Metaproterenol hemisulfate salt

sc-257701

Material Safety Data Sheet



LOW Hazard Alert Code Key: **EXTREME HIGH** MODERATE

Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME

Metaproterenol hemisulfate salt

STATEMENT OF HAZARDOUS NATURE

CONSIDERED A HAZARDOUS SUBSTANCE ACCORDING TO OSHA 29 CFR 1910.1200.

NFPA



SUPPLIER

Santa Cruz Biotechnology, Inc. 2145 Delaware Avenue Santa Cruz, California 95060 800.457.3801 or 831.457.3800

EMERGENCY:

ChemWatch

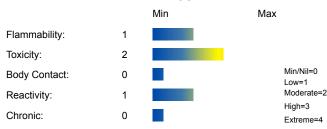
Within the US & Canada: 877-715-9305 Outside the US & Canada: +800 2436 2255 (1-800-CHEMCALL) or call +613 9573 3112

SYNONYMS

C22-H36-N2-O10-S, "1, 3-benzenediol, 5-(1-hydroxy-2-[(1-methylethyl)amino)ethyl]-, ", "sulfate(2:1) (salt)", "benzyl alcohol, 3, 5-dihydroxy-1lpha-[(isopropylamino)methyl]-, sulfate(2:1)", (salt), "5-[1-hydroxy-2-((1-methylethyl)amino)ethyl]-, 1, 3-benzenediol", "sulfate(2:1) (salt)", "3, 5-dihydroxy-alpha-[(isopropylamino)methyl benzyl alcohol sulfate(2; 1)", (salt), Alupent, Metaprel, "Metaproterenol sulfate", "Metaproterenol hemisulfate salt", sympathomimetic

Section 2 - HAZARDS IDENTIFICATION

CHEMWATCH HAZARD RATINGS



CANADIAN WHMIS SYMBOLS

EMERGENCY OVERVIEW RISK

POTENTIAL HEALTH EFFECTS

ACUTE HEALTH EFFECTS

SWALLOWED

■ Although ingestion is not thought to produce harmful effects, the material may still be damaging to the health of the individual following ingestion, especially where pre-existing organ (e.g. liver, kidney) damage is evident.

EYE

■ Although the material is not thought to be an irritant, direct contact with the eye may produce transient discomfort characterized by tearing or conjunctival redness (as with windburn).

SKIN

- The material is not thought to produce adverse health effects or skin irritation following contact (as classified using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable gloves be used in an occupational setting.
- Open cuts, abraded or irritated skin should not be exposed to this material.

INHALED

- The material is not thought to produce respiratory irritation (as classified using animal models). Nevertheless inhalation of the material, especially for prolonged periods, may produce respiratory discomfort and occasionally, distress.
- Persons with impaired respiratory function, airway diseases and conditions such as emphysema or chronic bronchitis, may incur further disability if excessive concentrations of particulate are inhaled.
- Sympathomimetics, which mimic stimulation of the sympathetic nerves, causing a stimulatory effect on the heart and central nervous system, constriction of blood vessels supplying the skin and mucous membranes, dilation of blood vessels supplying muscles of movement, and widening of the airways. These drugs may act on the receptor or the release of the neurotransmitter noradrenaline.
- Stimulation of heart beta-1 adrenergic receptors may cause increased heart rate and irregularity of heartbeat, tightness and a constricting pain in the chest, palpitations and heart stoppage; low blood pressure with dizziness, fainting and flushing may also occur. Beta-1 receptors mediate the action of sympathomimetics; beta-2 receptors control dilation of the airways.

CHRONIC HEALTH EFFECTS

■ Principal routes of exposure are by accidental skin and eye contact andinhalation of generated dusts. Long term exposure may esult in personality changes. Reproductive studies in animals produced no teratogenic or embyrocidal effects at 310 times the human inhalation dose; at 620 times the human inhalation dose there were skeletal abnormalities and hydrocephalus with bone separation

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

NAME CAS RN %
orciprenaline sulfate 5874-97-5 >98

Section 4 - FIRST AID MEASURES

SWALLOWED

· IF SWALLOWED, REFER FOR MEDICAL ATTENTION, WHERE POSSIBLE, WITHOUT DELAY. · Where Medical attention is not immediately available or where the patient is more than 15 minutes from a hospital or unless instructed otherwise:. Poison Information Centers in each State capital city can provide additional assistance.

EYE

■ If this product comes in contact with the eyes: · Wash out immediately with fresh running water. · Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.

SKIN

■ If skin contact occurs: Immediately remove all contaminated clothing, including footwear · Flush skin and hair with running water (and soap if available).

INHALED

· If dust is inhaled, remove from contaminated area. · Encourage patient to blow nose to ensure clear passage of breathing. · If irritation or discomfort persists seek medical attention.

NOTES TO PHYSICIAN

- for isoprenaline intoxication:
- · Tachycardia and cardiac arrhythmias induced by beta-2-adrenergic agonists may be diminished by propranolol but this must NOT be given to asthmatics because of the risk of increasing bronchoconstriction.
- · Cautious use of cardioselective beta-adrenergic blocking agents such as metaprolol (5-10 mg by slow intravenous injection, repeated if necessary after 5 minutes) may be indicated in asthma patients.

 MARTINDALE & AAP Guide.

Section 5 - FIRE FIGHTING MEASURES

Upper Explosive Limit (%):	Not available
Specific Gravity (water=1):	Not available
Lower Explosive Limit (%):	Not available
Relative Vapor Density (air=1):	Not applicable

EXTINGUISHING MEDIA

- · Foam
- · Dry chemical powder.

FIRE FIGHTING

- · Alert Emergency Responders and tell them location and nature of hazard.
- Wear breathing apparatus plus protective gloves for fire only.

GENERAL FIRE HAZARDS/HAZARDOUS COMBUSTIBLE PRODUCTS

- · Solid which exhibits difficult combustion or is difficult to ignite.
- · Avoid generating dust, particularly clouds of dust in a confined or unventilated space as dusts may form an explosive mixture with air, and any source of ignition, i.e. flame or spark, will cause fire or explosion. Dust clouds generated by the fine grinding of the solid are a particular hazard; accumulations of fine dust may burn rapidly and fiercely if ignited.

Combustion products include: carbon monoxide (CO), sulfur oxides (SOx) and nitrogen oxides (NOx).

FIRE INCOMPATIBILITY

■ Avoid contamination with oxidizing agents i.e. nitrates, oxidizing acids,chlorine bleaches, pool chlorine etc. as ignition may result.

PERSONAL PROTECTION

Glasses:

Chemical goggles.

Gloves:

Respirator:

Particulate

Section 6 - ACCIDENTAL RELEASE MEASURES

MINOR SPILLS

- · Clean up all spills immediately.
- · Avoid contact with skin and eyes.

MAJOR SPILLS

- · Clear area of personnel and move upwind.
- · Alert Emergency Responders and tell them location and nature of hazard.

Section 7 - HANDLING AND STORAGE

PROCEDURE FOR HANDLING

- · Avoid generating and breathing dust
- · Avoid contact with skin and eyes.
- · Wear nominated personal protective equipment when handling.
- · Use in a well-ventilated area.
- \cdot Use good occupational work practices.
- · Observe manufacturer's storing and handling recommendations.

RECOMMENDED STORAGE METHODS

- Packaging as recommended by manufacturer.
- · Check that containers are clearly labele.

Glass container.

STORAGE REQUIREMENTS

- · Protect from light.
- · Keep dry.
- · Store in original containers.
- · Keep containers securely sealed.
- · No smoking, naked lights or ignition sources.
- · Store in a cool, dry, well-ventilated area.
- · Store away from incompatible materials.
- · Protect containers against physical damage.
- · Check regularly for leaks.
- Observe manufacturer's storing and handling recommendations.

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE CONTROLS

The following materials had no OELs on our records

• orciprenaline sulfate: CAS:5874-97-5

PERSONAL PROTECTION







RESPIRATOR

Particulate

Consult your EHS staff for recommendations

■ EYE

No special equipment needed when handling small quantities of substance.

For bulk handling wear:

Chemical goggles or

Face shield.

HANDS/FEET

Rubber gloves

PVC gloves

Protective shoe covers

Head covering.

OTHER

No special equipment when handling small quantities of substance otherwise:

Coveralls

For Emergencies:

Vinyl suit

Safety shower

ENGINEERING CONTROLS

■ Enclosed local exhaust ventilation is required at points of dust, fume or vapor generation.

HEPA terminated local exhaust ventilation should be considered at point of generation of dust, fumes or vapors.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL PROPERTIES

Solid.

Mixes with water.

mater mater.			
State	Divided solid	Molecular Weight	520.60
Melting Range (°F)	395.6- 397.4	Boiling Range (°F)	Not available
Solubility in water (g/L)	Miscible	Flash Point (°F)	Not available
pH (1% solution)	Not available	Decomposition Temp (°F)	Not available
pH (as supplied)	Not applicable	Autoignition Temp (°F)	Not available
Vapour Pressure (mmHG)	Negligible	Upper Explosive Limit (%)	Not available
Specific Gravity (water=1)	Not available	Lower Explosive Limit (%)	Not available
Relative Vapor Density (air=1)	Not applicable	Volatile Component (%vol)	Negligible
Evaporation Rate	Not applicable		

APPEARANCE

White to almost white crystalline powder with bitter taste; mixes with water (1:2), ethanol (1:1).,

Section 10 - CHEMICAL STABILITY

CONDITIONS CONTRIBUTING TO INSTABILITY

- $\cdot \ \text{Presence of incompatible materials}.$
- · Product is considered stable.

STORAGE INCOMPATIBILITY

■ Avoid reaction with oxidizing agents.

For incompatible materials - refer to Section 7 - Handling and Storage.

Section 11 - TOXICOLOGICAL INFORMATION

ORCIPRENALINE SULFATE

TOXICITY AND IRRITATION

■ unless otherwise specified data extracted from RTECS - Register of Toxic Effects of Chemical Substances.

TOXICITY IRRITATION

Oral (rat) LD50: 5538 mg/kg Nil Reported

Subcutaneous (rat) LD50: >4000 mg/kg Intraduodenal (rat) LD50: 2230 mg/kg Oral (mouse) LD50: 4800 mg/kg

Subcutaneous (mouse) LD50: 290 mg/kg Intravenous (mouse) LD50: 114 mg/kg

Section 12 - ECOLOGICAL INFORMATION

No data

Section 13 - DISPOSAL CONSIDERATIONS

Disposal Instructions

All waste must be handled in accordance with local, state and federal regulations.

· Recycle wherever possible. Special hazard may exist - specialist advicemay be required.

Section 14 - TRANSPORTATION INFORMATION

NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS: DOT, IATA, IMDG

Section 15 - REGULATORY INFORMATION

REGULATIONS

orciprenaline sulfate (CAS: 5874-97-5) is found on the following regulatory lists;

"Canada Domestic Substances List (DSL)"

Section 16 - OTHER INFORMATION

LIMITED EVIDENCE

- Inhalation and/or ingestion may produce health damage*.
- * (limited evidence).

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- Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

 A list of reference resources used to assist the committee may be found at:

 www.chemwatch.net/references.
- The (M)SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

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