EXIDE CORPORATION -- LEAD-ACID BATTERY, PART C -- 3695-01-268-9156

Product ID:LEAD-ACID BATTERY,PART C MSDS Date:02/01/1993 FSC:3695 NIIN:01-268-9156 Kit Part:Y MSDS Number: BQYMW === Responsible Party === **Company Name: EXIDE CORPORATION** Address:645 PENN ST City:READING State:PA ZIP:19601 Country:US Info Phone Num:215-378-0500/215-378-0616(FAX) **Emergency Phone Num:** 215-378-0500/800-424-9300(CHEMTREC) CAGE:60038 === 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 Company Name: TIMKEN CORP GOVERNMENT SALES BON-17 Address:1835 DUEBER AVE SW City:CANTON State:OH ZIP:44706-2798 Country:US Phone:330-471-6587/330-471-6470 FAX CAGE:60038

Ingred Name:SULFURIC ACID (SARA III)

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; 9293 EPA Rpt Qty:1000 LBS DOT Rpt Qty:1000 LBS

Ingred Name:LEAD (SARA III) CAS:7439-92-1 RTECS #:OF7525000 Fraction by Wt: 53% Other REC Limits:NONE RECOMMENDED OSHA PEL:0.05 MG/M3;1910.1025 ACGIH TLV:0.15 MG/M3;DUST 9293 EPA Rpt Qty:1 LB DOT Rpt Qty:1 LB

Ingred Name:ANTIMONY (SARA III) CAS:7440-36-0 RTECS #:CC4025000 Fraction by Wt: 0.2% Other REC Limits:NONE RECOMME NDED OSHA PEL:0.5 MG/M3 ACGIH TLV:0.5 MG SB/M3; 9293 EPA Rpt Qty:5000 LBS DOT Rpt Qty:5000 LBS

Ingred Name:ARSENIC (SARA III) CAS:7440-38-2 RTECS #:CG0525000 Fraction by Wt: 0.003% Other REC Limits:NONE RECOMMENDED OSHA PEL:0.5 MG/M3 (AS) ACGIH TLV:0.01,A1 MG/M3; 9394 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 RE C Limits:NONE RECOMMENDED OSHA PEL:2 MG/M3 ACGIH TLV:2 MG/M3; 9293

Ingred Name:POLYPROPYLENE CAS:9003-07-4 RTECS #:UD1842000 Fraction by Wt: 5-6% Other REC Limits:NONE RECOMMENDED

Ingred Name:SILICA, CRYSTALLINE - FUSED (GEL CELL BATTERIES ONLY) CAS:60676-86-0 RTECS #:VV7328000 Fraction by Wt: 3-5% Other REC Limits:NONE RECOMMENDED OSHA PEL:SEE TABLE Z3 ACGIH TLV:0.1 MG/M3 RDUST;9293

LD50 LC50 Mixture:LD50 ORAL RAT IS 2140 MG/KG (SULF. ACID) Routes of Entry: Inhalation:NO Skin:NO Ingestion:NO Reports of Carcinogenicity:NTP:NO IARC:YES OSHA:NO Health Hazards Acute and Chronic: ACUTE: SEVERE BURNS AND ULCERATION OF SKIN, EYES, MOUTH, THROAT, ESOPHAGUS AND STOMACH. INFLAMMATION OF BRONCHIAL MEMBRANES. LEAD MAY CAUSE GASTROINTESTINAL DISORDERS AND CNS EFFECTS. CHRONIC: EROSION OF TEETH, INFLAMMATION OF NOSE, THROATAND BRONCHIAL TUBES. LEAD MAY CAUSE ANEMIA, DAMAGE TO KIDNEYS AND CNS. Explanati on of Carcinogenicity:LEAD IS LISTED UNDER IARC. Effects of Overexposure: IF CONTACTED, SEVERE BURNS AND ULCERATION OF SKIN AND EYES. IF INHALED, SEVERE RESPIRATORY IRRITATION. IF INGESTED, SEVERE BURNS AND ULCERATION. Medical Cond Aggravated by Exposure:SULFURIC ACID MAY AGGRAVATE SKIN DISEASES SUCH AS ECZEMA AND DERMATITIS. LEAD CAN AGGRAVATE CHRONIC

FORMS OF KIDNEY, LIVER AND NEUROLOGIC DISEASES.

First Aid:E

YES/SKIN: FLUSH WITH PLENTY OF WATER. SEE DOCTOR IMMEDIATELY. REMOVE CONTAMINATED CLOTHING AND SHOES. INHALATION: REMOVE TO FRESH AIR. GIVE OXYGEN/CPR IF NEEDED. SEE DOCTOR. INGESTION: DO NOT INDUCE VOMITING. GIVE MILK OR WATER, FOLLOWED BY 2 OUNCES OF MILK OF MAGNESIA (NO CARBONATES). SEE DOCTOR IMMEDIATELY.

Flash Point:NONE Lower Limits:4.0(HYDROGN) Upper Limits:75(HYDROGEN) Extinguishing Media:USE CARB ON DIOXIDE, DRY CHEMICAL, FOAM. Fire Fighting Procedures:EVACUATE AREA. REMOVE ALL IGNITION SOURCES. WEAR SULFURIC ACID RESISTANT CLOTHING AND A FULL FACED SCBA. COOL FIRE EXPOSED CONTAINERS WITH WATER SPRAY. Unusual Fire/Explosion Hazard:HYDROGEN GAS MAY BE PRODUCED AND MAY EXPLODE IF IGNITED. REMOVE ALL IGNITION SOURCES. VENTILATE AREA. WATER GENERATES HEAT AND CAUSES ACID TO SPLATTER.

Spill Release Procedure

s:WEAR APPROPIATE PROTECTIVE EQUIPMENT. DILUTE CAUTIOUSLY WITH WATER. COVER WITH SODA ASH OR QUICKLIME. SCOOP UP AND PLACE IN APPROPIATE DISPOSAL CONTAINER. FLUSH AREA WITH LARGE AMOUNTS OF WATER. Neutralizing Agent:SODA ASH (SODIUM CARBONATE), BAKING SODA OR

QUICKLIME (CALCIUM OXIDE).

Handling and Storage Precautions:STORE AT ROOM TEMPERATURE AWAY FROM FLAMES, IGNITION SOURCES, COMBUSTIBLE AND ORGANIC MATE RIALS. AVOID

PROLONGED OVERCHARGING. WEAR PROTECTIVE EQUIPM. Other Precautions:DO NOT CARRY BATTERY BY TERMINALS. DO NOT DROP BATTERY, PUNCTURE OR ATTEMPT TO OPEN BATTERY CASE. KEEP TERMINALS COVERED IN PLASTIC CASE. AVOID SHORTING BATTERIES. PLACE BROKEN BATTERIES IN PLASTIC CO NTAINERS AND DELIVER TO BATTERY RECYCLER

Respiratory Protection:NONE NORMALLY REQUIRED. NIOSH/MSHA-APPROVED CARTRIDGE RESPIRATOR F

OR ACIDS OR FULL FACE MASK AS APPROPIATE FOR EXPOSURE OF CONCERN WHEN TLV IS EXCEEDED. Ventilation:GENERAL (MECHANICAL) VENTILATION. LOCAL EXHAUST IN CONFINED AREAS. Protective Gloves:RUBBER GLOVES IF CONTACT IS EXPECTED. Eye Protection:GOGGLES IF CONTACT IS EXPECTED. Other Protective Equipment:RUBBER APRON AND BOOTS IF CONTACT IS EXPECTED. EYE WASH STATION AND SAFETY SHOWER. Work Hygienic Practices:WASH THOROUGHLY AFTER HANDLING. Supplemental Safety and Health KEY1:C1. CLEAN TERMINA LS WITH MILD BAKING SODA SOLUTION AND WASH WITH WATER. WHEN BRUSHING BATTERY POSTS, USE MASK APPROVED FOR LEAD DUST, SAFETY GLASSES AND GLOVES.

HCC:C1 Boiling Pt:=95.C, 203.F B.P. Text:203-240F Vapor Pres:17-11 Vapor Density:>1 Spec Gravity:1.23-1.35 pH: