

TROJAN BATTERY CO -- LEAD-ACID BATTERY,379596 -- 6140-01-261-4977

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Product Identification
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Product ID:LEAD-ACID BATTERY,379596

MSDS Date:05/01/1990

FSC:6140

NIIN:01-261-4977

MSDS Number: CFCWD

=== 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:310-946-8381/714-521-8215

Emergency Phone Nu

m:310-946-8381/800-424-9300(CHEMTREC)

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

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 Ingredients
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Ingred Name:SULFURIC ACID (SARA 302/313)

(CERCLA)/30-38% SULFURIC ACID
IN WATER

CAS:7664-93-9

RTECS #:WS5600000

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:LEAD (SARA 313) (CERCLA)/LEAD ALLOY

CAS:7439-92-1

RTECS #:OF7525000

Fraction by Wt: 94 - 97%

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) IN LEAD ALLOY

CAS:7440-36-0

RTE

CS #:CC4025000

Fraction by Wt: 2 - 6%

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) IN LEAD ALLOY

CAS:7440-38-2

RTECS #:CG0525000

Fraction by Wt: 0.25%

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:TIN IN LEAD ALLOY

CAS:7440-31-5

RTECS #:XP7320000

Fraction by Wt: 0.3%

Other REC Limits:NONE

RECOMMENDED
OSHA PEL:2 MG/M3
ACGIH TLV:2 MG/M3; 9596

===== 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, SKIN, CNS, LUNG, GI TRACT. ACUTE- LEAD MAY CAUSE GI UPSET, DIARRHEA, CRAMPING & FATIGUE. SULFURIC ACID MAY CAUSE EYE, SKIN & RESPIRATORY TRACT IRRITATION, BURNS, CORNEAL & LUNG DAMAGE. CHRONIC- 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. CONTAINS LEAD.
Effects of Overexposure:GI UPSET, LOSS OF APPETITE, DIARRHEA, CONSTIPATION, CRAMPING, LACK OF SLEEP, FATIGUE, IRRITATION, BURNS, CORNEAL AND LUNG DAMAGE
Medical Conditions 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. PROVIDE CPR/OXYGEN IF NEEDED.
INGESTION:DO NOT INDUCE VOMITING. IF CONSCIOUS, DRINK AS MUCH MILK OR WATER AS POSSIBLE WITHOUT VOMITING.

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

Flash Point:NON-FLAMMABLE
Lower Limits:4.1% H2
Upper Limits:74.2% H2
Extinguishing Media:USE CARBON DIOXIDE, SAND, FOAM/DRY CHEMICAL. WATER APPLIED TO ELECTROLYTE GENERATES HEAT AND CAUSES IT TO SPATTER.
Fire Fighting Procedures:WEAR ACID-RESISTANT CLOTHING AND NIOSH-APPROVED SELF-CONTAINED BREATHING APPARATUS

US 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 Procedures: 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 AND 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. STORAGE AREA SHOULD BE EQUIPPED WITH A DRAIN WHICH CAPTURES SPILLS OF ACID FOR PROPER DISPOSAL.

Other Precautions: KEEP TERMINALS COVERED. AVOID SHORTING BATTERIES. DO NOT CRACK OR OVERCHARGE BATTERIES. KEEP LIGHTED CIGARETTES, SPARKS, AND FLAMES AWAY FROM CHARGING BATTERIES. KEEP OUT OF REACH OF CHILDREN. WASH THOROUGHLY AFTER HANDLING.

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

Respiratory Protection: NOT REQUIRED UNDER NORMAL USE. USE NIOSH-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 RECOMMENDED PROCEDURES. WASH THOROUGHLY BEFORE EATING, DRINKING/SMOKING.

Supplemental Safety and Health

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

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HCC:C1

NRC/State Lic Num:NOT RELEVANT

Spec Gravity:1.24-1.28 ACID

Viscosity:NOT RELEVANT

Evaporation Rate & Reference:NOT RELEVANT

Solubility in Water:NOT RELEVANT

Appearance and Odor:BATTERY CONTAINING SULFURIC ACID AND LEAD.

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

Stability Indicator/Materials to Avoid:YES

ORGANIC MATERIALS, STRONG REDUCING AGENTS, METALS, WATER, SULFUR TRIOXIDE GAS, STRONG OXIDIZING AGENTS, BASES

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, 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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