

SAFT AMERICA INC, POWER SOURCES DIV -- NICKEL CADMIUM SEALED CELL BATTERY --  
6140-01-211-9906

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

Product ID:NICKEL CADMIUM SEALED CELL BATTERY  
MSDS Date:10/03/1994  
FSC:6140  
NIIN:01-211-9906  
Status Code:A  
MSDS Number: CHXBX  
=== Responsible Party ===  
Company Name:SAFT AMERICA INC, POWER SOURCES DIV  
Address:711 INDUSTRIAL BLVD  
Box:1886  
City:VALDOSTA  
State:GA  
ZIP:31603

Country:US  
Info Phone Num:912-247-2331  
Emergency Phone Num:912-247-2331  
CAGE:09052

=== Contractor Identification ===  
Company Name:SAFT AMERICA INC.  
Address:711 INDUSTRIAL BLVD  
Box:1886  
City:VALDOSTA  
State:GA  
ZIP:31602  
Country:US  
Phone:912-247-2331  
CAGE:09052

===== Composition/Information on Ingredients =====

Ingred Name:NICKEL OXIDE  
CAS:1313-99-1  
RTECS #:QR8400000  
Fraction by Wt: 10%  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:1 MG/M3 AS NI  
ACGIH TLV:1 MG/M3 AS NI

Ingred Nam

e:POTASSIUM HYDROXIDE (CERCLA) (ELECTROLYTE SOLUTION)

CAS:1310-58-3

RTECS #:TT2100000

Fraction by Wt: 19%

Other REC Limits:NONE RECOMMENDED

OSHA PEL:C 2 MG/M3

ACGIH TLV:C 2 MG/M3; 9596

EPA Rpt Qty:1000 LBS

DOT Rpt Qty:1000 LBS

Ingred Name:CADMIUM OXIDE (SARA 302/313) (CERCLA)

CAS:1306-19-0

RTECS #:EV1925000

Fraction by Wt: 13%

Other REC Limits:NONE RECOMMENDED

OSHA PEL:0.2 MG (CD)/M3 DUST

ACGIH TLV:0.01 MG(CD)/M3; 9596

Ingred Name:NYLON 11

CAS:25587-80-8

Fraction by Wt: 15%

Other REC Limits:NO

NE RECOMMENDED

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

LD50 LC50 Mixture:PRODUCT'S LD50 (ORAL RAT) WAS NOT STATED

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

Reports of Carcinogenicity:NTP:YES IARC:YES OSHA:YES

Health Hazards Acute and Chronic:EXPOSURE TO HAZARDOUS COMPONENTS WILL HAPPEN ONLY IF BATTERY CASE IS BROKEN. IF CASE IS BROKEN:ELECTROLYTE IS CORROSIVE TO BODY TISSUES, CAUSING SEVERE BURNS. METALS MAY CAUSE IRRITATION. METAL FUMES INHALED OR METALS INGESTED ARE TOXIC.

Explanation of Carcinogenicity:NIOSH RECOMMENDS THAT NICKEL & CADMIUM BE TREATED AS OCCUPATIONAL CARCINOGENS.

Effects of Overexposure:SEVERE IRRITATION, BURNS TO BODY TISSUES CONTACTED. EYE:SEVERE IRRITATION, BURNS. SKIN:BURNS, CHRONIC ECZEMA, NICKEL ITCH. INALATION (FUMES):RESPIRATORY IRRITATION, COUGH, HEADACHE, VOMITING, CHEST PA IN, CHILLS. INGESTION:BURNS, NAUSEA, G/I DISORDERS.

Medical Cond Aggravated by Exposure:MFR GAVE NO I

INFORMATION ON MSDS.

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First Aid Measures  
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First Aid:IF IRRITATION PERSISTS OR IS SEVERE, GET MEDICAL ATTENTION.  
EYE:FLUSH W/WATER FOR 15 MIN. SKIN:WASH W/SOAP & WATER. REMOVE  
CONTAMINATED CLOTHING & LAUNDER BEFORE REUSE. INHALED:REMOVE FROM  
EXPOSURE. A ID OR RESTORE BREATHING AS NEEDED. INGESTED:DO NOT  
INDUCE VOMITING. GIVE 1-2 GLASSES OF MILK OR WATER TO DRINK. GET  
IMMEDIATE MEDICAL ATTENTION. NOTHING BY MOUTH IF UNCONSCIOUS.

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Fire Fighting Measures  
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Extinguishing Media:CARBON DIOXIDE, SAND  
Fire Fighting Procedures:USE SELF-CONTAINED BREATHING APPARATUS TO  
AVOID BREATHING TOXIC FUMES. WEAR PROTECTIVE CLOTHING TO PREVENT  
CONTACT W/ ELECTROLYTE SOLUTION.  
Unusual Fire/Explosion Hazard:ELECTROLYTE IS CORROSIVE TO BODY TISSUES.  
REACTS W/ORGANIC COMPOUNDS & METALS. RELEASES EXPLOSIVE HYDROGEN  
GAS. RELEASES TOXIC CADMIUM FUMES IN FIRE.

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Accidental Release Measures  
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Spill Release Procedures:ELECTROLYTE SPILL: FLUSH W/ WATER & NEUTRALIZE  
W/DILUTE ACID.  
Neutralizing Agent:DILUTE ACID

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Handling and Storage  
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Handling and Storage Precautions:THESE CELLS & BATTERIES CONSTRUCTED  
FROM THEM MAY BE HIGHLY CHARGED& CAPEABLE OF HIGH ENERGY DISCHARGE.  
TAKE CARE TO HANDLE CELLS PROPERLY.  
Other Precautions:AVOID SHORTING OR MISUSE THAT WILL RESULT IN RAPID  
UNCONTROLLED ELECTRICAL, CHEMICAL OR HEAT ENERGY RELEASE. DO NOT  
SHORT CIRCUIT - MAY CAUSE BURNS. DO NOT BREAK OPEN CELL. DO NOT  
ALLOW EXPOSED AN FLA ME OR SPARK TO COME NEAR THE CELLS.

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Exposure Controls/Personal Protection  
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Respiratory Protection:USE NIOSH/MSHA APPROVED RESPIRATOR IF CELL IS  
BROKEN OPEN DURING FIRE TO MAINTAIN EXPOSURE LEVELS BELOW TWA FOR  
CADMIUM & NICKEL COMPONENTS.  
Ventilation:USE LOCAL EXHAUST AND MECHANICAL (GENERAL) VENTILATION.  
MAI

NTAIN OSHA PEL.

Protective Gloves:SYNTHETIC RUBBER FOR ELECTROLYTE EXPOS.

Eye Protection:SPLASH GOGGLES IF CELL ACTIVATES

Other Protective Equipment:RUBBER APRON OR EQUIPMENT IF EXPOSURE TO ELECTROLYTE SOLUTION IS LIKELY.

Work Hygienic Practices:KEEP FOOD AND TOBACCO AWAY FROM WORK AREA.

Supplemental Safety and Health

NONE

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

HCC:C2

NRC/State Lic Num:NONE

Spec Gravity:1.250-1.30

Evaporation Rate & Reference:NOT DETERMINE

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Solubility in Water:SEE APPEARANCE

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

Stability Indicator/Materials to Avoid:YES

ALUMINUM, ZINC, TIN, ACTIVE METALS. ACID, AROMATIC HYDROCARBONS, NITROCARBONS, HALOCARBONS.

Stability Condition to Avoid:MFR GAVE NO INFORMATION ON MSDS.

Hazardous Decomposition Products:NICKEL OXIDE, CADMIUM, CADMIUM OXIDE, POTASSIUM HYDROXIDE.

Conditions to Avoid Polymerization:WILL NOT OCCUR.

===== Disposal Consideration

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Waste Disposal Methods:STORAGE BATTERY IS HAZARDOUS WASTE UNDER RCRA. IT MAY BE RETURNED TO SAFT FOR RECYCLING. BATTERY IS TCLP TOXIC. BATTERY & ELECTROLYTE SOLUTION IS CORROSIVE. IF NOT RECYCLED, MUST BE DISPOSED I/A/W FED ERAL, STATE & LOCAL REGULATIONS.

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