

EXIDE CORP -- LEAD-ACID BATTERY -- 6140-01-031-6876

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

Product ID:LEAD-ACID BATTERY

MSDS Date:09/01/1993

FSC:6140

NIIN:01-031-6876

MSDS Number: BYDKB

=== Responsible Party ===

Company Name:EXIDE CORP

Address:9176 RED BRANCH RD

City:COLUMBIA

State:MD

ZIP:21045-2059

Country:US

Info Phone Num:301-381-8500

Emergency Phone Num:301-381-8500 OR 215-378-0757

CAGE:90660

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Contractor Identification ===

Company Name:BATTERY OUTLET INC

Address:1608 CAMPOSTELLA RD

Box:City:CHESAPEAKE

State:VA

ZIP:23324

Country:US

Phone:757-545-4442

CAGE:0FGN2

Company Name:ENERSYS INC

Address:8306PATUXENT RANGE RS SUITE 103

Box:City:JESSUP

State:MD

ZIP:20794-8609

Country:US

Phone:301-381-8500 OR 215-378-0757

CAGE:90660

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:YUASA EXIDE I

NC  
Address:257 SPRING VALLEY RD  
Box:City:LAURELDALE  
State:PA  
ZIP:19605  
Country:US  
Phone:215-921-4480  
CAGE:0RN21

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

Ingred Name:LEAD (SARA III)  
CAS:7439-92-1  
RTECS #:OF7525000  
Fraction by Wt: 60%  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:SEE 1910.1025  
ACGIH TLV:0.15 MG/M3,DUST;9394  
EPA Rpt Qty:1 LB  
DOT Rpt Qty:1 LB

Ingred Name:ANTIMONY (SARA III)  
CAS:7440-36-0  
RTECS #:CC4025000  
Fraction by Wt: 2%  
Other REC Limits:NONE RECOMMEND  
ED  
OSHA PEL:0.5 MG/M3  
ACGIH TLV:0.5 MG (SB)/M3; 9394  
EPA Rpt Qty:5000 LBS  
DOT Rpt Qty:5000 LBS

Ingred Name:ARSENIC (SARA III)  
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; 9394  
EPA Rpt Qty:1 LB  
DOT Rpt Qty:1 LB

Ingred Name:CALCIUM  
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:NON

E RECOMMENDED  
OSHA PEL:2 MG/M3  
ACGIH TLV:2 MG/M3; 9394

Ingred Name:SULFURIC ACID (SARA III) (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; 9394  
EPA Rpt Qty:1000 LBS  
DOT Rpt Qty:1000 LBS

Ingred Name:PROPENE POLYMERS (POLYPROPPYLENE)  
CAS:9003-07-4  
RTECS #:UD1842000  
Fraction by Wt: SEE #16%  
Other REC Limits:NONE RECOMMENDED

Ingred Name:POLYSTYRENE  
CAS:9003-53-6  
Fraction by Wt: SEE #16%  
Other REC Limits:NO  
NE RECOMMENDED

Ingred Name:STYRENE ACRYLONITRILE  
CAS:9003-54-7  
RTECS #:AT6978000  
Fraction by Wt: SEE #16%  
Other REC Limits:NONE RECOMMENDED

Ingred Name:ACRYLONITRILE BUTADIENE STYRENE  
CAS:9003-56-9  
RTECS #:AT6970000  
Fraction by Wt: SEE #16%  
Other REC Limits:NONE RECOMMENDED

Ingred Name:STYRENE BUTADIENE  
CAS:9003-55-8  
RTECS #:WL6478000  
Fraction by Wt: SEE #16%  
Other REC Limits:NONE RECOMMENDED

Ingred Name:POLYVINYL CHLORIDE  
CAS:9002-86-2  
RTECS #:KV0350000  
Fraction by Wt: SEE #16%  
Other REC Li

imits:NONE RECOMMENDED

Ingred Name:POLYCARBONATE

Fraction by Wt: SEE #16%

Other REC Limits:NONE RECOMMENDED

Ingred Name:HARD RUBBER

Fraction by Wt: SEE #16%

Other REC Limits:NONE RECOMMENDED

Ingred Name:POLYETHYLENE

CAS:9002-88-4

RTECS #:TQ3325000

Fraction by Wt: SEE #16%

Other REC Limits:NONE RECOMMENDED

Ingred Name:CASE MATERIAL, TOTAL OF INGREDIENTS #7 THRU 15.

Fraction by Wt: 5-10%

Other REC Limits:NONE RECOMMENDED

Ingred Name:SILICON DIOXIDE (GEL BATTERIES ONLY) (SEE INGRED #19)

CAS:606

76-86-0

RTECS #:VV7328000

Fraction by Wt: 10%

Other REC Limits:NONE RECOMMENDED

OSHA PEL:10 MG/M3 RDUST; Z-3

ACGIH TLV:0.1 MG/M3 RDUST;9394

Ingred Name:SHEET MOLDING COMPOUND (GLASS-REINFORCED POLYESTER) (SEE  
INGRED #19)

Fraction by Wt: 10%

Other REC Limits:NONE RECOMMENDED

Ingred Name:OTHER(INORG PB & ELECTROLYTE PRIM CMPNTS OF EVERY BATTERY  
MFG BY YUASA-EXIDE.OTHER INGRED MAY BE PRESENT DEPENDS ON TYP)

RTECS #:9999999ZZ

Other REC Limits:NONE RECOMMENDED

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===== Hazard

s Identification =====

LD50 LC50 Mixture:NOT KNOWN

Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES

Reports of Carcinogenicity:NTP:YES IARC:YES OSHA:YES

Health Hazards Acute and Chronic:H2SO4:INHAL:SEVER RESP

IRRIT.INGEST:IRRIT MOUTH/THROAT/ESOPHAGUS/STOMACH.SKIN/EYE:SEVE

IRRIT,BURNS,ULCERATION,BURNS, CORNEA DAMAGE,BLINDNESS.PB

CMPDS:INHAL:IRRIT UPPER RESP TRACT & LUNGS. INGEST:SYS TOX

ICITY.EYE:IRRIT.CHRONIC:TOOTH ENAMEL,INFLAMM OF NOSE/THROAT/

B

BRONCHIAL TUBES.ANEMIA,NEUROPATHY(MOTOR NERVES)KID/REPROD D

Explanation of Carcinogenicity:PER MSDS:H2SO4 MIST FROM MISUSE OF

PRODUCT. LEAD CMPDS. ARSENIC.

Effects of Overexposure:SKIN IRRIT, DAMAGE TO CORNEA, UPPER RESP IRRIT.

SYMPTOMS OF TOXICITY OF LEAD CMPDS WHEN PRODUCT HEATED, OXIDIZED OR

OTHERWISE PROCESSED OR DAMAGED TO CREATE DUST/VAPOR/FUME:HEADACHE,

FATIGUE, ABDOMINAL PAIN, LOSS OF APPETITE, MUSCULAR ACHES &

WEAKNESS, SLEEP DISTURBANCES & IRRITABILITY.

Medical Cond

Aggravated by Exposure:OVEREXPOSURE TO H2SO4 MIST MAY

CAUSE LUNG DAM,AGGRAVATE PULM CONDITIONS.H2SO4 CONTACT W/SKIN MAY

AGGRAVATE SKIN DISEASES(ECZEMA & CONTACT DERM).PB & CMPDS CAN

AGGRAVATE SOME FORMS OF KID/ LIV/NEURO DI

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

First Aid:INHAL:ACID:REMOVE TO FRESH AIR IMMED. IF BREATH DIFFI GIVE

OXY.PB:GARGLE,WASH NOSE/LIPS.CALL DR.INGEST:ACID:GIVE LG QUANTITIES

OF H2O.DON'T INDUCE VOMIT.CALL DR.SKIN:ACID:FLU

SH W/LOTS AMTS OF

H2O FOR @ LEAST 15MINS.REMOVE CONTAMIN CLOTH/SHOE.PB:WASH IMMED

W/SOAP & WATER.EYE:ACID/PB:FLUSH IMMED W/LG AMTS OF H2O FOR @ LEAST

15MINS.SEE DR.

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

Lower Limits:4.1 H2 GAS

Upper Limits:74.2

Extinguishing Media:CARBON DIOXIDE, FOAM, DRY CHEMICAL.

Fire Fighting Procedures:IF BATTERIES ARE ON CHARGE, SHUT OFF POWER.

USE + PRES SCBA. WATER APPLIED TO ELECTROLYTE GENERATES HEAT &

CASUES IT TO

SPATTER. WEAR ACID-RESISTANT CLOTHING.

Unusual Fire/Explosion Hazard:HIGHLY FLAMM H2 GAS GENERATED DURING CHARG/ OPER OF BATTERY.KEEP SPARKS OR OTHER SOURCES OF IGN AWAY.DON'T ALLOW METALLIC MATLS TO CONTACT -/+ TERMINALS.

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

Spill Release Procedures:STOP FLOW.CONTAIN/ABSORB SM SPILLS W/DRY SAND,EARTH,VERMI.DON'T USE COMBUST MATLS.CAREFULLY NEUTRALIZE ELECTROLYTE W/SODA ASH,SODIUM BICARBONATE,LIME,ETC.WEAR ACI

D-RESISTANT CLOTH,BOOT,GLOV, FACESHIEL D.DON'T ALLOW DISCHARGE OF UNTREATED ACID TO SEWER

Neutralizing Agent:SODA ASH, SODIUM BICARBONATE, LIME.

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

Handling and Storage Precautions:STORE BATTERIES IN COOL,DRY,WELL-VENTI AREAS W/IMPERVIOU SURFACES & ADEQUATE CONTAINMENT IN EVENT OF SPILLS.SEPARATE FROM INCOMP MATLS,SPARKS,HEAT,FIR

Other Precautions:BATTERIES SHOULD ALSO BE STORED UNDER ROOF FOR PROTECTION AGAINST A

DVERSE WEATHER CONDITIONS.STORE & HANDLE ONLY

IN AREAS W/ADEQUATE H2O SUPPLY & SPILL CONTROL.AVOID DAMAGE TO CONTAINERS.FOLLOW MFG'S INSTRUCTIONS FOR INSTALLATION & SERVICE.

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

Respiratory Protection:NONE REQUIRED UNDER NORMAL CONDITONS. WHEN CONCENTRATION OF H2SO4 MIST ARE KNOWN TO EXCEED PEL USE NIOSH OR MSHA APPROVED RESPIRATORY PROTECTION.

Ventilation:STORE & HANDLE IN WELL-VENTILATED AREA. IF MECHANICAL

VENTILATION IS USED COMPONENTS MUST BE ACID-RESISTANT.

Protective Gloves:RUB,PLASTIC ACID RESISTANT W/ELBOW LENGT

Eye Protection:CHEMNICAL GOGGLES OR FACE SHIELD.

Other Protective Equipment:ACID-RESIS APRON.UNDER SEVERE EXPOSURE OR EMERG CONDITIONS WEAR ACID-RESIS CLOTH/BOOTS.EYEWASH & SHOWERS W/UNLIM H2O SUP

Work Hygienic Practices:HANDLE CAUTIOUSLY TO AVID SPILLS.MAKE CERTAIN VENT CAPS ON SECURLEY.AVOID CONTACT W/INTERNAL COMPONENTS.

Supplemental Safety and Health

CONSULT STATE ENV

IRONEMNTAL AGENCY &/OR FED EPA FOR DISPOSAL. WEAR  
PROTECTIVE CLOTHING WHEN FILLING OR HANDLING BATTERIES.

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

HCC:C1

Boiling Pt:B.P. Text:203F,95C

Vapor Pres:10

Vapor Density:>1

Spec Gravity:1.215-1.350

Evaporation Rate & Reference: