EXIDE CORP -- LEAD-ACID BATTERY -- 6140-01-134-2531

========== Product Identification ==========

Product ID:LEAD-ACID BATTERY
MSDS Date:02/01/1993
FSC:6140
NIIN:01-134-2531
MSDS Number: CFCVJ
=== Responsible Party ===
Company Name:EXIDE CORP
Address:645 PENN STREET
City:READING (FORMALLY IN HORSHAM)
State:PA
ZIP:19612-4205
Country:US
Info Phone Num:610-378-0550/ FAX -0616
Emergency Phone Num:610-378-0500/
800-424-9300(CHEMTREC)
CAGE:20038
=== Contractor Identification ===
Company Name:CELL ENERGY
Box:UNKNOW
CAGE:1V269
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

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

Ingred Name:LEAD (SARA 313) (CERCLA)
CAS:7439-92-1
RTECS #:OF7525000
Fraction by Wt: 53%
Other REC Limits:100 UG/M3 (NIOSH)
OSHA PEL:SEE 1910.1025
ACGIH TLV:0.05MG/M3, A3; 9

596
EPA Rpt Qty:1 LB
DOT Rpt Qty:1 LB

Ingred Name:SULFURIC ACID (SARA 302/313) (CERCLA)
CAS:7664-93-9
RTECS #:WS5600000
Fraction by Wt: 30 - 40%
Other REC Limits:1 MG/M3 (NIOSH)
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:ANTIMONY (SARA 313) (CERCLA)
CAS:7440-36-0
RTECS #:CC4025000
Fraction by Wt: 0.2%
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 Na
me:ARSENIC (SARA 313) (CERCLA)
CAS:7440-38-2
RTECS #:CG0525000
Fraction by Wt: 0.003%
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
Fraction by Wt: 0.02%
Other REC Limits:NONE RECOMMENDED

Ingred Name:TIN
CAS:7440-31-5
RTECS #:XP7320000
Fraction by Wt: 0.06%
Other REC Limits:NONE RECOMMENDED
OSHA PEL:2 MG/M3
ACGIH TLV:2 MG/M3; 9596

Ingred Name:PROPYNE POLYMERS/

POLYPROPYLENE
CAS:9003-07-4
RTECS #:UD1842000
Fraction by Wt: 5 - 6%
Other REC Limits:NONE RECOMMENDED

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

LD50 LC50 Mixture:TLV FOR SULFURIC ACID IS 1 MG/M3.
Routes of Entry: Inhalation:NO Skin:NO Ingestion:YES
Reports of Carcinogenicity:NTP:YES IARC:YES OSHA:YES
Health Hazards Acute and Chronic:ACUTE- LEAD MAY CAUSE GI UPSET, LOSS OF APPETITE, DIARRHEA, CONSTIPATION, CRAMPING, LACK OF SLEEP. CONTACT WITH SULFURIC
ACID MAY LEAD TO EYE, SKIN & RESPIRATORY
TRACT IRRITATION, CORNEAL & LUNG DAMAG E. CHRONIC- LEAD MAY CAUSE ANEMIA, KIDNEY & NERVOUS SYSTEM DAMAGE. ACID CAN CAUSE BRONCHITIS, EROSION OF TOOTH ENAMEL.
Explanation of Carcinogenicity:CONTAINS ARSENIC AND LEAD.
Effects of Overexposure:LEAD MAY CAUSE GI UPSET, LOSS OF APPETITE, DIARRHEA, CONSTIPATION, CRAMPING, LACK OF SLEEP & FATIGUE. CONTACT WITH SULFURIC ACID MAY LEAD TO EYE, SKIN & RESPIRATORY TRACT IRRITATION, CORNEAL & LU
NG DA MAGE.
Medical Cond Aggravated by Exposure:INORGANIC LEAD AND ITS COMPOUNDS CAN AGGRAVATE CHRONIC FORMS OF KIDNEY, LIVER AND NEUROLOGIC DISEASES. CONTACT OF SULFURIC ACID WITH THE SKIN MAY AGGRAVATE SKIN DISEASES SUCH AS ECZEMA AND DERMATITIS.

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

First Aid:OBTAIN MEDICAL ATTENTION IN ALL CASES OF EXPOSURE.
EYES/SKIN:FLUSH WITH WATER FOR 15 MINUTES. KEEP EYELIDS OPEN.
INHALATION:MOVE TO FRESH AIR. PROVIDE
OXYGEN/CPR IF NEEDED.
INGESTION:DO NOT INDUCE VOM ITING.IF CONSCIOUS, DRINK LARGE AMOUNT OF WATER. CALL PHYSICIAN IMMEDIATELY.

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

Flash Point:NON-FLAMMABLE
Lower Limits:4.1%HYDROGEN
Upper Limits:74.2% (H2)
Extinguishing Media:CARBON DIOXIDE, FOAM, OR DRY CHEMICAL. WATER SPRAY MAY BE USED TO COOL FIRE-EXPOSED CONTAINER & DECREASE VAPORS.
Fire Fighting Procedures:IF BATTERIES ARE ON CHARGE, SHUT OFF POWER.
USE POS

ITIVE PRESSURE, SELF-CONTAINED BREATHING APPARATUS. WEAR ACID RESISTANT CLOTHING.
Unusual Fire/Explosion Hazard:HIGHLY FLAMMABLE HYDROGEN GAS IS PRODUCED DURING CHARGING AND BATTERY OPERATION. THEY ENTER THE AIR THROUGH THE VENT CAPS. KEEP AWAY SPARKS/SOURCES OF FIRE.

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

Spill Release Procedures:VENTILATE AREA. WEAR PROTECTIVE EQUIPMENTS. REMOVE COMBUSTIBLES & IGNITION SOURCES (H2 MAY BE PRESENT). CONTAIN BY D
IKING & COVER SPILL WITH SODA ASH/QUICKLIME. MIX WELL. CHECK THAT MIXTURE IS NEUTRAL . COLLECT & PLACE IN A DRUM. DO NOT FLUSH TO SEWER
Neutralizing Agent:SODA ASH (SODIUM CARBONATE), QUICKLIME (CALCIUM OXIDE)

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

Handling and Storage Precautions:STORE NEAR EYEWASH FOUNTAIN AND SAFETY SHOWER. STORAGE AREA SHOULD BE EQUIPPED WITH A DRAIN WHICH CAPTURES SPILLS OF ACID FOR PROPER DISPOSAL.
Other Precautions:POISON
-CAUSES SEVERE BURNS. DANGER-CONTAINS SULFURIC ACID. REACTS WITH WATER VIOLENTLY. KEEP LIGHTED CIGARETTES, SPARKS, AND FLAMES AWAY FROM CHARGING BATTERIES. KEEP OUT OF REACH OF SMALL CHILDREN. W ASH HANDS WELL AFTER HANDLING.

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

Respiratory Protection:NOT REQUIRED UNDER NORMAL USE. USE NIOSH-APPROVED ACID-MIST FILTER RESPIRATOR IF 1 MG/M3 TWA IS EXCEEDED (ACID).
Ventilation:ADEQUATE GENERAL VENTILATION
Protect
ive Gloves:RUBBER
Eye Protection:SPLASH-PROOF CHEMICAL GOGGLES
Other Protective Equipment:RUBBER APRON AND BOOTS. EYES WASH STATION AND SAFETY SHOWER. USE ACID-PROOF CLOTHING FOR MAJOR SPILLS.
Work Hygienic Practices:REMOVE METALLIC JEWELRY-SHOCK POTENTIAL. WASH THOROUGHLY BEFORE EATING AND DRINKING.
Supplemental Safety and Health
DO NOT ALLOW METALLIC MATERIALS TO SIMULATNEOUSLY CONTACT NEGATIVE AND POSITIVE TERMINALS OF CELLS AND BATTERIES. FOLLOW MANUFACTURER'S INSTRUCTIONS FO

R INSTALLATION AND SERVICE.

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

HCC:C1
Boiling Pt:B.P. Text:203-240F
Melt/Freeze Pt:M.P/F.P Text:NOT GIVEN
Decomp Temp:Decomp Text:NOT GIVEN
Vapor Pres:17-11
Vapor Density:> 1
Spec Gravity:1.230-1.350
Evaporation Rate & Reference:< 1 (BUTYL ACETATE=1)
Solubility in Water:COMPLETE
Appearance and Odor:MANUFACTURED ARTICLE. IT IS A BATTERY.

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

Stability Indicator
/Materials to Avoid:YES
COMBUSTIBLES, ORGANIC MATERIALS, STRONG REDUCING AGENTS, STRONG OXIDIZERS, METALS, STRONG BASES, HALIDES, WATER
Stability Condition to Avoid:HIGH HEAT, FLAMES (HYDROGEN), OVERCHARGING, SMOKING, SPARKS
Hazardous Decomposition Products:OXIDES OF LEAD & SULFUR, HYDROGEN, SULFUR DIOXIDE & SULFUR TRIOXIDE, ARSINE GAS, TOXIC METAL FUME, SULFURIC ACID MISTS

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

Waste Disposal Methods:DISPOSE AS HAZ
ARDOUS WASTE. OBSERVE ALL FEDERAL, STATE AND LOCAL ENVIRONMENTAL REGULATIONS FOR ACID OR LEAD SCRAP. SEND BATTERIES TO LEAD SMELTER FOR RECLAMATION FOLLOWING APPLICABLE FEDERAL, STATE AN D LOCAL REGULATIONS.

disclaims all liability for its use. Any person utilizing this document should seek competent professional advice to verify and assume responsibility for the suitability of this information to their particular situation.