



MATERIAL SAFETY DATA SHEET

NAME OF PRODUCT: Phenylephrine Hydrochloride MSDS DATE: 19 July, 2011

Notice

NSF Reference Standards are for test and assay use only and are not intended for human or animal consumption. This document communicates information relating to test and assay use only and may not be applicable for any unauthorized use.

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name: Phenylephrine Hydrochloride
Catalog Code: RS1-0030
Synonym: (R)-3-Hydroxy-alpha-[(methylamino)methyl] benzenemethanol hydrochloride
Chemical Formula: $C_9H_{13}NO_2 \cdot HCl$
CAS #: 61-76-7

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SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

Name: Phenylephrine Hydrochloride

CAS#: 61-76-7

% by Weight: 100%

Toxicological Data on Ingredients:

LD50 (mouse) 120 mg/kg

SECTION 3: HAZARDS IDENTIFICATION

Potential Acute Health Effects:

Hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation.



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Potential Chronic Health Effects:

CARCINOGENIC EFFECTS: Classified 4 (No Evidence) by NTP.

MUTAGENIC EFFECTS: Mutagenic form mammalian somatic cells.

TERATOGENIC EFFECTS: Not available

DEVELOPMENTAL TOXICITY: Classified Reproductive System, toxin/ female [possible]

Repeated or prolonged exposure Phenylephrine Hydrochloride is not known to aggravate medical conditions.

SECTION 4: FIRST AID MEASURES

Eye Contact:

Check for and remove contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes keeping eyelids open. Do not use eye ointment. Seek medical attention.

Skin Contact:

In case of contact, immediately wash skin with disinfectant soap and plenty of water. Cover the irritated skin with an emollient. Seek medical attention.

Serious Skin Contact:

Wash with a disinfecting soap and cover contaminated area with antibiotic cream. Seek medical attention.

Inhalation:

If inhaled, remove to fresh air. Seek immediate medical attention.

Serious Inhalation:

Not available

Ingestion:

Do not induce vomiting. Loosen tight clothing. If victim is not breathing, perform mouth to mouth resuscitation. Seek immediate medical attention.

Serious Ingestion: Not available.

SECTION 5: FIRE-FIGHTING MEASURES

Flammability of the Product: May be combustible at high temperature.

Auto-Ignition Temperature: Not available.

Flammable Limits: Not available.

Flash Points: Not available

Products of Combustion: These products are carbon oxides (CO, CO₂), nitrogen oxides (NO, NO₂...).

Special Remarks on Explosion Hazards: Not available.



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Fire Hazards in Presence of Various Substances: Slightly flammable to flammable in presence of heat. Not flammable in presence of shock.

Explosion Hazards in Presence of Various Substances:

Risks of explosion of the product in presence of mechanical impact: Not available.

Risks of explosion of the product in presence of static discharge: Not available.

Special Remarks on Fire Hazards: Not available

Fire Fighting Media and Instructions:

SMALL FIRE: Use DRY chemical powder.

LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Small Spill:

Use appropriate tools to put the spilled solid in a convenient waste disposal container. After powder clean up, spread water on the contaminated surface and dispose of according to local and regional authority requirements.

Large Spill:

Use appropriate tools to put the material into a suitable waste disposal container. After powder clean up, spread water on the contaminated surface and dispose of according to local and regional authority requirements.

SECTION 7: HANDLING AND STORAGE

Precautions:

Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe dust. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatible agents such as oxidizing agents, acids.

Storage:

Keep container tightly closed. Keep container in a refrigerated, well-ventilated area. Protect from light.



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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls:

If laboratory operations generate dust, use local exhaust ventilation or other appropriate engineering controls to keep exposure to airborne contaminants below the exposure limit.

Personal Protection:

Splash goggles. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

Personal Protection in Case of a Large Spill:

Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits: Not available.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical state and appearance: Solid.

Odor: Odorless

Taste: Bitter

Molecular Weight: 203.67 g/mol

Color: White

pH (1% soln/water): Not available

Boiling Point: Not available

Melting Point: 143 °C (289.4 °F)

Critical Temperature: Not available.

Specific Gravity: Not available.

Vapor Pressure: Not applicable.

Vapor Density: Not available.

Volatility: Not available.

Odor Threshold: Not available.

Water/Oil Dist. Coeff.: Not available.

Ionicity (in Water): Not available.

Dispersion Properties: See Solubility on Water.

Solubility: Easily soluble in cold water or hot water.



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SECTION 10: STABILITY AND REACTIVITY

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Excess Heat, incompatible materials.

Incompatibility with various substances: Reactive with oxidizing agents, acids.

Corrosivity: Non-corrosive in presence of glass

Special Remarks on Reactivity: Incompatible with acid chloride and acid anhydrides.

Special Remarks on Corrosivity: Not available.

Polymerization: Will not occur.

SECTION 11: TOXICOLOGICAL INFORMATION

Routes of Entry: Inhalation. Ingestion.

Toxicity to Animals: LD50 (mouse): 120 mg/kg

Chronic effects on Humans:

Carcinogenic effects: Classified 4 (No Evidence) by NTP

Mutagenic Effects: Mutagenic for mammalian somatic cells.

Developmental Toxicity: Classified Reproductive system toxin/ females [Possible].

Other Toxic Effects on Humans:

Hazardous in case of skin contact (irritant), of ingestion, of inhalation.

Special Remarks on Toxicity to Animals: Not available

Special Remarks on Chronic Effects on Humans:

May affect genetic material. May cause adverse reproductive effects (maternal effects (parturation) and fetotoxicity) based on animal data. No human data found.

Special Remarks on other Toxic Effects on Humans: Acute Potential Health Effects:

Skin and Eyes: May cause severe irritation. May cause dilation of the pupils.

Inhalation: May cause respiratory tract irritation.

Ingestion: Harmful if swallowed. May cause GI tract irritation with nausea, vomiting and diarrhea.

May also affect the endocrine system, cardiovascular system (rapid, irregular, pounding heartbeat), respiration (dyspnea), and the brain. May affect behavior, CNS and cause convulsions, muscle weakness, somnolence, dizziness, nervousness, trembling, headache, increased sweating. Moderately toxic in high concentrations.



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SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity: Not available.

BOD5 and COD: Not available.

Products of Biodegradation:

Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation:

The products of degradation are less toxic than the product itself.

Special Remarks on the Products of Biodegradation: Not available

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal:

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

SECTION 14: TRANSPORT INFORMATION

DOT Classification: Not a DOT controlled material in the United States

Identification: Not applicable.

Special Provisions for Transport: Not applicable.

SECTION 15: REGULATORY INFORMATION

Federal and State Regulations: TSCA 8(b) inventory: Phenylephrine Hydrochloride

Other Regulations:

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200)

EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.

Other Classifications:

WHMIS (Canada): Not controlled under WHMIS (Canada)

DSCL (EEC):



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R22 Harmful if swallowed. R36/38 – Irritating to eyes and skin. R40 – Possible risks of irreversible effects. R62 – Possible risk of impaired fertility. S2 – Keep out of reach of children. S36/37 – Wear suitable protective clothing and gloves. S46 – If swallowed, seek medical advice immediately and show label.

HMIS (U.S.A.):
Health Hazard: 2
Fire Hazard: 1
Reactivity: 0
Personal Protection: E

National Fire Protection Association (U.S.A.):
Health: 2
Flammability: 1
Reactivity: 0
Specific hazard:

Protective Equipment:
Gloves. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Splash goggles.

SECTION 16: OTHER INFORMATION

References: Not available.
Other Special Considerations: Not available.

DISCLAIMER:

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