

SAFT AMERICA INC ADVANCED BATTERY SYSTEMS DIVISION -- LITHIUM THIONYL CHLORIDE  
BATTERY -- 6135-01-324-2505

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

Product ID:LITHIUM THIONYL CHLORIDE BATTERY

MSDS Date:03/01/1994

FSC:6135

NIIN:01-324-2505

MSDS Number: CHHVB

=== Responsible Party ===

Company Name:SAFT AMERICA INC ADVANCED BATTERY SYSTEMS DIVISION

Address:313 CRESCENT STREET

City:VALDESE

State:NC

ZIP:286

90

Country:US

Info Phone Num:704-874-4111/CORP 912-247-2331

Emergency Phone Num:704-874-4111/MD 410-771-3200

CAGE:7X634

=== Contractor Identification ===

Company Name:MATHEWS ASSOCIATES INC

Address:645 HICKMAN CIRCLE

Box:City:SANFORD

State:FL

ZIP:32771

Country:US

Phone:407-323-3390

CAGE:4U927

Company Name:SAFT AMERICA INC ADVANCED BATTERY SYSTEMS DIVISION

Address:313 CRESCENT ST NE

Box:City:VALDESE

State:NC

ZIP:28690-9643

Country:US

Phone:828-874-4111/912-245-2806

CAGE:7X634

===== Comp

osition/Information on Ingredients =====

Ingred Name:THIONYL CHLORIDE  
CAS:7719-09-7  
RTECS #:XM5150000  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:C 1 PPM  
ACGIH TLV:C 1 PPM; 9596

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

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

Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES  
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO  
Health Hazards Acute and Chronic:IF CEL  
L SEAL IS BROKEN, THE SUBSTANCE  
AND VAPORS HAVE A CORROSIVE EFFECT ON THE SKIN AND MUCOUS  
MEMBRANES.  
Effects of Overexposure:BURNS AND IRRITATION TO RESPIRATORY SYSTEM.  
Medical Cond Aggravated by Exposure:ASTHMA AND OTHER RESPIRATORY  
DISEASES.

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

First Aid:EYES: FLUSH IMMEDIATELY WITH WTAER FOR 15 MIN. SKIN: WASH  
WITH PLENTY OF WATER AND TAKE OFF CONTAMINATED CLOTHES.  
INHALATION: REMOVE FROM EXPOSURE, SEEK  
MEDICAL ATTENTION.

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

Extinguishing Media:USE WATER OR CARBON DIOXIDE ON BURNING LITHIUM  
THIONYL CHLORIDE CELLS OR BATTERIES.  
Fire Fighting Procedures:USE SELF-CONTAINED BREATHING APPARATUS. NOTE:  
USE A CLASS D FIRE EXTINGUISHING AGENT ONLY ON A RAW LITHIUM FIRE.  
Unusual Fire/Explosion Hazard:GENERATION OF CHLORINE, SULFUR DIOXIDE,  
DISULFUR DICHLORIDE DURING THERMAL DECOMPOSITION.

===== Accidental Rele

ase Measures =====

Spill Release Procedures:COVER WITH SODIUM CARBONATE OR 1:1 MIXTURE OF SODA ASH AND SLAKED LIME.

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

Handling and Storage Precautions:DO NOT RECHARGE, SHORT CIRCUIT, PUNCTURE OR MUTILATE. DO NOT EXPOSE TO TEMPERATURES IN EXCESS OF 85C (185F). DO NOT EXPOSE TO WATER OR CORROSIVES.

Other Precautions:IF CONTAMINATION WITH MOISTURE OCCURS, PRODUCT WILL RELAESE GAS CAUSING A PRESSURE BU ILD-UP WHICH COULD RESULT IN DRUM RUPTURE.

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

Eye Protection:SAFETY GLASSES.

Work Hygienic Practices:KEEP ONLY IN THE ORIGINAL CONTAINER. HANDLE AND OPEN CONTAINER WITH CARE. ENSURE EFFECTIVE VENTILATION.

Supplemental Safety and Health

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

HCC:N1

Melt/Freeze Pt:M.P/F.P Text:374F,190C

Decomp Temp:Decomp Text:284F,140C

Spec Gravity:>1

Solubility in Water:NOT SOLUBLE

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

Stability Indicator/Materials to Avoid:YES WATER ALKALIS.

Stability Condition to Avoid:CELLS ARE NON REACTING PROVIDED THE CELL SEAL REMAINS INTACT. THERMAL DECOMPOSITION BEGINS AT 140C.

Hazardous Decomposition Products:HYDROGEN, SULFUR DIOXIDE, SULFUR DICHLORIDE, DISULFUR DICHLORIDE, CHLORINE.

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

Waste Disposal Methods:PRODUCT DECOMPOSED BY WA

TER MUST BE NEUTRALIZED,  
MAY BE ADDED TO WASTE WATER IN SUFFICIENTLY DILUTED FORM.

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