

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;

9596  
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 Name: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

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===== 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 DAMAGE. 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 & L

UNG DAMAGE.

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.

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===== 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 VOMITING.IF CONSCIOUS, DRINK LARGE AMOUNT OF WATER. CALL PHYSICIAN IMMEDIATELY.

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===== 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 PO

SITIVE 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

DIKING & 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:POISO

N-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

Protec

tive 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 F

OR 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 Indicato

r/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 HA

ZARDOUS 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.

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