Material Name: PHENOXYBENZAMINE HYDROCHLORIDE

Chemical Family
amines, aromatic, salt

Synonyms

Product Use
pharmaceutical

** ** Section 2 - HAZARDS IDENTIFICATION** **

EMERGENCY OVERVIEW
Color: colorless, white or off-white  
Change in Color: light-sensitive  
Physical Form: crystalline powder  
Odor: odorless  
Health Hazards: suspect cancer hazard (in animals)  
Physical Hazards: Dust/air mixtures may ignite or explode.

**POTENTIAL HEALTH EFFECTS**

**Inhalation**  
Short Term: irritation  
Long Term: no information is available

**Skin Contact**  
Short Term: irritation  
Long Term: no information is available

**Eye Contact**  
Short Term: irritation  
Long Term: no information is available

**Ingestion**  
Short Term: same as effects reported in long term exposure  
Long Term: digestive disorders, irregular heartbeat, drowsiness, dizziness

*** Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS***

<table>
<thead>
<tr>
<th>CAS</th>
<th>Component / EC#</th>
<th>Percent</th>
<th>Symbol(s)</th>
<th>Risk Phrase</th>
</tr>
</thead>
<tbody>
<tr>
<td>63-92-3</td>
<td>PHENOXYBENZAMINE HYDROCHLORIDE 200-569-7</td>
<td>100.0</td>
<td>Xn</td>
<td>R:22</td>
</tr>
</tbody>
</table>

*** Section 4 - FIRST AID MEASURES***

**Inhalation**  
If adverse effects occur, remove to uncontaminated area. Give artificial respiration if not breathing. Get immediate medical attention.

**Skin**  
Wash skin with soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention, if needed. Thoroughly clean and dry contaminated clothing and shoes before reuse.
Eyes
Flush eyes with plenty of water for at least 15 minutes. Then get immediate medical attention.

Ingestion
If a large amount is swallowed, get medical attention.

* * * Section 5 - FIRE FIGHTING MEASURES* * *

See Section 9 for Flammability Properties

NFPA Ratings:
Health: 1 Fire: 1 Reactivity: 0
Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

Flammable Properties
Dust/air mixtures may ignite or explode. Slight fire hazard.

Extinguishing Media
regular dry chemical, carbon dioxide, water, regular foam
Large fires: Use regular foam or flood with fine water spray.

Fire Fighting Measures
Move container from fire area if it can be done without risk. Do not scatter spilled material with high-pressure water streams. Dike for later disposal. Use extinguishing agents appropriate for surrounding fire. Avoid inhalation of material or combustion by-products. Stay upwind and keep out of low areas.

Thermal Decomposition Products
Combustion: oxides of nitrogen, oxides of carbon, chlorine, hydrochloric acid

* * * Section 6 - ACCIDENTAL RELEASE MEASURES* * *

Water Release
Subject to California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65). Keep out of water supplies and sewers.

Occupational spill/release
Collect spilled material in appropriate container for disposal. Keep out of water supplies and sewers. Keep unnecessary people away, isolate hazard area and deny entry.

* * * Section 7 - HANDLING AND STORAGE* * *

Handling Procedures
Use methods to minimize dust.
Storage Procedures
Store and handle in accordance with all current regulations and standards. Store at 25 C. Store in a tightly closed container. Avoid contact with light. Keep separated from incompatible substances.

***Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION***

Component Exposure Limits
ACGIH, NIOSH, EU, OSHA (US) and Mexico have not developed exposure limits for any of this product's components.

Exposure Limits for Chemicals which may be generated during processing
This material has no components listed.

Ventilation
Ventilation equipment should be explosion-resistant if explosive concentrations of material are present. Provide local exhaust ventilation system. Ensure compliance with applicable exposure limits.

PERSONAL PROTECTIVE EQUIPMENT

Eyes/Face
Wear splash resistant safety goggles. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

Protective Clothing
Wear appropriate chemical resistant clothing.

Glove Recommendations
Wear appropriate chemical resistant gloves.

Respiratory Protection
Under conditions of frequent use or heavy exposure, respiratory protection may be needed.
Respiratory protection is ranked in order from minimum to maximum.
Consider warning properties before use.
Any air-purifying half-mask respirator equipped with organic vapor cartridge(s) in combination with an N95, R95, or P95 filter. The following filters may also be used: N99, R99, P99, N100, R100 or P100.
Any air-purifying full-facepiece respirator (gas mask) with a chin-style, front-mounted or back-mounted organic vapor canister having an N100, R100, or P100 filter.
Any powered, air-purifying respirator with a tight-fitting facepiece, organic vapor cartridge(s) and high-efficiency particulate filter(s).
Any supplied-air respirator with a full facepiece that is operated in a pressure-demand or other positive-pressure mode.

For Unknown Concentrations or Immediately Dangerous to Life or Health -
Any supplied-air respirator with a full facepiece that is operated in a pressure-demand
or other positive-pressure mode in combination with an auxiliary self-contained breathing apparatus operated in pressure-demand or other positive-pressure mode. Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode.

*** Section 9 - PHYSICAL AND CHEMICAL PROPERTIES ***

| Physical State: Solid                  | Appearance: Not available |
| Change in color: light-sensitive       | Color: colorless, white or off-white |
| Physical Form: crystalline powder      | Odor: odorless |
| Odor Threshold: Not available          | Melting Point: 136 - 141 °C |
| Boiling Point: Not applicable          | Vapor Pressure: Not applicable |
| Vapor Density (air = 1): Not applicable| Density: Not available |
| Specific Gravity (water = 1): Not available | Water Solubility: slightly soluble |
| Coeff. Water/Oil Dist: Not available  | Molecular Weight: 340.32 |
| Molecular Formula: C18-H22-Cl-N-O.Cl-H |                         |

Solvent Solubility
Soluble: alcohol, chloroform, propylene glycols, ethanol
Insoluble: ether

*** Section 10 - STABILITY AND REACTIVITY ***

Chemical Stability
Stable at normal temperatures and pressure.
Conditions to Avoid
Avoid heat, flames, sparks and other sources of ignition. Avoid contact with incompatible materials.
Incompatible Materials
oxidizing materials
PHENOXYBENZAMINE HYDROCHLORIDE:
OXIDIZERS (STRONG): Fire and explosion hazard.

Thermal Decomposition Products
Combustion: oxides of nitrogen, oxides of carbon, chlorine, hydrochloric acid
Possibility of Hazardous Reactions
Will not polymerize.

** Section 11 - TOXICOLOGICAL INFORMATION **

**Component Analysis - LD50/LC50**
The components of this material have been reviewed in various sources and the following selected endpoints are published:

**PHENOXYBENZAMINE HYDROCHLORIDE (63-92-3)**

Oral LD50 Mouse 900 mg/kg

**RTECS Acute Toxicity (selected)**
The components of this material have been reviewed, and RTECS publishes the following endpoints:

**PHENOXYBENZAMINE HYDROCHLORIDE (63-92-3)**

Oral: 900 mg/kg Oral Mouse LD50

**Acute Toxicity Level**
**PHENOXYBENZAMINE HYDROCHLORIDE (63-92-3)**
Moderately ingestion
Toxic:

**Component Carcinogenicity**
**PHENOXYBENZAMINE HYDROCHLORIDE (63-92-3)**

IARC: Supplement 7 [1987]; Monograph 24 [1980] (Group 2B (possibly carcinogenic to humans))
NTP: Reasonably Anticipated To Be A Human Carcinogen
OSHA: Present

**RTECS Irritation**
The components of this material have been reviewed and RTECS publishes no data as of the date on this document.
When injected intraperitoneally in mice and rats, it produced peritoneal sarcomas in mice and rats of both sexes. When injected intraperitoneally the phenoxybenzamine (free base) produced an increased incidence of lung tumors in mice of both sexes.

**Medical Conditions Aggravated by Exposure**
heart or cardiovascular disorders, kidney disorders, respiratory disorders

**RTECS Tumorigenic**
The components of this material have been reviewed, and RTECS publishes the following endpoints:
PHENOXYBENZAMINE HYDROCHLORIDE (63-92-3)
3900 mg/kg Intraperitoneal Mouse TDLo (52 week); 1560 mg/kg
Intraperitoneal Rat TD (1 year(s)); 780 mg/kg Intraperitoneal Rat TDLo (1
year(s))

RTECS Mutagenic
The components of this material have been reviewed, and RTECS publishes the
following endpoints:
PHENOXYBENZAMINE HYDROCHLORIDE (63-92-3)
3 ug/plate Salmonella typhimurium (+S9)

RTECS Reproductive Effects
The components of this material have been reviewed, and RTECS publishes the
following endpoints:
PHENOXYBENZAMINE HYDROCHLORIDE (63-92-3)
12 mg/kg Oral Rat TDLo (pregnant 5-12 day(s)); 24500 ug/kg Parenteral
Rat TDLo (male 35 day(s)); 24500 ug/kg Parenteral Rat TDLo (male 35
day(s))

Additional Data
Interactions with drugs may occur. May cross react with similar compounds.
Inhalation - Acute Exposure
PHENOXYBENZAMINE HYDROCHLORIDE: May cause irritation.
Inhalation - Chronic Exposure
PHENOXYBENZAMINE HYDROCHLORIDE: No data available.
Skin Contact - Acute Exposure
PHENOXYBENZAMINE HYDROCHLORIDE: May cause irritation and contact
dermatitis.
Skin Contact - Chronic Exposure
PHENOXYBENZAMINE HYDROCHLORIDE: No data available.
Eye Contact - Acute Exposure
PHENOXYBENZAMINE HYDROCHLORIDE: May cause irritation.
Eye Contact - Chronic Exposure
PHENOXYBENZAMINE HYDROCHLORIDE: No data available.
Ingestion - Acute Exposure
PHENOXYBENZAMINE HYDROCHLORIDE: The therapeutic use may cause
effects as detailed in chronic exposure.
Ingestion - Chronic Exposure
PHENOXYBENZAMINE HYDROCHLORIDE: This is a long-acting, adrenergic,
alpha-receptor blocking agent. Therapeutic use may cause gastrointestinal irritation,
nausea, vomiting, diarrhea, drowsiness, dizziness, fatigue, miosis, stuffy nose,
fainting, lethargy, tachycardia, and hypotension. Inhibition of ejaculation and changes in renal tubules, tubular necrosis or renal failure have been reported, but rarely.

*** Section 12 - ECOLOGICAL INFORMATION ***

Component Analysis - Aquatic Toxicity
No LOLI ecotoxicity data are available for this product's components.

*** Section 13 - DISPOSAL CONSIDERATIONS ***

Disposal Methods
Dispose in accordance with all applicable regulations.

Component Waste Numbers
The U.S. EPA has not published waste numbers for this product's components.

*** Section 14 - TRANSPORT INFORMATION ***

US DOT Information: No Classification assigned.
TDG Information: No Classification assigned.
ADR Information: No Classification assigned.
RID Information: No Classification assigned.
IATA Information: No Classification assigned.
ICAO Information: No Classification assigned.
IMDG Information: No Classification assigned.

*** Section 15 - REGULATORY INFORMATION ***

U.S. Federal Regulations
None of this product's components are listed under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 311/312 (40 CFR 370.21), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), or require an OSHA process safety plan.

SARA Section 311/312 (40 CFR 370 Subparts B and C)
Acute Health: No Chronic Health: Yes Fire: No Pressure: No Reactive: No

U.S. State Regulations
The following components appear on one or more of the following state hazardous substances lists:

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS</th>
<th>CA</th>
<th>MA</th>
<th>MN</th>
<th>NJ</th>
<th>PA</th>
<th>RI</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHENOXYBENZAMINE HYDROCHLORIDE</td>
<td>63-92-3</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>
The following statement(s) are provided under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):

WARNING! This product contains a chemical known to the state of California to cause cancer.

**Component Analysis**

**PHENOXYBENZAMINE HYDROCHLORIDE (63-92-3)**

**Carc:** carcinogen, initial date 4/1/88

**EU Marking and Labelling**

**Symbols**

Xn Harmful

**Risk Phrases**

R22 Harmful if swallowed.

**Safety Phrases**

S2 Keep out of the reach of children.

S13 Keep away from food, drink and animal feedingstuffs.

S24 Avoid contact with skin.

S36 Wear suitable protective clothing.

S46 If swallowed, seek medical advice immediately and show this container or label.

**Component Analysis - Inventory**

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS</th>
<th>US</th>
<th>CA</th>
<th>EU</th>
<th>AU</th>
<th>PH</th>
<th>JP</th>
<th>KR</th>
<th>CN</th>
<th>NZ</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHENOXYBENZAMINE HYDROCHLORIDE</td>
<td>63-92-3</td>
<td>No</td>
<td>No</td>
<td>EIN</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**Globally Harmonized System of Classification and Labelling (GHS)**

The listed component(s) of this material have been checked for country-specific published classifications according to the Globally Harmonized System of Classification and Labelling (GHS). The results of the queries are displayed below. Please see the individual country listings, as additional interpretations or reference information may be available. For a reference list of H- or P-statements, please visit ChemADVISOR’s website at www.chemadvisor.com\sdsoncommand\ghs_H&Pphrases.html.

**Australia GHS Classifications**

No published information available. This material may be hazardous according to published criteria for classification.

**European Union GHS Classifications**

No published information available. This material may be hazardous according to published criteria for classification.

**Indonesia GHS Classifications**

No published information available. This material may be hazardous according to published criteria for classification.
Japan GHS Classifications
Classifications below published under Japan's Chemicals Classification Program according to the Globally Harmonized System of Classification and Labelling of Chemicals (GHS).

PHENOXYBENZAMINE HYDROCHLORIDE (63-92-3)
- Acute toxicity - Oral - Category 5 H303 May be harmful if swallowed
- Skin sensitizers - Category 1 H317 May cause allergic skin reaction
- Carcinogenicity - Category 2 H351 Suspected of causing cancer
- Specific target organ toxicity - Single exposure - Category 1 H370 Causes damage to cardiovascular system and/or central nervous system

Korea GHS Classifications (SV)
No published information available. This material may be hazardous according to published criteria for classification.

New Zealand GHS Classifications
No published information available. This material may be hazardous according to published criteria for classification.

South Africa GHS Classifications
No published information available. This material may be hazardous according to published criteria for classification.

Taiwan GHS Classifications
No published information available. This material may be hazardous according to published criteria for classification.

*** Section 16 - OTHER INFORMATION ***

Key / Legend
ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; AU - Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CN - China; CPR - Controlled Products Regulations; DFG - Deutsche Forschungsgemeinschaft; DOT - Department of Transportation; DSL - Domestic Substances List; EEC - European Economic Community; EINECS - European Inventory of Existing Commercial Chemical Substances; EPA - Environmental Protection Agency; EU - European Union; F - Farenheit; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IDL - Ingredient Disclosure List; IMDG - International Maritime Dangerous Goods; JP - Japan; Kow - Octanol/water partition coefficient; KR - Korea; LEL - Lower Explosive Limit; LOLI - List Of LIsTSTM -
Full text of R phrases in Section 3
R22 Harmful if swallowed.

Other Information
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