

TROJAN BATTERY CO -- LEAD ACID STORAGE BATTERY -- 6140-01-360-6488

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Product Identification  
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Product ID:LEAD ACID STORAGE BATTERY

MSDS Date:03/03/1997

FSC:6140

NIIN:01-360-6488

MSDS Number: CJVMV

=== Responsible Party ===

Company Name:TROJAN BATTERY CO

Address:12380 CLARK ST

City:SANTA FE SPRINGS

State:CA

ZIP:90670-3804

Country:US

Info Phone Num:213-946-8381

Emergency Phone Num:714-521-8

215

Preparer's Name:JOHN J BRYSON

Chemtec Ind/Phone:(800)424-9300

CAGE:94598

=== Contractor Identification ===

Company Name:CELL ENERGY INC

Address:3190-B ORANGE GROVE AVE

Box:City:NORTH HIGHLANDS

State:CA

ZIP:95660-5706

Country:US

Phone:916-484-7974

Contract Num:SP0430-99-M-AQ72

CAGE:1U269

Company Name:TROJAN BATTERY CO

Address:12380 CLARK ST

Box:City:SANTA FE SPRINGS

State:CA

ZIP:90670

Country:US

Phone:562-946 8381 / 800-423-6569

CAGE:94598

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Composition/Information on Ingredient  
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Ingred Name:LEAD/LEAD OXIDE/LEAD SULFATE

CAS:7439-92-1

RTECS #:OF7525000

Minumum % Wt:60.

Maxumum % Wt:97.

OSHA PEL:0.05 MG/M3

ACGIH TLV:0.15 MG/M3

EPA Rpt Qty:1 LB

DOT Rpt Qty:1 LB

Ingred Name:ANTIMONY

CAS:7440-36-0

RTECS #:CC4025000

Minumum % Wt:1.5

Maxumum % Wt:6.

OSHA PEL:0.5 MG/M3

ACGIH TLV:0.5 MG/M3

EPA Rpt Qty:5000 LBS

DOT Rpt Qty:5000 LBS

Ingred Name:ARSENIC

CAS:7440-38-2

RTECS #:CG0525000

&lt; Wt:1.

OSHA PEL:0.01MG/M3

ACGIH TLV:0.01 MG/M3

EPA Rpt Qty:1 LB

DOT Rpt Qt

y:1 LB

Ingred Name:SULFURIC ACID (BATTERY ELECTROLYTE)

CAS:7664-93-9

RTECS #:WS5600000

Minumum % Wt:10.

Maxumum % Wt:38.

OSHA PEL:1 MG/M3

ACGIH TLV:1 MG/M3

ACGIH STEL:3 MG/M3

EPA Rpt Qty:1000 LBS

DOT Rpt Qty:1000 LBS

Ingred Name:CALCIUM

CAS:7440-70-2

RTECS #:EV8040000

&lt; Wt:.15

Ingred Name:TIN

CAS:7440-31-5

RTECS #:XP7320000

&lt; Wt:.3

OSHA PEL:2.0 MG/M3

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

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

Reports of

Carcinogenicity:NTP:UNKNOWN IARC:NO OSHA:NO

Health Hazards Acute and Chronic:ACUTE- ACID CAN CAUSE IRRITATION OF EYES, NOSE, THROAT. BREATHING MIST PRODUCES RESPIRATORY DIFFICULTY, CONTACT WITH SKIN & EYES CAUSES IRRITATION & SKIN BURNS. CHRONIC- REPEATED CONTACT WITH SULFURIC ACID BATTERY ELECTROLYTE FLUID MAY CAUSE DRYING OF THE SKIN WHICH MAY RESULT IN IRRITATION & DERMATITIS. PROLONGED INHALATION OF A MIST OF SULFURIC ACID CAN CAUSE INFLAMMATION OF THE UPPER

RESPIRATORY TRACT LEADING TO

CHRONIC BRONCHITIS. SHORT TERM LIQUID OR VAPOR CONTACT MAY RESULT IN EYE IRRITATION & ACID BURNS. PROLONGED CONTACT TO STRONG ACID FUMES MAY RESULT IN EROSION OF THE TOOTH ENAMEL .

Explanation of Carcinogenicity:IARC MONOGRAPHS: NO, OSHA: NO, EPA CAG: YES.

Effects of Overexposure:ACID CAN CAUSE IRRITATION OF EYES, NOSE, THROAT. BREATHING MISTS PRODUCES RESPIRATORY DIFFICULTY, CONTACT WITH SKIN AND EYES CAUSES IRRITATION AND SKIN BURN. SULFURIC

ACID

MIST CAUSES COUGHING AND WILL BURN EYES AND SKIN.

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

First Aid:INHALATION: MOVE TO VENTILATED AREA. OBTAIN MEDICAL ATTENTION. EYES: WASH THE EYES WITH COPIOUS QUANTITIES OF RUNNING WATER FOR 15 MIN. OBTAIN MEDICAL ATTENTION. SKIN: FLUSH AREA WITH LARGE AMOUNTS OF RUNNING WATER. REMOVE CONTAMINATED CLOTHING AND OBTAIN MEDICAL ATTENTION. INGESTION: WASH OUT MOUTH WITH RUNNING WATER. GIVE MILD

OR WATER TO DRINK. DO NOT INDUCE VOMITING. CALL

PHYSICIAN. INGESTION: WASH OUT MOUTH WITH RUNNING WATER. GIVE MILK OR WATER TO DRINK. DO NOT INDUCE VOMITING. CALL PHYSICIAN. LEAD EXPOSURE: MAY CAUSE LASSITUDE, CONSTIPATION, ANEMIA, NAUSEA, VOMITING, PARALYSIS AND CNS DEPRESSION.

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

Autoignition Temp:=357.2C, 675.F

Lower Limits:4.1FOR H2

Upper Limits:74.2 FOR H2

Extinguishing Media:USE MEDIA SUITABLE FOR SURROU

**ENDING FIRES.**

Fire Fighting Procedures:LEAD/ACID BATTERIES DO NOT BURN, OR BURN WITH DIFFICULTY. EXTINGUISH FIRE WITH AGENT SUITABLE FOR SURROUNDING COMBUSTIBLE MATERIALS. COOL EXTERIOR OF BATTERY EXPOSED TO FIRE TO PREVENT RUPTURE. ACID MIST AND VAPORS GENERATED BY HEAT OR FIRE ARE CORROSIVE. WEAR RESPIRATORY PROTECTION (SCBA) AND PROTECTIVE CLOTHING.

Unusual Fire/Explosion Hazard:HYDROGEN GAS AND SULFURIC ACID VAPORS ARE GENERATED UPON OVERCHARGE. VENTILATE CHARGING AREAS AS PER ACGIH

INDUSTRIAL VENTILATION, A MANUAL OF RECOMMENDED PRACTICE AND NATIONAL FIRE CODE 1930 VOL. 1,P , 12,, B-9, 10. HYDROGEN GAS IS FLAMMABLE OR EXPLOSIVE WHEN MIXED WITH AIR, OXYGEN, CHLORINE.

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

Spill Release Procedures:WEAR PROTECTIVE CLOTHING. VENTILATE ENCLOSED AREAS. DIKE TO CONTAIN CONTAMINATED MATERIALS AND LIQUIDS. LIMIT SITE ACCESS TO EMERGENCY RESPONDERS. NEUTRALIZE WITH SODIUM BICAR

BONATE, SODA ASH, LIME OR OTHER NEUTRALIZING AGENT.

Neutralizing Agent:SODIUM BICARBONATE, SODA ASH, LIME OR OTHER NEUTRALIZING AGENT

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

Handling and Storage Precautions:KEEP AWAY FROM FLAMES DURING AND IMMEDIATELY AFTER CHARGING. COMBUSTION OR OVERCHARGING MAY CREATE OR LIBERATE TOXIC AND HAZARDOUS GASES AND LIQUIDS INCLUDING HYDROGEN, SULFURIC ACID MIST, SULFUR DIOXIDE, SULFUR TRIOXIDE, STILBINE, ARSINE AND SULFURIC ACID.

Other Precautions:HANDLING & STORAGE: STORE BATTERIES IN COOL, DRY, WELL-VENTILATED AREA. DO NOT SHORT CIRCUIT BATTERY TERMINALS, OR REMOVE VENT CAPS DURING STORAGE OR RECHARGING. OTHER PRECAUTIONS: AVOID PROLONGED OVERCHARGE. SODIUM BICARBONATE, SODA ASH, SAND OR LIME SHOULD BE KEPT ON-SITE FOR SPILL REMEDIATION.

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

Respiratory Protection:SULFURIC ACID MIST- FULL FACE OR HALF MASK RESPIRATOR

R WITH ACID MIST FILTER OR SCBA.

Ventilation:CHANGE AIR EVERY 15 MIN. LOCAL EXHAUST:- NO.

MECHANICAL(GENERAL): NO INFORMATION FOUND.

Protective Gloves:ACID RESISTANT RUBBER OR PLASTIC.

Eye Protection:GOGGLES OR FACE SHIELD.

Other Protective Equipment:ACID-RESISTANT RUBBER OR PLASTIC APRON,  
BOOTS AND PROTECTIVE CLOTHING.

Work Hygienic Practices:WASH THOROUGHLY BEFORE EATING/DRINKING/SMOKING  
& AT END OF WORKDAY.

Supplemental Safety and Health

BATTERIES MUST BE HANDLED WITH CARE. DO D

ROP, BREAK OPEN OR OVERCHARGE

BATTERIES. WASH HANDS AFTER TOUCHING TERMINALS.

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

HCC:C1

Boiling Pt:=112.8C, 235.F

Melt/Freeze Pt: