

YUASA-EXIDE INC -- LEAD-ACID BATTERY,NP 1.2-12 -- 6140-01-371-0520

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

Product ID:LEAD-ACID BATTERY,NP 1.2-12

MSDS Date:06/01/1996

FSC:6140

NIIN:01-371-0520

MSDS Number: CFKTT

=== Responsible Party ===

Company Name:YUASA-EXIDE INC

Address:645 PENN ST

Box:14205

City:READING

State:PA

ZIP:19612-4205

Country:US

Info Phone Num:610-208-1975

Emergency Phone Num:610-208-1975

CAGE:IO592

=== Contractor Identification ===

Company Name:YUASA-EXIDE INC

Address:2366 BERNVILLE ROAD

Box:14145

City:READING

State:PA

ZIP:19612-4145

Country:US

Phone:610-208-1975

CAGE:77280

Company Name:YUASA-EXIDE INC

Address:645 PENN ST

Box:14145

City:READING

State:PA

ZIP:19612

Country:US

Phone:610-208-1975

CAGE:IO592

Company Name:YUASA-EXIDE,INC.

Address:645 PENN ST.

Box:City:READING

State:PA

ZIP:19601

Country:US

Phone:215-371-0400

CAGE:0W0V7

===== Composition/Information on Ingred

ients =====

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 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: 0.2%
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 PEL:2 MG/M3
ACGIH TLV:2 MG/M3; 9596

Ingred Name:SULFURIC ACID (SARA 302/313) (CERCLA)/ELECTROLYTE
CAS:7664-9

3-9

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 (POLYPROPYLENE, POLYSTYRENE, STYRENE
ACRYLONITRILE, STYRENE BUTADIENE, POLYCARBONATE, HARD RUBBER ETC.)

Fraction by Wt: 5 - 10%

Other REC Limits:NONE RECOMMENDED

Ingred Name:SILICONE DIOXIDE (GEL CELL BATTERIES ONLY)/SILICA,
CRYSTALLINE - FUSED

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 (GLASS-REINFORCED POLYESTER)

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, S
KIN, CNS, LUNG, GI

TRACT. ACUTE- LEAD MAY CAUSE GI UPSET & FATIGUE. ACID MAY CAUSE
EYE, SKIN, MOUTH, THROAT, STOMACH & RESPIRATORY TRACT IRRITATION,
BURNS, CORNEAL & LUNG DAMAGE. C HRONIC- 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. ALSO CONTAINS LEAD.

Effects of Overexposure:GI UPSET, LOSS OF

APPETITE, DIARRHEA,
CONSTIPATION, CRAMPING, LACK OF SLEEP, FATIGUE, SEVERE IRRITATION,
BURNS, CORNEAL AND LUNG DAMAGE, BLINDNESS, IRRITABILITY, ULCERATION
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:IMMEDIATELY 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.

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

Flash Point:NON-FLAMMABLE
Lower Limits:4.1% (H2)
Upper Limits:74.2% (H2)
Extinguishing Media:USE CARBON DIOXIDE, SAND, HALON/DRY CHEMICAL. WATER
APPLIED TO ELECTROLYTE GENERAT
ES HEAT AND CAUSES IT TO SPATTER.
Fire Fighting Procedures:WEAR ACID-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 Procedu
res: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. STOR

AGE AREA SHOULD BE EQUIPPED WITH A DRAIN WHICH CAPTURES
SPILLS OF ACID FOR PROPER DISPOSAL.

Other Precautions:KEEP TERMINALS COVERED. AVOID SHORTING BATTERIES.
KEEP LIGHTED CIGARETTES, SPARKS, AND FLAMES AWAY FROM CHARGING
BATTERIES. KEEP OUT OF REACH OF CHILDREN. STORE AWAY FROM
INCOMPATIBLE MATERIALS. STORE IN AREA WITH ADEQUATE WATER SUPPLY.

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

Respiratory Protection:NOT REQUIRED UNDER NORMAL USE. USE
NIOS

H-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
RECOMM

ENDED PROCEDURES. WASH AFTER HANDLING AND BEFORE EATING OR
DRINKING.

Supplemental Safety and Health

===== 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:SEALED, BATTERY CONTAINING SULFURIC ACID AND LEAD.

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

Stability Indic

ator/Materials to Avoid:YES

SOLVENTS THAT DISSOLVE BATTERY CASE MATERIAL, ORGANIC MATERIALS, STRONG
REDUCING AGENTS, METALS, WATER, STRONG OXIDIZERS

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, TOXIC
ARSINE GAS

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

Waste Disposal Methods:DISPOSE AS

HAZARDOUS 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 AND LOCAL REGULATIONS.

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