EXIDE CORP.-GENERAL BATTERY CORP -- LEAD-ACID BATTERY -- 6140-01-031-6879
========== Product Identification ==========

Product ID:LEAD-ACID BATTERY
MSDS Date:02/01/1996
FSC:6140
NIIN:01-031-6879
MSDS Number: CFTGH
=== Responsible Party ===
Company Name:EXIDE CORP.-GENERAL BATTERY CORP
Address:645 PENN STREET
Box:14205
City:READING
State:PA
ZIP:19612-4205
Country:US
Info Phone Num:610-378-0500
Emergency Phon
e Num:610-378-0500
Chemtrec Ind/Phone:(800)424-9300
CAGE:08163
=== Contractor Identification ===
Company Name:BATTERY OUTLET INC
Address:1608 CAMPOSTELLA RD
Box:City:CHESAPEAKE
State:VA
ZIP:23324
Country:US
Phone:757-545-4442
Contract Num:SP0430-99-M-F912
CAGE:0FGN2
Company Name:EXIDE CORP
Address:645 PENN STREET
Box:14205
City:READING
State:PA
ZIP:19612-4205
Country:US
Phone:610-378-0500/0798
CAGE:20038
Company Name:EXIDE CORP.-GENERAL BATTERY CORP
Address:645 PENN STREET
Box:City:READING
State

:PA
ZIP:19601
Country:US
Phone:215-378-0527/800-424-9300(CHEMTREC)
CAGE:08163

========== Composition/Information on Ingredients ==========

Ingred Name:LEAD (SARA 313) (CERCLA)
CAS:7439-92-1
RTECS #:OF7525000
= Wt:53.
Other REC Limits:NONE RECOMMENDED
OSHA PEL:SEE 1910.1025
ACGIH TLV:0.05MG/M3, A3; 9596
EPA Rpt Qty:1 LB
DOT Rpt Qty:1 LB

Ingred Name:ANTIMONY (SARA 313) (CERCLA)
CAS:7440-36-0
RTECS #:CC4025000
= Wt:.2
Other REC Limits:NONE RECOMMENDED
OSHA PEL:0.5 MG/M3
ACGIH TLV:0.5 MG
(SB)/M3; 9596
EPA Rpt Qty:5000 LBS
DOT Rpt Qty:5000 LBS

Ingred Name:ARSENIC (SARA 313) (CERCLA)
CAS:7440-38-2
RTECS #:CG0525000
= Wt:0.
Other REC Limits:NONE RECOMMENDED
OSHA PEL:SEE 1910.1018
ACGIH TLV:0.01 MG/M3, A1; 9596
EPA Rpt Qty:1 LB
DOT Rpt Qty:1 LB

Ingred Name:CALCIUM, METAL
CAS:7440-70-2
RTECS #:EV8040000
= Wt:.02
Other REC Limits:NONE RECOMMENDED

Ingred Name:TIN
CAS:7440-31-5
RTECS #:XP7320000
= Wt:.06
Other REC Limits:NONE RECOMMENDED
OSHA PEL:2 MG/M3
ACGIH TLV:2 MG/M3; 9596

Ingr

ed Name:SULFURIC ACID (SARA 302/313) (CERCLA) (ELECTROLYTE)
CAS:7664-93-9
RTECS #:WS5600000
Minumum % Wt:30.
Maxumum % Wt:40.
Other REC Limits:NONE RECOMMENDED
OSHA PEL:1 MG/M3
ACGIH TLV:1 MG/M3/3 STEL; 9596
EPA Rpt Qty:1000 LBS
DOT Rpt Qty:1000 LBS

Ingred Name:POLYPROPYLENE (CASE)
CAS:9003-07-0
RTECS #:TR5000000
Minumum % Wt:5.
Maxumum % Wt:6.
Other REC Limits:NONE RECOMMENDED

Ingred Name:SILICA, CRYSTALLINE - FUSED (GEL CELL BATTERIES ONLY)
CAS:60676-86-0
RTECS #:VV7328000
Fraction by Wt: 3
-5%
Other REC Limits:NONE RECOMMENDED
OSHA PEL:SEE TABLE Z-3
ACGIH TLV:0.1 MG/M3 RDUST;9596

========== Hazards Identification ==========

LD50 LC50 Mixture:TLV FOR SULFURIC ACID IS 1 MG/M3.
Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES
Reports of Carcinogenicity:NTP:NO IARC:YES OSHA:NO
Health Hazards Acute and Chronic:TARGET ORGANS:EYE, SKIN, CNS, KIDNEY.
ACUTE- SULFURIC ACID ELECTROLYTE CAN CAUSE EYE, SKIN, RESPIRATORY & DIGESTIVE TRACTS IRRITATIO
N, BURNS, CORNEAL & LUNG DAMAGE,
BLINDNESS. NO POSSIBILITY OF OVER E XPOSURE OF LEAD UNLESS BATTERY IS DESTROYED, MAY CAUSE EYE IRITATION. CHRONIC- LEAD MAYCAUSE ANEMIA, KIDNEY & NERVOUS SYSTEM DAMAGE. ACID CAN DAMAGE LUNGS & TEETH.
Explanation of Carcinogenicity:"STRONG INORGANIC ACID MISTS CONTAINING SULFURIC ACD": IARC HAS CLASSIFIED AS A CATAGORY I CARCINOGEN BUT DOES NOT APPLY TO SULFURIC ACID IN STATIC LIQUID STATE OR TO BATTERY ELECTROLYTE. LEAD COMPOUN DS: LIS

TED AS 2B CARCINOGEN BY
IARC. ARSENIC LISTED BY NTP, IAC, OSHA & NIOSH AS A POTENTIAL CARCINOGEN.

Effects of Overexposure:ELECTROLYTE: ACUTE: SEVERE SKIN IRRITATION, DAMAGE TO CORNEA MAY CAUSE BLINDNESS, UPPER RESPIRATORY IRRITATION. CHRONIC: POSSIBLE TOOTH EROSION, INFLAMMATION OF NOSE, THROAT & BRONCHIAL TUBES. LEAD: A CUTE-HEADACHE, FATIGUE, ABDOMINAL PAIN,LOSS OF APPETITE, MUSCULAR ACHES AND WEAKNESS, SLEEP DISTURBANCES AND IRRATABILITY. CHRONIC: ANEMIA, NEURO
PATHY-PARTICULARLY OF MORTOR NERVES (EG WRIST DROP), KI DNEY DAMAGE, REPRODUCTIVE CHANGES IN BOTH MALES & FEMALES.

Medical Cond Aggravated by Exposure:INORGANIC LEAD AND ITS COMPOUNDS CAN AGGRAVATE CHRONIC FORMS OF KIDNEY, LIVER AND NEUROLOGIC DISEASES. SULFURIC ACID MISTS CAN AGGRAVATE SKIN DISEASES SUCH AS ECZEMA, DERMATITIS AND LUNG DISEASES.

========== First Aid Measures ==========

First Aid:INHALED-ELECTROLYTE: REMOVE TO FRESH AIR IMMEDIATELY. I
F
BREATHING DIFFICULT, GIVE OXYGEN. LEAD: REMOVE FROM EXPOSURE, GARGLE, WASH NOSE & LIPS. CONSULT PHYSICIAN. INGESTED-ELECTROLYTE: GIVE LARGE QUA NTITIES OF WATER. DO NOT INDUCE VOMITING! CONSULT PHYSICIAN. LEAD: CONSULT PHYSICIAN IMMEDIATELY. SKIN-ELECTROLYTE: FLUSH WITH LARGE AMOUNTS OF WATER FOR AT LEAST 15 MINUTES. REMOVE CONTAMINATED CLOTH ES COMPLETELY, INCLUDING SHOES. LEAD: WASH IMMEDIATELY WITH SOAP & WATER. EYES-ELECTROLYTE: FLUSH IMMEDIATELY WITH WATER
FOR AT LEAST 15 MINUTES. CONSULT PHYSICIAN IMMEDIATELY.

========== Fire Fighting Measures ==========

Lower Limits:4.1 HYDROGEN
Upper Limits:74.2
Extinguishing Media:CARBON DIOXIDE (CO2), FOAM, DRY CHEMICAL.
Fire Fighting Procedures:USE SELF-CONTAINED BREATHING APPARATUS & ACID-RESISTANT CLOTHING, GLOVES, FACE & EYE PROTECTION. BEWARE OF ACID SPLATTERING. IFBATTERIES ARE ON CHARGE, SHUT OFF POWER TO CHARGING EQUIPMENT.
Unusual Fire/Explosion Hazard:DURING OPE

RATIONS, BATTERIES GENERATE &
RELEASE FLAMMABLE HYDROGEN GAS. THIS GAS, IF IGNITED, MAY CAUSE BATTERY EXPLOSION WITH CASING FRAGMENTS & CORROSIVE LIQUID ELECTROLYTE. CAREFULLY FOLLOW MANUFAC TURER'S INSTRUCTIONS FOR INSTALLATION &SERVICE.

========== Accidental Release Measures ==========

Spill Release Procedures:STOP FLOW OF MATERIAL, CONTAIN/ABSORB WITH DRY SAND, EARTH, VERMICULITE. IF POSSIBLE, CAREFULLY NEUTRALIZE SPILLED ELECTROLYTE WITH SODA ASH,
SODIUM BICARBONATE, LIME, ETC. WEAR
ACID-RESISTANT CLOTHES , BOOTS, GLOVES AND FACE SHIELD.DO NOT ALLOW DISCHARGE OF UN-NEUTRALIZED ACID TO SEWER. NEUTRALIZED ACID MUST BE MANAGED IN ACCORDANCE WITH APPROVED LOCAL, STATE AND FEDERAL REQUIREMENTS.
Neutralizing Agent:SODA ASH, LIME, SODIUM BICARBONATE.

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

Handling and Storage Precautions:STORE BATTERIES UNDER ROOF IN A COOL, DRY, WELL-VENTILATED AREAS SEPARATED
FROM INCOMPATIBLE MATERIALS
AND FROM SOURCES OF IGNITION. STORE ON SMOOTH, IMPERVIOUS SURFSCES WHICH ARE PROVIDED WITH LIQUID CONTAINMENT. KEEP AWAY FROM METALLIC OBJECTS WHICH COULD BRIDGE THE TERMINALS.
Other Precautions:HANDLE CAREFULLY & AVOID TIPPING. PROHIBIT SMOKING AND AVOID CREATING FLAMES & SPARKS NEARBY TO CHARGING OPERATIONS. CHARGING SPPACE SHOULD BE VENTILATED. KEEP BATTERY VENT CAPS IN PLACE. WEAR FACE & EYE PROTECTION WHEN NEAR BATTERIES BEINGCHARGED.

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

Respiratory Protection:NONE REQUIRED UNDER NORMAL CONDITIONS. WHEN CONCENTRATIONS OF SULURIC ACID MIST ARE KNOWN TO EXCEED PEL, USE NIOSH OR MSHA APPROVED RESPIRATORY PROTECTION.
Ventilation:STORE AND HANDLE IN WELL-VENTILATED AREA. IF MECHANICAL VENTILATION IS USED. COMPONENTS MUST BE ACID-RESISTANT
Protective Gloves:RUBBER OR PLASTIC ACID-RESISTANT GLOVES WITH ELBOW-LENGTH GAUNTLET.
Eye Protection:CHEMICAL

GOGGLES OR FACE SHIELD.
Other Protective Equipment:ACID-RESISTANT APRON. UNDER SEVERE EXPOSURE OR EMERGENCY CONDITIONS, WEAR ACID-RESISTANT CLOTHING, GLOVES AND BOOTS.
Work Hygienic Practices:HANDLE BATTERIES CAUTIOUSLY, DO NOT TIP TO AVOID SPILLS. AVOID BODILY CONTACT WITH INTERNAL COMPONENTS. WEAR PROTECTIVE CLOTHING, EYE & FACE PROTECTION, WHEN FILLING OR HANDLING BATTERIES.
Supplemental Safety and Health
NONE SPECIFIED BY MANUFACTURER.

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

HCC:C1
Boiling Pt:B.P. Text:203FTO 240F(S.G. RANGE
Vapor Pres:17 TO 11(FOR S.G. RANGE)
Vapor Density:>1 (AIR=1)
Spec Gravity:1.230 TO 1.350 (H20=1)
Viscosity:NOT SPECIFIED BY MFR.
Evaporation Rate & Reference: