

## **14-48 LITHIUM/THIONYL CHLORIDE BATTERY**

### **MSDS Number**

BNBLT

### **National Stock Number**

6135-00N028842

### **Product Name**

14-48 LITHIUM/THIONYL CHLORIDE BATTERY

### **Manufacturer**

BATTERY ENGINEERING INC

### **Product Identification**

Product ID:14-48 LITHIUM/THIONYL CHLORIDE BATTERY

MSDS Date:09/04/1991

FSC:6135

NIIN:00N028842

MSDS Number: BNBLT

### **Responsible Party**

BATTERY ENGINEERING INC

1636 HYDE PARK AVE

HYDE PARK , MA 02136

US

Emergency Phone: 617-361-7555

Info Phone: 617-361-7555

Cage: 60289

### **Contractor**

BATTERY ENGINEERING INC

CANTON, MA 02021

US

781-575-0800

Cage: 60289

### **Ingredients**

LITHIUM; (LITHIUM - CONTENT 0.64 GRAMS)

CAS: 7439-93-2

RTECS: OJ5540000

Fraction By Weight: 4%

THIONYL CHLORIDE

CAS: 7719-09-7

RTECS: XM5150000

Fraction By Weight: 39.5%

OSHA PEL1 PPM, C

ACGIH TLV: 1 PPM, C

ALUMINUM CHLORIDE

CAS: 7446-70-0

RTECS: BD0525000

Fraction By Weight: 6.5%

LITHIUM CHLORIDE

CAS: 7447-41-8

RTECS: OJ5950000

Fraction By Weight: 2%

CARBON

CAS: 7440-44-0

RTECS: FF5250100

Fraction By Weight: 4.7%

OSHA PEL15 MG/M3 TDUST

ACGIH TLV: 2 MG/M3 TDUST; 9293

STAINLESS STEEL

Fraction By Weight: 42.5%

NICKEL (SARA III)

CAS: 7440-02-0

RTECS: QR5950000

Fraction By Weight: 0.4%

OSHA PEL1 MG/M3

ACGIH TLV: 1 MG/M3

PAPER/FILM; (PAPER)

Fraction By Weight: 0.4%

## Hazards

LD50 LC50 Mixture:NONE SPECIFIED BY MANUFACTURER.

Routes of Entry: Inhalation:YES Skin:NO Ingestion:NO

Reports of Carcinogenicity:NTP:YES IARC:YES OSHA:NO

Health Hazards Acute and Chronic:ACUTE: VAPORS VERY IRRITATING TO SKIN, EYES AND MUCOUS MEMBRANES. CHRONIC: OVEREXPOSURE CAN CAUSE SYMPTOMS OF NONFIBROTIC LUNG INJURY.

Explanation of Carcinogenicity:NICKEL:GROUP 2 (NTP), GROUP 2B (IARC)

Effects of Overexposure:SEE HEALTH HAZARDS.

Medical Cond Aggravated by Exposure:ASTHMA, OTHER RESPIRATORY DISORDERS, SKIN ALLERGIES, ECZEMA.

## First Aid

First Aid:SEEK MEDICAL ASSISTANCE FOR FURTHER TREATMENT, OBSERVATION AND SUPPORT IF NECESSARY. EYES: FLUSH W/RUNNING WATER FOR AT LEAST 15 MIN. HOLD EYELIDS APART. SEEK IMMED MEDICAL TREATMENT. SKIN: RINSE W/LA RGE AMOUNTS OF RUNNING WATER. IF BURNS DEVELOP, SEEK MEDICAL TREATMENT. INHAL: REMOVE TO FRESH AIR. IF BRTHG IS DFCLT, ADMINISTER O2 AND SEEK MEDICAL TREATMENT. INGEST: CALL MD IMMEDIATELY .

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## Fire Fighting

Extinguishing Media: DRY LITHIUM CHLORIDE, GRAPHITE POWDER, PYRENE G-1, LITH-X.

Fire Fighting Procedures: WEAR NIOSH/MSHA APPRVD SCBA & FULL PROT EQUIP . COVER W/ DRY LITHIUM CHLORIDE OR LITH-X POWDER. DO NOT USE WATER, MOIST SAND, CO<sub>2</sub> OR SODA-ACID EXTING.

Unusual Fire/Explosion Hazard: DO NOT SHORT CIRCUIT, RECHARGE, OVERDISCHARGE, PUNCTURE, CRUSH OR EXPOSE TO TEMPERATURES ABOVE 100C.

## Accidental Release

Spill Release Procedures: DO NOT BREATHE VAPORS OR TOUCH LIQUID W/ BARE HANDS. NEUTRALIZE SPILL W/ SODA LIME, SEAL LEAKING BATTERY AND SODA LIME IN PLASTIC BAG AND DISPOSE OF AS HAZARDOUS WASTE.

Neutralizing Agent: SODA LIME.

## Handling

Handling and Storage Precautions: DO NOT SHORT CIRCUIT, DO NOT EXPOSE TO TEMPERATURES ABOVE 100C. DO NOT RECHARGE, OVERDISCHARGE, PUNCTURE OR CRUSH.

Other Precautions: DO NOT STORE BATTERIES IN HIGH HUMIDITY ENVIRONMENTS FOR LONG PERIODS OF TIME.

## Exposure Controls

Respiratory Protection: NIOSH/MSHA APPROVED ACID GAS FILTER MASK.

Ventilation: LOCAL EXHAUST.

Protective Gloves: BUTYL RUBBER GLOVES.

Eye Protection: CHEMICAL WORKERS GOGGLES .

Other Protective Equipment: CHEMICAL LABORATORY GARMENTS. EMERGENCY EYE WASH & DELUGE SHOWER .

Supplemental Safety and Health

BOILING POINT: SOCL<sub>2</sub>: 171F, 77C. SPECIFIC GRAVITY: SOCL<sub>2</sub>: 1.63 (H<sub>2</sub>O=1).

VAPOR PRESSURE: SOCL<sub>2</sub>: 92 @ 20C.

## Chemical Properties

HCC: N1

Boiling Pt: B.P. Text: SUPDAT

Melt/Freeze Pt: M.P/F.P Text: -157F, -105C

Vapor Pres: SUPDAT

Vapor Density: SOCL<sub>2</sub>: 4.1

Spec Gravity: SUPDAT

Solubility in Water: SOCL<sub>2</sub>: DECOMPOSES

Appearance and Odor: SOCL<sub>2</sub>: COLORLESS TO PALE YELLOW; SHARP, IRRITATING ODOR.

## Stability

Stability Indicator/Materials to Avoid: YES

SOCL<sub>2</sub> HYDROLYZES IN WATER TO FORM SO<sub>2</sub> & HCL.

Stability Condition to Avoid: TEMPERATURE IN EXCESS OF 100C. HIGH HUMIDITY FOR EXTENDED PERIODS OF TIME.

Hazardous Decomposition Products: SULFUR DIOXIDE, HYDROGEN CHLORIDE.

## Disposal

Waste Disposal Methods: DISPOSE OF AS HAZARDOUS WASTE I/A/W FEDERAL, STATE, AND LOCAL REGULATIONS .

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