

EXIDE CORP/YUASA-EXIDE INC -- LEAD-ACID BATTERY,HP-31 9500 -- 6140-01-261-4977

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

Product ID:LEAD-ACID BATTERY,HP-31 9500

MSDS Date:04/01/1993

FSC:6140

NIIN:01-261-4977

MSDS Number: CDZGM

=== Responsible Party ===

Company Name:EXIDE CORP/YUASA-EXIDE INC

Address:645 PENN STREET

Box:14145

City:READING

State:PA

ZIP:19601

Country:US

Info Phone Num:610-378-0550/ FAX -06

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Emergency Phone Num:610-378-0500/800-424-9300(CHEMTREC)

CAGE:KO556

=== Contractor Identification ===

Company Name:CELL ENERGY INC

Address:3190-B ORANGE GROVE AVE

Box:City:NORTH HIGHLANDS

State:CA

ZIP:95660-5706

Country:US

Phone:916-484-7974

CAGE:1U269

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/YUASA EXIDE INC.

Address:645 PENN STREET

Box:14145

City:READING

State:PA

ZIP:196

12-4205
Country:US
Phone:610-378-0550/208-1975
CAGE:KO556

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

Ingred Name:LEAD (SARA 313) (CERCLA)
CAS:7439-92-1
RTECS #:OF7525000
Fraction by Wt: 60%
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
Fraction by Wt: 2%
Other REC Limits:NONE RECOMMENDED
OSHA PEL:0.5 MG/M3
ACGIH TLV:0.5 M
G (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: 0.2%
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: 0.2%
Other REC Limits:NONE RECOMMENDED

Ingred Name:TIN
CAS:7440-31-5
RTECS #:XP7320000
Fraction by Wt: 0.2%
Other REC Limits:NONE RECOMMENDED
OSHA PE

L:2 MG/M3
ACGIH TLV:2 MG/M3; 9596

Ingred Name:SULFURIC ACID (SARA 302/313) (CERCLA)/ELECTROLYTE
CAS:7664-93-9
RTECS #:WS5600000
Fraction by Wt: 10 - 30%
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:CASE MATERIAL
Fraction by Wt: 5 - 10%
Other REC Limits:NONE RECOMMENDED

Ingred Name:SILICA, CRYSTALLINE - FUSED/SILICONE DIOXIDE (GEL CELL
BATTERIES ONLY)
CAS:60676-86-0
RTECS #:VV7328000
Fraction by Wt:
10%
Other REC Limits:NONE RECOMMENDED
OSHA PEL:SEE TABLE Z-3
ACGIH TLV:0.1 MG/M3 RDUST;9596

Ingred Name:SHEET MOLDING COMPOUND
Fraction by Wt: 10%
Other REC Limits:NONE RECOMMENDED

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

LD50 LC50 Mixture:LD50 (ORAL, RAT) IS NOT RELEVANT.
Routes of Entry: Inhalation:NO Skin:NO Ingestion:YES
Reports of Carcinogenicity:NTP:YES IARC:YES OSHA:YES
Health Hazards Acute and Chronic:TARGET ORGANS:EYE, SKIN, CNS, LUNG, GI
TRACT.

ACUTE- LEAD MAY CAUSE GI UPSET, DIARRHEA, CRAMPING &
FATIGUE. SULFURIC ACID MAY CAUSE EYE, SKIN & RESPIRATORY TRACT
IRRITATION, BURNS, CORNEAL & LUNG DAMA GE. CHRONIC- LEAD MAY CAUSE
ANEMIA, KIDNEY & NERVOUS SYSTEM DAMAGE. ACID CAN CAUSE BRONCHITIS,
EROSION OF TOOTH ENAMEL.

Explanation of Carcinogenicity:CONTAINS ARSENIC WHICH IS LISTED BY NTP
AND IARC AND REGULATED BY OSHA AS A CARCINOGEN. CONTAINS LEAD.

Effects of Overexposure:GI UPSET, LOSS OF APPETITE, DIARRHEA,
CONST

IPATION, CRAMPING, LACK OF SLEEP, FATIGUE, IRRITATION, BURNS,
CORNEAL AND LUNG DAMAGE

Medical Cond Aggravated by Exposure:LEAD AND ITS COMPOUNDS CAN
AGGRAVATE CHRONIC FORMS OF KIDNEY, LIVER AND NEUROLOGIC DISEASES.
CONTACT OF SULFURIC ACID WITH SKIN MAY AGGRAVATE DISEASES SUCH AS
ECZEMA. ACID MIST AGGRAVATES LUNG DISEASE

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

First Aid:OBTAIN MEDICAL ATTENTION IMMEDIATELY IN ALL CASES OF
EXPOSURE. EYES/SKIN:IMM
EDIATELY FLUSH WITH WATER FOR 15 MINUTES.
KEEP EYELIDS OPEN. INHALATION:MOVE TO FRESH AIR. INGESTION:DO NOT
INDUCE VOMITING. IF CONSCIOUS, DRINK LARGE AMOUNT OF WATER OR
MILK.

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

Flash Point:NON-FLAMMABLE
Lower Limits:4.1% H2
Upper Limits:74.2% H2
Extinguishing Media:USE CARBON DIOXIDE, SAND, FOAM/DRY CHEMICAL. WATER
APPLIED TO ELECTROLYTE GENERATES HEAT AND CAUSES IT TO SPATTER.
Fire Fighting Procedures:WEAR AC
ID-RESISTANT CLOTHING AND
NIOSH-APPROVED SELF-CONTAINED BREATHING APPARATUS WITH FULL
FACEPIECE OPERATED IN THE POSITIVE PRESSURE MODE.
Unusual Fire/Explosion Hazard:BATTERY CELLS MAY RUPTURE WHEN EXPOSED TO
EXCESSIVE HEAT. THIS COULD RESULT IN RELEASE OF CORROSIVE
MATERIALS. HYDROGEN GAS, IF PRESENT, IS EXPLOSIVE/FLAMMABLE.

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

Spill Release Procedures:WEAR PROTECTIVE EQUIPMENTS. REMOVE
COMBUSTIBLES & IGNITION
SOURCES (H2 MAY BE PRESENT). CONTAIN BY
DIKING AND COVER SPILL WITH SODA ASH OR QUICKLIME. MIX WELL. CHECK
THAT MIXTURE IS NEUTRAL. COLLECT A ND 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:KEEP TERMINALS COVERED. AVOID SHORTING BATTERIES. DO NOT CRACK OR OVERCHARGE BATTERIES. KEEP LIGHTED CIGARETTES, SPARKS, AND FLAMES AWAY FROM CHARGING BATTERIES. KEEP OUT OF REACH OF CHILDREN. WASH THOROUGHLY 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. IF MECHANICAL VENTILATION IS USED, COMPONENTS MUST BE ACID-RESISTANT.

Protective Gloves:RUBBER OR PLASTIC

Eye Protection:SPLASH-PROOF CHEMICAL GOGGLES/FACESHIELD

Other Protective Equipment:RUBBER APRON AND BOOTS. EYES WASH STATION AND SAFETY SHOWER. USE ACID-PROOF CLOTHING FOR MAJOR SPILLS.

Work Hygienic Practices:OBSERVE GOOD INDUSTRIAL HYGIENE PRACTICES AND RECOMMENDED PROCEDURES. WASH THOROUGHLY BEFORE EATING, DRINKING/SMOKING.

Supplemental

Safety and Health

FORMULA CHANGED. FOR PREVIOUS FORMULATION, SEE PNI A, SAME NSN.

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

HCC:C1

NRC/State Lic Num:NOT RELEVANT

Spec Gravity:1.215-1.35 ACID

Viscosity:NOT RELEVANT

Evaporation Rate & Reference:NOT RELEVANT

Solubility in Water:NOT RELEVANT

Appearance and Odor:BATTERY CONTAINING SULFURIC ACID AND LEAD.

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

Stability Indicator/Materials to Avoid:YES

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ORGANIC MATERIALS, STRONG REDUCING AGENTS, METALS, WATER, SULFUR TRIOXIDE GAS, STRONG OXIDIZING AGENTS, HALIDES, BASES

Stability Condition to Avoid:HIGH HEAT, OPEN FLAMES, OVERCHARGING, SMOKING, SPARKS

Hazardous Decomposition Products:LEAD OXIDE, HYDROGEN, SULFUR DIOXIDE, SULFUR TRIOXIDE, CARBON MONOXIDE, METAL FUME, VAPOR OR DUST, ARSINE GAS

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

Waste Disposal Methods:DISPOSE AS HAZARDOUS WASTE. OBSERVE ALL FED

ERAL,
STATE AND LOCAL ENVIRONMENTAL REGULATIONS FOR ACID OR LEAD SCRAP.
SEND BATTERIES TO LEAD SMELTER FOR RECLAMATION FOLLOWING APPLICABLE
FEDERAL, STATE AND LOCAL REGULATIONS.

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