Product ID:BATTERY WET, FILLED WITH ACID MSDS Date:12/01/1996 FSC:6140 NIIN:00-057-2553 Status Code:A MSDS Number: CJKZB === Responsible Party === Company Name: EAST PENN MFG CO INC Address:DEKA RD **City:LYON STATION** State:PA ZIP:19536 Country:US Info Phone Num:800-424-9300 (CHEMTREC) Emergency Phone Num: (800) 424-9300 Chemtrec Ind/Phone:(800)424-9300 CAGE :04055 === Contractor Identification === Company Name: EAST PENN MFG CO INC Address:DEKA RD Box:City:LYON STATION State:PA ZIP:19536 Country:US Phone:610-682-6361 CAGE:04055

Ingred Name:LEAD CAS:7439-92-1 RTECS #:OF7525000 Minumum % Wt:43. Maxumum % Wt:70. ACGIH TLV:0.15 MG/M3 EPA Rpt Qty:1 LB DOT Rpt Qty:1 LB

Ingred Name:SULFURIC ACID CAS:7664-93-9 RTECS #:WS5600000 Minumum % Wt:20. Maxumum % Wt:44. OSHA PEL:1 MG/M3 ACGIH TL V:1 MG/M3 ACGIH STEL:3 MG/M3 EPA Rpt Qty:1000 LBS DOT Rpt Qty:1000 LBS

Ingred Name:ANTIMONY CAS:7440-36-0 RTECS #:CC4025000 Minumum % Wt:0. Maxumum % Wt:4. OSHA PEL:0.5 MG/M3 ACGIH TLV:0.5 MG/M3 EPA Rpt Qty:5000 LBS DOT Rpt Qty:5000 LBS

Ingred Name:ARSENIC CAS:7440-38-2 RTECS #:CG0525000 &It; Wt:.01 ACGIH TLV:0.01 MG/M3 EPA Rpt Qty:1 LB DOT Rpt Qty:1 LB

Ingred Name:POLYPROPYLENE CAS:9003-07-0 RTECS #:UD1842000 Minumum % Wt:5. Maxumum % Wt:10.

Ingred Name:CALCIUM CAS:7440-70-2 RTECS #:EV80400 00 < Wt:1.

Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES Reports of Carcinogenicity:NTP:YES IARC:YES OSHA:NO Health Hazards Acute and Chronic:TARGET ORGANS: RESPIRATORY SYSTEM, EYES, SKIN AND TEETH. ACUTE- SULFURIC ACID MAY CAUSE IRRITATION OF EYES, NOSE, AND THROAT. PROLONGED CONTACT MAY CAUSE SEVERE BURNS. CHRONIC- REPEATED CONTACT CAUS ES IRRITATION AND SKIN BURNS. REPEATED EXPOSURE TO

MIST MAY CAUSE ERROSION OF TEETH, CHRONIC EYE IRRITATION AND/OR CHRONIC INFLAMMATION OF THE NOSE, THROAT, AND BRONCHIAL TUBES.
Explanation of Carcinogenicity:SULFURIC ACID MIST: ACGIH- SUSPECTED HUMAN CARCINOGEN. NTP- REASONABLY ANTICIPATED TO BE A CARCINOGEN. LEAD: PROOF OF CARCINOGENICITY IN HUMANS IS LACKING AT PRESENT. Medical Cond Aggravated by Exposure:PULMONARY EDEMA, BRONCHITIS,
EMPHYSEMA, DENTAL ERROSION, AND TRACEOBRONCHITIS.
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First Aid:EYES & SKIN: FLUSH CONTACTED AREA WITH LARGE AMOUNTS OF WATER FOR AT LEAST 15 MIN. REMOVE CONTAMINATED CLOTHING AND OBTAIN MEDICAL ATTENTION. INGESTION: GIVE LARGE VOLUMES OF WATER. DO NOT INDUCE VOM ITING. OBTAIN MEDICAL TREATMENT. E
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Flash Point:NON-FLAMMABLE Lower Limits:4 Upper Limits:74
Extinguishing Media:AIR EXPLOSION LIMITS: HYDROGEN GAS. CLASS ABC EXTI
NGUISHER, CO2. Fire Fighting Procedures:COOL EXTERIOR OF BATTERY IF EXPOSED TO FIRE TO PREVENT RUPTURE. THE ACID MIST AND VAPORS IN A FIRE SITUATION ARE CORROSIVE. WEAR SPECIAL RESPIRATORY PROTECTION (SCBA) AND CLOTHING.
Unusual Fire/Explosion Hazard:HYDROGEN GAS, WHICH MAY EXPLODE IF IGNITED, IS PRODUCED BY THIS BATTERY ESPECIALLY WHEN CHARGING. USE ADEQUATE VENTILATION, AVOID OPEN FLAMES, SPARKS, OR OTHER SOURCES OF IGNITION. CONTACT OF ACID WITH METALS MAY PRODUCE TOXI
C SULFUR DIOXIDE FUMES AND MAY RELEASE FLAMMABLE HYDROGEN GAS.
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Spill Release Procedures: DILUTE SPILL CAUTIOUSLY WITH FIVE TO SIX VOLUMES OF WATER AND GRADUALLY NEUTRALIZE WITH SODIUM BICARBONATE,

SODA ASH OR LIME. WHEN EXPOSURE LEVEL IS NOT KNOWN, WEAR NIOSH APPROVED POSITIVE PRESSURE SE LF-CONTAINED BREATHING APPARATUS. Neutralizing Agent:SODIUM BICARBONATE

======== Handling and Storage ======

Handling and Storage Precautions:STORE AWAY FROM REACTIVE MATERIAL. Other Precautions:SODIUM BICARBONATE, SODA ASH, SAND, OR LIME SHOULD BE KEPT IN SAME GENERAL AREA FOR EMERGENCY USE. IF BATTERY CASE IS BROKEN, AVOID DIRECT CONTACT WITH INTERNAL COMPONENTS.

======= Exposure Controls/Personal Protection ==========

Respiratory Protection: RESPIRATOR REQUIRED WHEN PEL IS EXCEEDED OR EMPLOYEE WITNESSES RESPIRATORY IRRITATION.

Ventilation: MUST BE PROVIDED WHE

N CHARGING IN AN ENCLOSED AREA.

29CFR1910.178(G) AND .305(J) (7).MECHANICAL(GENERAL) ACCEPTABLE AT 1 TO 4 (SEE SUPPL DATA).

Protective Gloves: ACID RESISTANT

Eye Protection: PREFERRED

Other Protective Equipment: ACID RESISTANT APRON, BOOTS AND PROTECTIVE CLOTHING.

Work Hygienic Practices: GOOD PERSONAL HYGIENE AND WORK PRACTICES ARE MANDATORY.

Supplemental Safety and Health

AIR EXCHANGES/HOUR OR TO MAINTAIN AIR CONCENTRATIONS BELOW THE PEL. LOCAL EXHAUST: PREFERRED; LOCAL BUILDIN

G/FIRE CODES MAY REQUIRE

EXPLOSION PROOF FANS AND EQUIPMENT.

HCC:C1 Boiling Pt:=112.8C, 235.F B.P. Text:APPROX Melt/Freeze Pt:M.P/F.P Text:NA Vapor Pres:13 MMHG Vapor Density:NA Spec Gravity:1.220 - 1.325 Evaporation Rate & amp; Reference: