

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 Pho

ne 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

Stat

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

=====  
Composition/Information on Ingredients  
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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

Ing

red 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 IRRITATI

ON, BURNS, CORNEAL & LUNG DAMAGE,

BLINDNESS. NO POSSIBILITY OF OVER E XPOSURE OF LEAD UNLESS BATTERY IS DESTROYED, MAY CAUSE EYE IRRITATION. 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: LI

STED 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, NEUR

OPATHY-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.

IF

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. IF BATTERIES ARE ON CHARGE, SHUT OFF POWER TO CHARGING EQUIPMENT.

Unusual Fire/Explosion Hazard:DURING OP

ERATIONS, BATTERIES GENERATE &  
RELEASE FLAMMABLE HYDROGEN GAS. THIS GAS, IF IGNITED, MAY CAUSE  
BATTERY EXPLOSION WITH CASING FRAGMENTS & CORROSIVE LIQUID  
ELECTROLYTE. CAREFULLY FOLLOW MANUFACTURER'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 SURFACES  
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 SPACE SHOULD BE VENTILATED. KEEP BATTERY VENT CAPS IN  
PLACE. WEAR FACE & EYE PROTECTION WHEN NEAR BATTERIES  
BEING CHARGED

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

Respiratory Protection: NONE REQUIRED UNDER NORMAL CONDITIONS. WHEN  
CONCENTRATIONS OF SULFURIC 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:203F TO 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 (H2O=1)  
Viscosity:NOT SPECIFIED BY MFR.  
Evaporation Rate & Reference: