skin Contact: Causes skin irritation.
Skin Absorption: May be harmful if absorbed through the skin.
Eye Contact: Causes eye irritation.
Inhalation: Material is irritating to mucous membranes and upper respiratory tract. May be harmful if inhaled.
Ingestion: Harmful if swallowed.

SENSITIZATION
Sensitization: May cause allergic reaction.

TARGET ORGAN(S) OR SYSTEM(S)
Heart. Central nervous system.

SIGNS AND SYMPTOMS OF EXPOSURE
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

TOXICITY DATA

Oral
Rat
871 mg/kg
LD50

Intraperitoneal
Rat
55 MG/KG
LD50

Intravenous
Rat
19 MG/KG
LD50

Oral
Mouse
315 mg/kg
LD50

Intraperitoneal
Mouse
88 MG/KG
LD50
Intravenous
Mouse
37 MG/KG
LD50
Remarks: Behavioral: Convulsions or effect on seizure threshold.
Behavioral: Rigidity (includes catalepsy). Nutritional and Gross
Metabolic: Changes in: Body temperature decrease.

Intravenous
Dog
25 MG/KG
LD50

CHRONIC EXPOSURE - TERATOGEN

Species: Mouse
Dose: 90 MG/KG
Route of Application: Subcutaneous
Exposure Time: (9D PREG)
Result: Effects on Embryo or Fetus: Fetal death. Specific
Developmental Abnormalities: Central nervous system.

CHRONIC EXPOSURE - REPRODUCTIVE HAZARD

Species: Rat
Dose: 130 MG/KG
Route of Application: Subcutaneous
Exposure Time: (10-22D PREG)
Result: Effects on Newborn: Behavioral.

Section 12 - Ecological Information
No data available.

Section 13 - Disposal Considerations

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.

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: 22-36/37/38-42/43
Risk Statements: Harmful if swallowed. Irritating to eyes, respiratory system and skin. May cause sensitization by inhalation and skin contact.
S: 22-24-26-36/37
Safety Statements: Do not breathe dust. Avoid contact with skin. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing and gloves.

US CLASSIFICATION AND LABEL TEXT
Indication of Danger: Harmful.
Risk Statements: Harmful if swallowed. Irritating to eyes, respiratory system and skin. May cause sensitization by inhalation and skin contact.
Safety Statements: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing. Do not breathe dust.
US Statements: Target organ(s): Central nervous system. Heart.

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 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.