Amitriptyline hydrochloride (cas 549-18-8) MSDS

1 - Product and Company Information

Product Name AMITRIPTYLINE HYDROCHLORIDE
Product Number A8404

2 - Composition/Information on Ingredients

Product Name CAS # EC no Annex I
Index Number
AMITRIPTYLINE HYDROCHLORIDE 549-18-8 208-964-6 None

Formula C20H23N.ClH
Molecular Weight 313.87 AMU
Synonyms Amitriptyline hydrochloride * Amiatriptiline hydrochloride * Damilen hydrochloride * Deprex * Domical *
10,11-Dihydro-N,N-dimethyl-5H-dibenzo(a,d)cycloheptene-delta(sup 5,gamma)-propylamine HCl *
5-(3-Dimethylaminopropylidene)dibenz[a,d](1,4)cycloheptadiene hydrochloride * Elavil *
hydrochloride * Endep * Etrafon * Laroxyl *
Lentizol * Limbitrol DS * Miketorin *
Proheptadien monohydrochloride * 1-Propanamine,
3-(10,11-dihydro-5H-dibenzo(a,d)cyclohepten-5-yli
dene)-N,N-dimethyl-hcl * Rantolon * Saroten *
SK-Amitriptyline * Triavil * Tryptizol *
Yamanouchi

3 - Hazards Identification

SPECIAL INDICATION OF HAZARDS TO HUMANS AND THE ENVIRONMENT

Toxic by inhalation, in contact with skin and if swallowed.
Irritating to eyes, respiratory system and skin. May cause sensitization by inhalation and skin contact. Possible risk of harm to the unborn child.

4 - First Aid Measures

AFTER INHALATION
If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

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

AFTER EYE CONTACT
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.

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

5 - Fire Fighting Measures

EXTINGUISHING MEDIA
Suitable: Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.

**SPECIAL RISKS**
Specific Hazard(s): Emits toxic fumes under fire conditions.

**SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS**
Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

6 - Accidental Release Measures

**PERSONAL PRECAUTION PROCEDURES 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.

7 - Handling and Storage

**HANDLING**
Directions for Safe Handling: Do not breathe dust. Do not get in eyes, on skin, on clothing. Avoid prolonged or repeated exposure.

**STORAGE**
Conditions of Storage: Keep tightly closed.
Store at 2-8?C

8 - Exposure Controls / Personal Protection

**ENGINEERING CONTROLS**
Safety shower and eye bath. Use only in a chemical fume hood.

**GENERAL HYGIENE MEASURES**
Wash contaminated clothing before reuse. Wash thoroughly after handling.

**PERSONAL PROTECTIVE EQUIPMENT**
Respiratory Protection: Government approved respirator.

Eye Protection: Chemical safety goggles.

9 - Physical and Chemical Properties

**Appearance Physical State: Solid**

Property Value At Temperature or Pressure

pH N/A
BP/IP Range N/A
MP/MP Range 198 - 200 ?C
Flash Point N/A
FlammabilityN/A
Autoignition Temp N/A
Oxidizing Properties N/A
Explosive Properties N/A
Explosion Limits N/A
Vapor Pressure N/A
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

11 - Toxicological Information

RTECS NUMBER: HO9450000

ACUTE TOXICITY

LDLO
Oral
Child
62.5 mg/kg
Remarks: Behavioral: Convulsions or effect on seizure threshold.
Vascular: BP lowering not characterized in autonomic section.
Lungs, Thorax, or Respiration: Respiratory depression.

LD50
Oral
Rat
240 mg/kg
67 MG/KG

LD50
Subcutaneous
Rat
385 MG/KG
Remarks: Behavioral: Convulsions or effect on seizure threshold.
Lungs, Thorax, or Respiration: Cyanosis.

LD50
Intravenous
Rat
14 MG/KG

LD50
Oral
Mouse
140 mg/kg

LD50
Intraperitoneal
Mouse
65 MG/KG
Behavioral: Convulsions or effect on seizure threshold. Lungs, Thorax, or Respiration: Dyspnea.

LD50
Subcutaneous
Mouse
80 MG/KG
Remarks: Behavioral: Convulsions or effect on seizure threshold.
Behavioral: Ataxia. Lungs, Thorax, or Respiration: Cyanosis.

LD50
Intravenous
Mouse
21 MG/KG

LD50

SIGMA- A8404 www.-aldrich.com Intravenous
Dog
>27 MG/KG

LD50
Intramuscular
Dog
>23 MG/KG

LD50
Oral
Cat
37 mg/kg

LD50
Intravenous
rabbit
9600 UG/KG

SENSITIZATION
Sensitization: May cause allergic reaction.

ROUTE OF EXPOSURE
Skin Contact: May cause skin irritation.
Skin Absorption: Toxic if absorbed through skin.
Eye Contact: May cause eye irritation.
Inhalation: Toxic if inhaled. Material may be irritating to mucous membranes and upper respiratory tract.
Ingestion: Toxic if swallowed.

TARGET ORGAN INFORMATION
Central nervous system. Heart.

CHRONIC EXPOSURE - MUTAGEN

Mouse
70 mg/kg
Oral
5 sperm

CHRONIC EXPOSURE - TERATOGEN
Result: May cause congenital malformation in the fetus.

Species: Mouse
Dose: 60 mg/kg
Route of Application: Subcutaneous
Exposure Time: (9D PREG)
Result: Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus). Effects on Embryo or Fetus: Fetal death. Specific Developmental Abnormalities: Central nervous system.

Species: Mouse
Dose: 60 mg/kg
Route of Application: Subcutaneous
Exposure Time: (9D PREG)
Result: Specific Developmental Abnormalities: Craniofacial (including nose and tongue).

Species: Hamster
Dose: 60 mg/kg
Route of Application: Intraperitoneal

SIGMA - A8404 www.sigma-aldrich.com Exposure Time: (8D PREG)

Species: Hamster
Dose: 70300 UG/kg
Route of Application: Intraperitoneal
Exposure Time: (8D PREG)
Result: Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus). Specific Developmental Abnormalities: Central nervous system. Specific Developmental Abnormalities: Musculoskeletal system.

Species: Hamster
Dose: 60 mg/kg
Route of Application: Parenteral
Exposure Time: (8D PREG)

CHRONIC EXPOSURE - REPRODUCTIVE HAZAR
Species: Rat
Dose: 220 mg/kg
Route of Application: Subcutaneous
Exposure Time: (1-22D PREG)
Species: Mouse
Dose: 70 MG/KG
Route of Application: Oral
Exposure Time: (5D MALE)
Result: Paternal Effects: Spermatogenesis (including genetic material, sperm morphology, motility, and count).

12 - Ecological Information
No data available.

13 - Disposal Considerations

SUBSTANCE DISPOSAL
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.

14 - Transport Information
RID/AD UN#: 2811
Class: 6.1
PG: III
Proper Shipping Name: Toxic solid, organic, n.o.s.

IMDG
UN#: 2811
Class: 6.1
PG: III

SIGNA - A8404 www.-aldrich.com Proper Shipping Name: Toxic solid, organic, n.o.s.
Marine Pollutant: No
Severe Marine Pollutant: No
Technical Name: Required

IATA
UN#: 2811
Class: 6.1
PG: III
Proper Shipping Name: Toxic solid, organic, n.o.s.
Inhalation Packing Group I: No
Technical Name: Required

15 - Regulatory Information

CLASSIFICATION AND LABELING ACCORDING TO EU DIRECTIVES
INDICATION OF DANGER: T
Toxic.
R-PHRASES: 23/24/25 36/37/38 42/43 63
Toxic by inhalation, in contact with skin and if swallowed.
Irritating to eyes, respiratory system and skin. May cause sensitization by inhalation and skin contact. Possible risk of harm to the unborn child.
S-PHRASES: 45 26 36/37/39 22
In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing, gloves, and eye/face protection. Do not breathe dust.

16 - Other Information
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.
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