## BOEHRINGER-INGELHEIM PHARMACEUTICALS -- METAPROTERENOL SULFATE. ALUPENT -- 6505-01-078-0667

======== Product Identification ============ Product ID: METAPROTERENOL SULFATE, ALUPENT MSDS Date: 04/01/1991 FSC:6505 NIIN:01-078-0667 MSDS Number: BWLFF === Responsible Party === Company Name: BOEHRINGER-INGELHEIM PHARMACEUTICALS Address:900 RIDGEBURY RD Box:849 City:RIDGEFIELD State:CT ZIP:06877 Country: US Info Phone Num: 203-798-5521 Emergency Phone Num: 203-798-4312 Preparer's Name:(MSDS#:BIPI01(ALUPENT)) CAGE: 6J831 === Contractor Identification === Company Name: BOEHRINGER-INGELHEIM PHARMACEUTICALS Address:900 RIDGEBURY RD Box:849 City:RIDGEFIELD State:CT ZIP:06877 Country: US Phone: 203-798-4312 CAGE: 6J831 ======= Composition/Information on Ingredients ======== Ingred Name: BENZYL ALCOHOL, 3, 5-DIHYDROXY-ALPHA-(ISOPROPYL AMINO) METHYL-SULFATE (2:1) (SALT) OR METAPROTERENOL SULFATE OR ALUPENT CAS:5874-97-5 RTECS #: DO2275000 Fraction by Wt: 100% Other REC Limits: NONE RECOMMENDED ======== Hazards Identification =============== LD50 LC50 Mixture:LD50 ORAL, RAT = 5538 MG/KG. Routes of Entry: Inhalation: YES Skin: YES Ingestion: YES Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO Health Hazards Acute and Chronic: ACUTE: EYE, SKIN, &/OR RESPIRATORY IRRITATION. CHRONIC: POSSIBLE HYPERSENTSITIZATION. Explanation of Carcinogenicity: PER MSDS: NOT LISTED AS CARCINOGEN/POTENTIAL CARCINOGEN BY NTP/IARC/OSHA. Effects of Overexposure: POSSBILE ALLERGIC REACTION TO DUST IF INHALED, INGEST OR IN CONTACT W/SKIN, TACHYCARDIA, HYPERTENSION, PALPITATIONS, NERVOUSNESS, TREMOR, NAUSEA, VOMITING. Medical Cond Aggravated by Exposure: HPERSENSITIVITY TO MATERIAL,

HYPERTENSION, CORONARY ARTERY DISEASE, CONGESTIVE HEART FAILURE, HYPERTHYROIDISM, DIABETES.

First Aid:PERSONS DEVELOPING HYPERSENSITIVITY(ANAPHYLACTIC)REACTIONS
MUST RECEIVE IMMED MED ATTN.INGEST:FLUSH OUT MOUTH W/WATER.SEEK MED
ATTN.INHAL:REMOVE TO WELL VENTI AREA.GET MED ATTN.BREATH DIFF GIVE
OXY.BR EATH STOP START ART RESP.SKIN:REMOVE CONTAMIN CLOTH.FLUSH
W/COPIOUS QUANT OF WATER.IRRIT/RASH DEVELOPS GET MED
ATTN.EYE:IRRIGATE W/COPIOUS QUANT OF WATER.SEEK IMMED MED ATTN.

- Extinguishing Media: WATER SPRAY, DRY CHEMICAL, CARBON DIOXIDE, OR FOAM AS APPROPRIATE FOR SURROUNDING FIRE AND MATERIALS.
- Fire Fighting Procedures: AS W/ALL FIRES EVACUATE PERSONNEL TO SAFE AREA.FIREFIGHTERS SHOULD USE SELF-CONTAINED BREATHING EQMPT & PROTECTIVE CLOTH.USE WATERSPRAY TO COOL FIRE-EXPO CNTNRS
- Unusual Fire/Explosion Hazard: AS W/ANY FINELY DIVIDED ORG SOLID DUST MAY BE EXPLO FI MIXED W/AIR IN CRITICAL PROPORTIONS & PRESENCE OF IGN SOURCE.
- ======== Accidental Release Measures =========
- Spill Release Procedures: WEAR APPROVED RESP & CHEM COMPATIBLE GLOVES. VACUUM/SWEEP UP SPILLAGE. AVOID CREATING DUST. PLACE SPILLAGE IN APPROPRIATE CONTAINER FOR WASTE DISPOSAL. WASH CONTAMINATED CLOTHING BEFORE REUSE. VENTILATE AR EA & WASH SPILL SITE.
- ======== Handling and Storage ============
- Handling and Storage Precautions: AVOID CONTACT W/EYES/SKIN/CLOTH. AVOID BREATHING DUST. USE W/ADEQUATE DUST CONTROL. STORE IN AIRTIGHT CONTAINER. PROTECT FROM LIGHT & EXTREMES OF HEAT.
- Other Precautions: MECHANICAL EQMPT WHICH COMES IN CONTACT W/DRY
  MATERIAL SHOLD BE GROUNDED TO DISSIPATE POTENTIAL BUILDUP OF STATIC
  ELECTRICITY.REPORT ANY EXPO INCIDENT TO YOUR SUPERVISOR.DO NOT
  PERMIT EAT/DRINK/SMOKE NEAR MATL.
- ====== Exposure Controls/Personal Protection ========
- Respiratory Protection: THE NEED FOR RESP PROTECTION SHOULD BE DETERMINED BY AN INDUSTRIAL HYGIENE SURVEY. NIOSH/MSHA APPROVED DUST RESPIRATORS FOR PROTECTION AGAINST DUST SHOULD BE USED IF RESPIRATORS ARE FOUND TO BE NECESS ARY.
- Ventilation: ADEQUATE. LOCAL EXHAUST: RECOMMENDED. MECHANICAL (GENERAL AREA): RECOMMENDED.
- Protective Gloves: RUBBER GLOVES
- Eye Protection: SAF GOGGLES FOR PROTECTION FROM DUST
- Other Protective Equipment: APPROPRIATE LAB APPAREL, PROTECT EXPO SKIN.IF DUST HAZ EXISTS AN EYEWASH FOUNTAIN SHOULD BE MADE AVAILABLE.
- Work Hygienic Practices: MAINTAIN GOOD HOUSEKEEPING FOR CONTROL OF DUST. WASH WELL AFT HANDLING MATL. WEAR FRESH CLOTH DAILY. WASH CONTAMIN CLOTH.

Supplemental Safety and Health

======== Physical/Chemical Properties ==========

HCC:N1

Melt/Freeze Pt:M.P/F.P Text:401F,205C

Solubility in Water: SOLUBLE

Appearance and Odor: WHITE CRYSTALLINE POWDER, ODORLESS

======= Stability and Reactivity Data =========

Stability Indicator/Materials to Avoid:YES

ALKALIS, A HEAVY METAL IONS AND OXIDIZING AGENTS.

Stability Condition to Avoid: MATERIAL IS STABLE FROM A SAFETY POINT OF VIEW

Hazardous Decomposition Products: WHEN HEATED TO DECOMPOSITION OR UNDER FIRE CONDITONS, MATERIAL EMITS TOXIC FUMES.

======= Disposal Considerations ===========

Waste Disposal Methods: DISPOSE OF IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS. RECOMMENDED METHOD IS BY INCINERATION OR LANDFILL.

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