

SAFT AMERICA INC, POWER SOURCES DIV -- NICKEL CADMIUM AIRCRAFT BATTERY --
6140-00-881-6887

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

Product ID:NICKEL CADMIUM AIRCRAFT BATTERY

MSDS Date:11/01/1994

FSC:6140

NIIN:00-881-6887

MSDS Number: CFCTF

=== 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 Pho

ne 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: 18%

Other REC Limits:NONE RECOMMENDED

OSHA PEL:1 MG/M3 AS NI

ACGIH TLV:1 MG/M3 AS NI

Ingred Name:POTASSIUM HYDROXID

E (CERCLA)
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:COPPER (SARA 313) (CERCLA)
CAS:7440-50-8
RTECS #:GL5325000
Fraction by Wt: 9%
Other REC Limits:NONE RECOMMENDED
OSHA PEL:0.1MG/M3 FUME/1 DUST
ACGIH TLV:0.2 MG/M3 FUME; 9596
EPA Rpt Qty:5000 LBS
DOT Rpt Qty:5000 LBS

Ingred Name:NYLON 11
CAS:25587-80-8
Fraction by Wt: 15%
Other REC Limits:NONE RECOMMENDED

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

LD50 LC50 Mixture:LD50 (ORAL, RAT) IS NOT GIVEN
Routes of Entry: Inhalation:NO Skin:NO Ingestion:NO
Reports of Carcinogenicity:NTP:YES IARC:YES OSHA:YES
Health Hazards Acute and Chronic:TARGET ORGANS:EYES, SKIN, RESPIRATORY

& GI TRACTS. ACUTE- ELECTROLYTE IS CORROSIVE. INHALE:MIST MAY CAUSE SEVERE IRRITATION OF RESPIRATORY TRACT. EYE:MAY CAUSE PERMANENT BLINDNESS. SKIN: CAUSES BURNS, SENSITIZATION. ORAL:CAUSES TISSUE DAMAGE TO THROAT AREA & GI TRACT. CHRONIC- UNKNOWN.

Explanation of Carcinogenicity:CONTAINS CADMIUM [7440-43-9] WHICH IS LISTED BY NTP AND IARC AND REGULATED BY OSHA AS A CARCINOGEN. CONTAINS NICKEL.

Effects of Overexposure:IF LEAKING OR INCINERATED: IRRITATION, BURNS, CHE

ST PAIN, COUGHING, SWEATING, CHILLS, SHORTNESS OF BREATH, WEAKNESS, BLINDNESS

Medical Cond Aggravated by Exposure:NONE SPECIFIED BY MANUFACTURER.

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

First Aid:GET MEDICAL HELP IF SYMPTOMS PERSIST. INHALED:REMOVE TO FRESH AIR. PROVIDE CPR/OXYGEN IF NEEDED. EYES:FLUSH WITH WATER FOR 15 MINUTES, HOLDING EYELIDS OPEN. SEE DOCTOR. SKIN:WASH WITH SOAP & WATER. OR AL:DO NOT INDUCE VOMITING. IF CONSCIOUS,RINSE MOUTH WITH

WATER & DRINK 1-2 GLASSES OF WATER/MILK. SEEK IMMEDIATE MEDICAL ATTENTION. IF SPONTANEOUS VOMITING OCCURS, MONITOR FOR BREATHING DIFFICULTY.

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

Flash Point:NONE

Lower Limits:NOT GIVEN

Upper Limits:NOT GIVEN

Extinguishing Media:CARBON DIOXIDE, SAND. USE WATER SPRAY TO COOL FIRE EXPOSED CONTAINERS.

Fire Fighting Procedures:USE SELF-CONTAINED BREATHING APPARATUS TO AVOID BREATHING TOXIC FUMES. WEAR PROTECTIVE CLOTHING AND EQUIPMENT

TO PREVENT POTENTIAL BODY CONTACT WITH ELECTROLYTE

Unusual Fire/Explosion Hazard:ELECTROLYTE WILL REACT VIOLENTLY WITH MANY ORGANIC CHEMICALS. CADMIUM FUMES MAY BE RELEASED WHEN BATTERIES ARE SUBJECTED TO HIGH TEMPERATURES.

=====
===== Accidental Release Measures =====

Spill Release Procedures:BATTERY AND CELL CASES WILL NORMALLY CONTAIN MATERIALS OF CONCERN. USE INDUSTRIAL ABSORBENT TO COLLECT LIQUID POTASSIUM HYDROXIDE. WEAR GLO

VES. NEUTRALIZE WITH CITRIC ACID.

Neutralizing Agent:CITRIC ACID

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

Handling and Storage Precautions:STORE AWAY FROM INCOMPATIBLE MATERIALS. AVOID BREAKING, CRUSHING OR OTHERWISE DESTROYING THE PHYSICAL INTEGRITY OF THE CELL OR BATTERY.

Other Precautions:DO NOT INCINERATE. DO NOT TOUCH BROKEN OR LEAKING BATTERIES. WASH THOROUGHLY AFTER HANDLING. AVOID BREATHING FUMES OR DUST. KEEP OUT OF REACH OF SMALL CHILDREN. D

O NOT TRANSPORT
BATTERIES WITHOUT VENT CAP IN PLACE.

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

Respiratory Protection:USE NIOSH APPROVED MIST OR DUST MASK WHEN HANDLING THE LIQUID IN THE BATTERY. WEAR RESPIRATORY PROTECTION IF TLV EXCEEDED.

Ventilation:USE ADEQUATE LOCAL EXHAUST VENTILATION WHEN HANDLING THE LIQUID IN THE BATTERY OR FUMES PRESENT.

Protective Gloves:NEOPRENE, NITRILE FOR LEAKERS

Eye Protection:SAFETY GOGGLES FOR LEAKERS

Other Protectiv

e Equipment:EYE WASH STATION, QUICK DRENCH SHOWER AND IMPERVIOUS CLOTHING

Work Hygienic Practices:OBSERVE GOOD PERSONAL HYGIENE PRACTICES AND RECOMMENDED PROCEDURES. DO NOT WEAR CONTAMINATED CLOTHING.

Supplemental Safety and Health

NONE SPECIFIED BY MANUFACTURER.

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

HCC:B1

NRC/State Lic Num:NOT RELEVANT

Boiling Pt:B.P. Text:NOT GIVEN

Melt/Freeze Pt:M.P/F.P Text:NOT GIVEN

Decomp Temp:Decomp Text:NOT GIVEN

Vapor Pres:NOT G

IVEN

Vapor Density:NOT GIVEN

Spec Gravity:1.250-1.30

Viscosity:NOT RELEVANT

Evaporation Rate & Reference:NOT GIVEN

Solubility in Water:ELECTROLYTE-SOLUBLE

Appearance and Odor:BATTERY - NO ODOR

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

Stability Indicator/Materials to Avoid:YES

ELECTROLYTE WILL REACT WITH ALUMINUM, ZINC, TIN, ACIDS, CHLORINATED AND AROMATIC HYDROCARBONS, NITROCARBONS, HALOCARBON.

Stability Condition to Avoid:EXCESSIVE HEAT, FIRE. DO NOT ADD SUL

FURIC
ACID.

Hazardous Decomposition Products: POTASSIUM HYDROXIDE, TOXIC FUMES OF
CADMIUM, CADMIUM OXIDE AND NICKEL OXIDE

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

Waste Disposal Methods: CELLS AND BATTERIES MAY BE RETURNED AT SENDERS
EXPENSE TO A PERMITTED TREATMENT, STORAGE, DISPOSAL FACILITY
(TSD). DISPOSAL MUST BE MADE IN ACCORDANCE WITH ALL APPLICABLE
FEDERAL, STATE AND LOCAL LAWS AND REGULATIONS. MAY BE SENT TO SAFT
TO RECYCLE.

Disclaimer

er (provided with this information by the compiling agencies):
This information is formulated for use by elements of the Department
of Defense. The United States of America in no manner whatsoever,
expressly or implied, warrants this information to be accurate and
disclaims all liability for its use. Any person utilizing this
document should seek competent professional advice to verify and
assume responsibility for the suitability of this information to their
particular situation.