

EXIDE CORP -- 24F-470 ELECTRIC STORAGE BATTERY -- 6140-01-031-6876

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

Product ID:24F-470 ELECTRIC STORAGE BATTERY

MSDS Date:02/01/1996

FSC:6140

NIIN:01-031-6876

MSDS Number: BVFYL

=== Responsible Party ===

Company Name:EXIDE CORP

Address:645 PENN STREET

City:READING (FORMALLY IN HORSHAM)

State:PA

ZIP:19612-4205

Country:US

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

Em

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

CAGE:20038

=== 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: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.-GENERAL BATTERY CORP

Address:645 PENN STREET

Box:City:READING

State:PA

ZIP:19601

Country:US

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ne:215-378-0527/800-424-9300(CHEMTREC)
CAGE:08163

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Composition/Information on Ingredients
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Ingred Name:SULFURIC ACID (SARA III)
CAS:7664-93-9
RTECS #:WS5600000
Fraction by Wt: 30-40%
Other REC Limits:NONE SPECIFIED
OSHA PEL:1 MG/M3
ACGIH TLV:1 MG/M3; 9192
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 SPECIFIED
OSHA PEL:0.05 MG/M3;1910.1025
ACGIH TLV:0.15 MG/M3;DUST 919
2
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 SPECIFIED
OSHA PEL:0.5 MG/M3
ACGIH TLV:0.5 MG SB/M3; 9192
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 SPECIFIED
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 SPECIFIED

Ingred Name:TIN
CAS:7440-31-5
RTECS #:XP7320000
Fraction by Wt: 0.06%
Other REC Limits:NONE SPECIFIED
OSHA PEL:2 MG/M3
ACGIH TLV:2 MG/M3; 9192

Ingred Name:POLYPROPYLENE AND HARD RUBBER
CAS:9003-07-0
Fraction by Wt: 5-6%
Other REC Limits:NONE RECOMMENDED

Ingred Name:SILICON DIOXIDE (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

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

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 IAR
C 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 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.

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

Lower Limits:4.1, HYDROGEN
Upper Limits:74.2 HYDROGEN
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).

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

Handling and Storage Precautions: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 =====

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.

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

HCC:Z4

Boiling Pt:>95.C, 203.F

B.P. Text:203-240F

Vapor Pres:17 TO 11

Vapor Density:>1

Spec Gravity:1.230-1.350

Evaporation Rate & Reference: