

EXIDE CORP -- LEAD ACID BATTERY -- 6140-01-446-9498

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

Product ID:LEAD ACID BATTERY

MSDS Date:02/01/1996

FSC:6140

NIIN:01-446-9498

MSDS Number: CFYVG

=== Responsible Party ===

Company Name:EXIDE CORP

Address:645 PENN STREET

Box:14205

City:READING (FORMALLY IN HORSHAM)

State:PA

ZIP:19612-4205

Country:US

Info Phone Num:610-378-0550/ FAX -0616

Emergency Phone Num:61

0-378-0500/800-424-9300(CHEMTREC)

CAGE:20038

=== Contractor Identification ===

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: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: 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:SULFURIC ACID (SARA 302/313) (CERCLA)

CAS:7664-93-9

RTECS #:WS5600000

Fraction by Wt: 30-40%

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:INGREDIENTS 8-9 COMPRISE THE CASE MATERIAL

Other REC Li

imits:NONE RECOMMENDED

Ingred Name:POLYPROPYLENE

CAS:9003-07-0

RTECS #:TR5000000

Other REC Limits:NONE RECOMMENDED

Ingred Name:RUBBER, HARD

Other REC Limits:NONE RECOMMENDED

Ingred Name:OTHER COMPONENTS, INGREDIENT 11

Other REC Limits:NONE RECOMMENDED

Ingred Name:SILICA, CRYSTALLINE - FUSED

CAS:60676-86-0

RTECS #:VV7328000

Fraction by Wt: 3-5%

Other REC Limits:NONE RECOMMENDED

OSHA PEL:SEE TABLE Z-3

ACGIH TLV:0.1 MG/M3 RDUST;9596

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===== Hazards Identification =====
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Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES

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

Health Hazards Acute and Chronic:ACUTE: SEVERE SKIN IRRITATION, DAMAGE TO CORNEA, UPPER RESPIRATORY. CHRONIC: POSSIBLE EROSION OF TOOTH ENAMEL; INFLAMMATION OF NOSE, THROAT, AND BRONCHIAL TUBES.

Explanation of Carcinogenicity:CONTAINS I A [7440-38-2]

WHICH IS LISTED BY NTP AND IARC AND REGULATED BY OSHA AS A CARCINOGEN.

Effects of Overexposure:INHALATION-
MAY CAUSE SEVERE RESPIRATORY

IRRITATION. INGESTION-SEVERE IRRITATION OF MOUTH, THROAT, ESOPHAGUS & STOMACH. SKIN-SEVERE IRRITATION, BURNS & ULCERATIONS. EYE-SEVERE IRRITATION, BURNS, CORNEA DAMAGE, BLINDNESS.

Medical Cond Aggravated by Exposure:OVEREXPOSURE TO SULFURIC ACID MIST MAY CAUSE LUNG DAMAGE & AGGRAVATE PULMONARY CONDITIONS. CONTACT OF SULFURIC ACID WITH SKIN MAY AGGRIVATE SKIN DISEASES SUCH AS ECZEMA AND CONTACT DERMATITIS.

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===== First Aid M

Measures =====

First Aid:INHALATION-REMOVE TO FRESH AIR IMMEDIATELY. IF BREATHING IS DIFFICULT, GIVE OXYGEN. INGESTION-GIVE LARGE QUANTITIES OF WATER; DO NOT INDUCE VOMITING; CONSULT PHYSICIAN. SKIN-FLUSH WITH LARGE AMOUNTS OF WATER FOR AT LEAST 15 MIN. REMOVE CONTAMINATED CLOTHING COMPLETELY. EYES-FLUSH IMMEDIATELY WITH LARGE AMOUNTS OF WATER FOR AT LEAST 15 MIN; CONSULT PHYSICIAN.

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

Low

Per Limits:4.1,HYDROGEN

Upper Limits:74.2HYDROGEN

Extinguishing Media:CARBON DIOXIDE, FOAM, DRY CHEMICAL.

Fire Fighting Procedures:IF BATTERIES ON CHARGE, SHUT OFF POWER. USE POSITIVE PRESSURE SCBA. WATER APPLIED TO ACID GENERATES HEAT AND CAUSES SPATTER. WEAR ACID RESISTANT CLOTHING.

Unusual Fire/Explosion Hazard:HIGHLY FLAMMABLE HYDROGEN GAS IS GENERATED DURING CHARGING & OPERATION OF BATTERY. TO AVOID RISK OF FIRE OR EXPLOSION, KEEP SPARKS AWAY FROM BATTERIES.

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== Accidental Release Measures =====

Spill Release Procedures:STOP FLOW OF MATERIAL, CONTAIN/ABSORB SPILL WITH SAND, EARTH, OR VERMICULITE. DO NOT USE COMBUSTIBLE MATERIALS. NEUTRALIZE WITH SODA ASH, SODIUM BICARBONATE, AND LIME. WEAR ACID-RESISTANT CLOTHING, BOOTS & FACE SHIELD.

Neutralizing Agent:SODA ASH (SODIUM CARBONATE), BAKING SODA, OR QUICK LIME (CALCIUM OXIDE).

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

Handling and Storage Pre

cautions:STORE IN COOL, DRY, WELL-VENTILATED AREA WITH IMPERVIOUS SURFACES AND ADEQUATE CONTAINMENT IN THE EVENT OF SPILLS. AVOID PHYSICAL DAMAGE TO CONTAINERS

Other Precautions:BATTERIES SHOULD BE STORED UNDER ROOF FOR PROTECTION AGAINST ADVERSE WEATHER CONDITIONS. SEPARATE FROM INCOMPATIBLE MATERIALS. KEEP AWAY FROM FIRE, SPARKS AND HEAT. STORE AND HANDLE ONLY IN AREAS WITH ADEQUATE WATER SUPPLY AND SPILL CONTROL.

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

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Respiratory Protection:NONE REQUIRED UNDER NORMAL CONDITIONS. WHEN CONCENTRATIONS OF SULFURIC ACID MIST ARE KNOWN TO EXCEED PEL, USE NIOSH OR MSHA-APPROVED RESPIRATORY PROTECTION.

Ventilation:STORE AND HANDLE IN WELL VENTILATED AREAS. IF MECHANICAL VENTILATION IS USED, COMPONENTS MUST BE ACID-RESISTANT.

Protective Gloves:RUBBER/PLASTIC GLOVES WITH GAUNTLET.

Eye Protection:CHEMICAL SPLASH GOGGLES OR FACE SHIELD.

Other Protective Equipment:ACID-RESISTANT APRON. UNDER SEVERE EXPOSURE

OR EMERGENCY CONDITIONS, WEAR ACID-RESISTANT CLOTHING & BOOTS.

Work Hygienic Practices:WASH AFTER HANDLING AND BEFORE EATNG, DRINKING OR SMOKING. LAUNDER CONTAMINATED CLOTHING BEFORE REUSE.

Supplemental Safety and Health

IN AREAS WHERE SULFURIC ACID IS HANDLED IN CONCENTRATIONS GREATER THAN 1%, EMERGENCY EYEWASH STATIONS AND SHOWERS SHOULD BE PROVIDED, WITH UNLIMITED WATER SUPPLY. A BATTERY IS A MANUFACTURED ARTICLE. MSDS FOR DRY CHEARGED BATTERY CAN BE FOUND UNDER SA ME NSN P/N "A"; MSDS FOR ELECTROLYTE P/N "C".

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

HCC:N1

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 TO 11

Vapor Density:>1

Spec Gravity:1.230-1.350

Evaporation Rate & Reference: