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Product Identification
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Product ID: BATTERY ELECTRIC STORAGE

MSDS Date: 09/23/1986

FSC: 6140

NIIN: 00-199-4991

MSDS Number: BKHHM

=== Responsible Party ===

Company Name: EAST PENN MANUFACTURING CO., INC.

Address: DEKA ROAD

City: LYON STATION

State: PA

ZIP: 19536

Info Phone Num: (215) 682-6361

Emergency Phone Num: (215) 682-6361

CAGE: DO231

=== Contractor Identification ===

Company

Name: EAST PENN MANUFACTURING CO., INC.

Address: DEKA ROAD

City: LYON STATION

State: PA

ZIP: 19536

Phone: 215-682-6361/800-424-9300(CHEMTREC)

CAGE: DO231

Company Name: EAST PENN MFG CO INC

Address: DEKA RD

Box: City: LYON STATION

State: PA

ZIP: 19536

Country: US

Phone: 610-682-6361

CAGE: 04055

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Composition/Information on Ingredients
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Ingred Name: LEAD (SARA III)

CAS: 7439-92-1

RTECS #: OF7525000

Fraction by Wt: 43-70%

OSHA PEL: 0.05 MG/M3; 1910.1025

ACGIH TLV: 0.15 MG/M3; DUST 9192

EPA

Rpt Qty:1 LB
DOT Rpt Qty:1 LB

Ingred Name:ANTIMONY (SARA III)
CAS:7440-36-0
RTECS #:CC4025000
Fraction by Wt: 0-4%
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:SULFURIC ACID (SARA III)
CAS:7664-93-9
RTECS #:WS5600000
Fraction by Wt: 20-44%
OSHA PEL:1 MG/M3
ACGIH TLV:1 MG/M3; 9192
EPA Rpt Qty:1000 LBS
DOT Rpt Qty:1000 LBS

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

Routes of Entry: Inhalation:YES Skin:YES In
gestion:YES
Reports of Carcinogenicity:NTP:NO IARC:YES OSHA:NO
Health Hazards Acute and Chronic:INHALATION: IRRITATION & INFLAMMATION
OF THE NOSE, THROAT, & BRONCHIAL TUBES, RESPIRATORY DIFFICULTY &
IRRITATION. SKIN: IRRITATION, BURNS, & CORROSIVE. INGESTION:
EROSION OF TEETH. EYES: IRRITATION & CORROSIVE.
Explanation of Carcinogenicity:LEAD IS A SUSPECTED A2 CARCINOGEN BY
ACGIH.
Effects of Overexposure:INHALATION: IRRITATION & INFLAMMATION OF NOSE,
THROAT, & BRONCHIAL T
UBES, RESPIRATORY DIFFICULTY & IRRITATION.
SKIN: CORROSIVE, BURNS, & IRRITATION. INGESTION: EROSION OF TEETH.
EYES: IRRITATION & COR ROSIVE.
Medical Cond Aggravated by Exposure:PULMONARY EDEMA, BRONCHITIS,
EMPHYSEMA, DENTAL EROSION & TRACHEOBRONCHITIS

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

First Aid:EYES/SKIN: FLUSH W/LARGE AMOUNTS OF WATER FOR AT LEAST 15
MINS. INGESTION: GIVE LARGE AMOUNTS OF WATER. DON'T INDUCE
VOMITING. INHALATION: REMOVE T

O FRESH AIR. OBTAIN MEDICAL ATTENTION
IN ALL CASES.

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

Flash Point:NON-FLAMMABLE

Lower Limits:4%

Upper Limits:74%

Extinguishing Media:CLASS ABC EXTINGUISHER, CO2, OR HALON

Fire Fighting Procedures:WEAR SELF-CONTAINED BREATHING APPARATUS &
PROTECTIVE CLOTHING.

Unusual Fire/Explosion Hazard:COOL EXTERIOR OF BATTERY IF EXPOSED TO
FIRE TO PREVENT RUPTURE. HYDROGEN GAS, WHICH MAY EXPLODE IF
IGNITED, IS PRODUCED WHEN C
HARGING.

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

Spill Release Procedures:DILUTE SPILL CAUTIOUSLY W/FIVE TO SIX VOLUMES
OF WATER & GRADUALLY NEUTRALIZE W/SODIUM BICARBONATE, SODA ASH OR
LIME. WEAR PROTECTIVE EQUIPMENT.

Neutralizing Agent:SODIUM BICARBONATE, SODA ASH, OR LIME

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

Handling and Storage Precautions:STORE AWAY FROM REACTIVE MATERIAL. IF
BATTERY CASE IS BROKEN, AVOID DIRECT CONT
ACT W/INTERNAL COMPONENTS.

AVOID OPEN FLAMES/SPARKS/IGNITION SOURCES.

Other Precautions:USE ADEQUATE VENTILATION.

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

Respiratory Protection:WEAR NIOSH APPROVED PRESSURE SELF-CONTAINED
RESPIRATOR WHEN EXPOSURE LEVEL ISN'T KNOWN. WEAR ACID GAS
RESPIRATOR WHEN >PEL OR EMPLOYEE WITNESSES RESPIRATORY IRRITATION.

Ventilation:LOCAL EXHAUST: PREFERRED WHEN CHARGING IN ENCLOSED AREA.
MECHANICAL: ACCEPTABLE AT 1 TO 4 AIR EX
CHANGES/HOUR.

Protective Gloves:ACID RESISTANT, SUCH AS RUBBER

Eye Protection:CHEMICAL SAFETY GOGGLES OR FACE SHIELD

Other Protective Equipment:ACID RESISTANT APRONS, BOOTS, PROTECTIVE
CLOTHING, EYEWASH, & SHOWER STATIONS

Work Hygienic Practices:REMOVE/LAUNDER CONTAMINATED CLOTHING BEFORE
REUSE. PROVIDE GOOD PERSONAL HYGIENE & WORK PRACTICES.

Supplemental Safety and Health

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

Boiling Pt:B.P. Text: 235F

Decomp Temp:Decomp

Text:322-770F

Vapor Pres:13

Spec Gravity:1.22-1.325

Evaporation Rate & Reference:(BU AC = 1):