

EAGLE-PICHER ENERGY PRODUCTS CORP -- BA-5567A/U, LITHIUM BATTERY,  
NONRECHARGEABLE -- 6135-01-447-5082

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Product Identification  
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Product ID:BA-5567A/U, LITHIUM BATTERY, NONRECHARGEABLE

MSDS Date:01/10/2001

FSC:6135

NIIN:01-447-5082

Status Code:A

MSDS Number: CLNDH

==== Responsible Party ====

Company Name:EAGLE-PICHER ENERGY PRODUCTS CORP

Address:13136 82A AVENUE

City:SURREY, V3W 9Y6

State:

BC

Country:US

Info Phone Num:604-543-4350

Emergency Phone Num:604-543-4350

Preparer's Name:VENKAT RAMAN, ENG MGR

CAGE:0E1R2

==== Contractor Identification ====

Company Name:CANADIAN COMMERCIAL CORP

Address:50 OCONNOR ST 11TH FLOOR

Box:City:OTTAWA, ONT

Country:CN

Phone:613-996-0034

Contract Num:DAAB07-96-D-G017

CAGE:98247

Company Name:EAGLE-PICHER ENERGY PRODUCTS CORP

Address:13136 82A AVENUE

Box:City:SURREY, V3W 9Y6

State:BC

Country:US

Phone:604-543-4350

CAGE:0E1R2

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Composition/Inf

ormation on Ingredients =====

Ingred Name:LITHIUM METAL  
CAS:7439-93-2  
RTECS #:OJ5540000  
Fraction by Wt: 1.9%,0.37%G

Ingred Name:SULFUR DIOXIDE  
CAS:7446-09-5  
RTECS #:WS4550000  
= Wt:18.  
OSHA PEL:13 MG/M3;5 PPM  
ACGIH TLV:5.2 MG/M3;2 PPM  
ACGIH STEL:13 MG/M3;5 PPM

Ingred Name:ACETONITRILE  
CAS:75-05-8  
RTECS #:AL7700000  
= Wt:6.4  
OSHA PEL:70 MG/M3;40 PPM  
ACGIH TLV:67 MG/M3;40 PPM  
ACGIH STEL:101 MG/M3;60 PPM  
EPA Rpt Qty:5000 LBS  
DOT Rpt Qty:5000 LBS

===== Hazards Identificat  
ion =====

LD50 LC50 Mixture:ACETONITRILE: RAT, ORAL, LD50= 3.8 G/KG  
Health Hazards Acute and Chronic:SULFUR DIOXIDE IS SEVERE PULMONARY  
IRRITANT AND PRIMARY SKIN IRRITANT. ACUTE EXPOSURE CAUSES STRONG  
EYE, NOSE, THROAT IRRITATION, RHIORRHEA, CHOKING, COUGHING,  
BRONCHOCONSTRICTION. ODOR AND TASTE THRE SHOLDS ARE EQUAL TO OR  
LESS THAN PERMISSIBLE EXPOSURE LIMIT. NOSE AND THROAT IRRITATION  
OCCURS WITHIN THREE TIMES PERMISSIBLE EXPOSURE LIMIT. ACUTE:  
INHALAT  
ION: SO2: 10 - 20 PPM = IRRITATION; 100 PPM = DANGEROUS;  
400 PPM = LIFE THREATENING. EYE CONTACT: SO2: IRRITANT. SKIN  
CONTACT: SO2: IRRITANT. INGESTION: SO2: SEVER IRRITANT;  
ACETONITRILE: MAY CAUSE IRRITATION, NAUSEA, VOMITING, AND HARMFUL  
CNS EFFECTS. (CONTD. SEE "TOXICOLOGICAL")  
Effects of Overexposure:EYE CONTACT: IRRITATION. SKIN CONTACT:  
IRRITATION. INHALATION: IRRITATION, IMPAIRED LUNG FUNCTION OR  
BRONCHITUS, LIVER KIDNEY AND LUNG DAMAGE, LIFE THREATENING.  
INGE

STION: IRRITATION, NAUSEA, VOMITING , HARMFUL CNS EFFECTS.

Medical Cond Aggravated by Exposure:N/P.

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First Aid Measures  
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First Aid:INHALATION: REMOVE TO VENTILATED AREA, CONSULT PHYSICIAN. EYE CONTACT: FLUSH WITH WATER A MINIMUM OF 20 MINUTES. SKIN CONTACT: FLUSH WITH WATER A MINIMUM OF 20 MINUTES.

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Fire Fighting Measures  
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Extinguishing Media:FOR BURNING BATTERIES USE CLASS D EXTINGUISHER,

LITH-X (PREFERRED), POWDERED GRAPHITE, MET-L-X. USE WATER SPRAY OR CO2 TO LOWER TEMPERATURE AND EXTINGUISH FIRES IN PACKING MATERIAL.

Fire Fighting Procedures:USE SELF CONTAINED BREATHING APPARATUS AND FULL PROTECTIVE CLOTHING.

Unusual Fire/Explosion Hazard:HAZARDOUS COMBUSTION PRODUCTS: SULFUR DIOXIDE GAS, CARBON MONOXIDE AND LITHIUM OXIDE FUMES.

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Accidental Release Measures  
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Spill Release Procedures:SMALL: SULFUR DIOXIDE < 100 PPM USE FULL FACE

CHEMICAL CARTRIDGE RESPIRATOR. LARGE: SULFUR DIOXIDE >= 100 PPM USE SELF CONTAINED BREATHING APPARATUS.

Neutralizing Agent:NOT PROVIDED BY MFR

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Handling and Storage  
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Handling and Storage Precautions:HANDLING: NOT PROVIDED BY MFR.

STORAGE: STORE IN WELL VENTILATED AREA EQUIPPED WITH SPRINKLER SYSTEMS AND AWAY FROM FLAMMABLES.

Other Precautions:DO NOT EXPOSE TO TEMPERATURES ABOVE 70 DEG C OR SUBMERGE IN CONDUCTIVE SOLUTIONS.

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Exposure Controls/Personal Protection  
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Respiratory Protection:FULL FACE CHEMICAL CARTRIDGE ABOVE 20 PPM - FOR SULFUR DIOXIDE OR FIRE

Ventilation:NOT PROVIDED BY MFR.

Protective Gloves:PERSONAL PROTECTIVE EQUIPMENT NEEDED FOR BATTERIES - SULFUR DIOXIDE OR FIRE

Eye Protection:PERSONAL PROTECTIVE EQUIPMENT NEEDED FOR BATTERIES - SULFUR DIOXIDE OR FIRE

Other Protective Equipment:NOT PROVIDED BY MFR

Work Hygienic Practices:NOT PROVIDED BY MFR

Supplemental Saf

ety and Health  
NOT PROVIDED BY MFR

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

HCC:Z6  
Decomp Temp:Decomp Text:NOT PROVIDED BY MFR  
Viscosity:NOT PROVIDED BY MFR  
Appearance and Odor:NO ODOR. SOLID.  
Percent Volatiles by Volume:NOT PROVIDED  
Corrosion Rate:NOT PROVIDED BY MFR

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

Stability Indicator/Materials to Avoid:YES  
LITHIUM REACTS WITH WATER TO FORM HYDROGEN. MOIST SULFUR DIOXIDE IS  
CORROSIVE.  
Stabi  
lity Condition to Avoid:TEMPERATURES ABOVE 70 DEG C, SUBMERSION IN  
CONDUCTIVE SOLUTIONS  
Hazardous Decomposition Products:RUPTURED BATTERIES WILL RELEASE SULFUR  
DIOXIDE. HAZARDOUS COMBUSTION PRODUCTS: SULFUR DIOXIDE GAS, CARBON  
MONOXIDE, CARBON DIOXIDE AND LITHIUM OXIDE FUMES.  
Conditions to Avoid Polymerization:WILL NOT OCCUR.

===== Toxicological Information =====

Toxicological Information:(CONTD. FROM "HEALTH HAZARDS") CHRONIC HEALTH  
EFFECTS: INHALA  
TION: SULFUR DIOXIDE: PROLONGED AND REPEATED  
INHALATION MAY CAUSE IMPAIRED LUNG FUNCTION OR BRONCHITUS.  
ACETONITRILE: PROLONGED AND REPEATE D INHALATION MAY CAUSE LIVER,  
KIDNEY, AND LUNG DAMAGE.

===== Disposal Considerations =====

Waste Disposal Methods:ACCORDING TO LOCAL REGULATIONS.

===== MSDS Transport Information =====

Transport Information:APPLICABLE REGULATION: UN 3090, NOT APPLICALE.  
PROPER SHIPPING NAME: LI

THIUM BATTERY. DOT HAZARD CLASS: CLASS 9  
NOT APPLICABLE. DOT IDENTIFICATION NUMBER: N/P. DOT PACKAGING  
GROUP: N/P. DOT LABELING: N/P. NOTES: NOT SUBJECT TO IATA  
REGULATIONS DUE TO TESTING PER SECTION A45, SUBSECTION 9. NOT  
SUBJECT TO 49 CFR DUE TO TESTING PER SECTION 173.185, SUBSECTION C

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