

ELECTROCHEM INDUSTRIES, DIV. OF WILSON GREATBATCH -- LITHIUM OXYHALIDE PRIMARY BATTERY (BCX) -- 6135-01-300-6481

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

Product ID:LITHIUM OXYHALIDE PRIMARY BATTERY (BCX)

MSDS Date:01/19/1993

FSC:6135

NIIN:01-300-6481

MSDS Number: BXFZB

=== Responsible Party ===

Company Name:ELECTROCHEM INDUSTRIES, DIV. OF WILSON GREATBATCH

Address:10000 WEHRLE DR.

City:CLARENCE

State:

NY

ZIP:14031-2033

Country:US

Info Phone Num:716-759-6901

Emergency Phone Num:716-759-6901

CAGE:62713

=== Contractor Identification ===

Company Name:ELECTROCHEM INDUSTRIES, DIV. OF WILSON GREATBATCH

Address:10000 WEHRLE DR.

City:CLARENCE

State:NY

ZIP:14031-2033

Country:US

Phone:716-759-5384

CAGE:62713

Company Name:SMITHS INDUSTRIES AEROSPACE & DEFENSE SYSTEMS INC

Address:4141 EASTERN AVE SE

Box:City:GRAND RAPIDS

State:MI

ZIP:49518-8727

Country:US

Phone:616-241-7000

CAGE:35351

===== Comp

osition/Information on Ingredients =====

Ingred Name:LITHIUM METAL  
CAS:7439-93-2  
RTECS #:OJ5540000  
Other REC Limits:NONE SPECIFIED

Ingred Name:THIONYL CHLORIDE  
CAS:7719-09-7  
RTECS #:XM5150000  
Other REC Limits:NONE SPECIFIED  
OSHA PEL:C 1 PPM  
ACGIH TLV:C 1 PPM; 9192

Ingred Name:BROMINE (SARA III)  
CAS:7726-95-6  
RTECS #:EF9100000  
Other REC Limits:NONE SPECIFIED  
OSHA PEL:0.1 PPM/0.3 PPM STEL  
ACGIH TLV:0.1 PPM/0.3STEL;9293

Ingred Name:CHLORINE (SARA III)  
CAS:7782-50-5  
RTECS #:FO2100000  
Other REC Limits:NONE SPECIFIED  
OSHA PEL:(C) 1 PPM  
ACGIH TLV:0.5 PPM/1 STEL; 9293  
EPA Rpt Qty:10 LBS  
DOT Rpt Qty:10 LBS

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

Routes of Entry: Inhalation:NO Skin:NO Ingestion:NO  
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO  
Health Hazards Acute and Chronic:THIS PRODUCT IS CLASSIFIED AS AN  
ARTICLE UNDER OSHA REGULATION 1910.1200.  
Explanation of Carcinogenicity:MANUFACTURER GAVE NO INFORMATION ABOUT  
CARCINOGENICITY. HMI  
S DOES NOT EXPECT IT TO BE CARCINOGENIC.  
Effects of Overexposure:BURNS TO THE SKIN MAY RESULT FROM THE HEAT  
GENERATED BY A SHORT-CIRCUIT.  
Medical Cond Aggravated by Exposure:NONE SPECIFIED BY MANUFACTURER.

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

First Aid:IN CASE OF ACCIDENTAL INGESTION OF A CELL OR ITS CONTENTS,  
OBTAIN PROMPT MEDICAL ADVICE.

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

Extinguishing Media:IF CELLS ARE DIRECTLY INV

OLVED IN FIRE, DO NOT USE

WATER, CARBON DIOXIDE, DRY CHEMICAL OR HALON.

Fire Fighting Procedures:A LITH-X (GRAPHITE BASE) FIRE EXTINGUISHER OR MATERIAL IS THE ONLY RECOMMENDED EXTINGUISHING MEDIA FOR FIRES INVOLVING METAL OR CELLS. AVOID FUME INHALATION.

Unusual Fire/Explosion Hazard:IF A FIRE IS IN ADJACENT AREA, AND CELLS ARE PACKED IN THEIR ORIGINAL CONTAINERS, THE FIRE CAN BE FOUGHT BASED ON FUELING MATERIAL, E.G.,PAPER & PLASTICS.

===== Accidental Release

Measures =====

Spill Release Procedures:NONE SPECIFIED BY MANUFACTURER.

Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

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

Handling and Storage Precautions:STORE IN A COOL BUT PREVENT CONDENSATION ON CELLS OR BATTERIES. ELEVATED TEMPERATURES CAN RESULT IN SHORTENED BATTERY LIFE.

Other Precautions:IF SOLDERING OR WELDING TO THE TERMINALS OF THE CELL IS REQUIRED, EXERCISE PROPER PRECAUTIONS TO PREVENT DAMAGE TO THE

CELL WHICH MAY RESULT IN LOSS OF CELL CAPACITY, SEAL, LEAKAGE, AND/OR CELL EXPLOS ION. DO NOT SOLDER TO THE CASE.

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

Respiratory Protection:MFR GAVE NO INFORMATION ON MSDS.

Ventilation:MFR GAVE NO INFORMATION ON MSDS.

Protective Gloves:MFR GAVE NO INFORMATION ON MSDS.

Eye Protection:MFR GAVE NO INFORMATION ON MSDS.

Other Protective Equipment:MFR GAVE NO INFORMATION ON MSDS.

Work Hygienic Practices:MFR GAVE

NO INFORMATION ON MSDS.

Supplemental Safety and Health

MECHANICAL CONTAINMENT: ENCAPSULATION (POTTING OF THESE CELLS) WILL NOT ALLOW FRO CELL EXPANSION. SUCH ENCLOSURE CAN RESULT IN HIGH PRESSURE EXPLOSION FROM HEATING DUE TO INADVERTENT CHARGING OR HIGH TEMPERATURE ENVIRONMENTS (I.E., IN EXCESS OF 100C.)

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

HCC:N1

NRC/State Lic Num:NONE

Appearance and Odor:MFR GAVE NO INFORMATION ON MSDS.

===== Stabil

ity and Reactivity Data =====

Stability Indicator/Materials to Avoid: YES

JEWELRY, SUCH AS RINGS AND BRACELETS, SHOULD BE REMOVED OR INSULATED FROM BATTERIES TO PREVENT SHORT CIRCUITING.

Stability Condition to Avoid: BATTERIES SHOULD ALWAYS BE PACKAGED & TRANSPORTED IN SUCH A MANNER AS TO PREVENT DIRECT CONTACT WITH EACH OTHER.

Hazardous Decomposition Products: SHORT-CIRCUITING WILL CAUSE HEAT AND REDUCE CELL CAPACITY.

===== Disposal Considerations ==  
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Waste Disposal Methods: DO NOT INCINERATE OR SUBJECT CELLS TO TEMPERATURES IN EXCESS OF 212F(100C). SUCH ABUSE CAN RESULT IN LOSS OF SEAL, LEAKAGE AND/OR CELL EXPLOSION. DISPOSE OF IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS.

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