

SAFT AMERICA INC -- NICKEL CADMIUM BATTERY -- 6140-01-151-8255

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

Product ID:NICKEL CADMIUM BATTERY

MSDS Date:11/20/1986

FSC:6140

NIIN:01-151-8255

MSDS Number: CGDTK

=== Responsible Party ===

Company Name:SAFT AMERICA INC

Address:711 INDUSTRIAL BLVD

City:VALDOSTA

State:GA

ZIP:31601

Country:US

Info Phone Num:912-247-2331

Emergency Phone Num:912-247-2331

Preparer's Na

me:BETH SNYDER

CAGE:DO617

=== 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

Address:711 INDUSTRIAL BLVD

Box:450

City:VALDOSTA

State:GA

ZIP:31603

Phone:912-247-2331

CAGE:DO617

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

Ingred Name:CADMIUM (SARA 313) (CERCLA) AND INGREDIENT 2

CAS:7440-43-9

RTECS #:EU9800000

Fraction by

Wt: 13-16%
OSHA PEL:0.2 MG/M3 DUST
ACGIH TLV:0.01 MG/M3 DUST
EPA Rpt Qty:10 LBS
DOT Rpt Qty:10 LBS

Ingred Name:CADMIUM HYDROXIDE
CAS:21041-95-2
RTECS #:EV1260000
Fraction by Wt: 13-16%
OSHA PEL:0.05 MG CD/M3
ACGIH TLV:0.05 MG CD/M3

Ingred Name:NICKEL (SARA 313) (CERCLA) AND INGREDIENT 4
CAS:7440-02-0
RTECS #:QR5950000
Fraction by Wt: 20-30%
OSHA PEL:1 MG/M3
ACGIH TLV:1 MG/M3

Ingred Name:NICKEL HYDROXIDE
Fraction by Wt: 20-30%
OSHA PEL:0.05 MG/M3
ACGIH TLV:0.05 MG/M3

Ingred Name:POTASSIUM HY
DROXIDE (CERCLA) OR INGREDIENT 6
CAS:1310-58-3
RTECS #:TT2100000
Fraction by Wt: 2-4%
OSHA PEL:C 2 MG/M3
ACGIH TLV:C 2 MG/M3
EPA Rpt Qty:1000 LBS
DOT Rpt Qty:1000 LBS

Ingred Name:SODIUM HYDROXIDE (CERCLA)
CAS:1310-73-2
RTECS #:WB4900000
Fraction by Wt: 2-4%
OSHA PEL:2 MG/M3
ACGIH TLV:C 2 MG/M3
EPA Rpt Qty:1000 LBS
DOT Rpt Qty:1000 LBS

Ingred Name:COBALT HYDROXIDE
CAS:1307-86-4
RTECS #:GG0904000
Fraction by Wt: 0.5-1%
OSHA PEL:0.05 MG/M3(COBALT)
ACGIH TLV:0.1 MG/M3

Ingred Name:SUP DAT: GROUP 2

B. NTP 7TH ANNUAL RPT ON CARCINS, 1994:

ANTIC TO BE CARCIN. ANIMAL: LUNG. NICKEL HYDROXIDE: NTP (ING 9)
RTECS #:9999999ZZ

Ingred Name:ING 8: 7TH ANNUAL REPORT ON CARCINOGENS, 1994: ANTICIPATED
TO BE CARCINOGEN. ANIMAL: LUNG.
RTECS #:9999999ZZ

Ingred Name:EYE PROTECTION: AND FULL LENGTH FACESHIELD .
RTECS #:9999999ZZ

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

LD50 LC50 Mixture:NONE SPECIFIED BY MANUFACTURER.

Routes of Entry: Inhalation:YES Skin:YES Ingestio
n:YES

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

Health Hazards Acute and Chronic:ACUTE: POTASSIUM HYDROXIDE OR SODIUM
HYDROXIDE: BURNS TO TISSUE CONTACTED; NICKEL: POSSIBLE CONTACT
DERMATITIS; CADMIUM: POSSIBLE LUNG OR KIDNEY DAMAGE; NICKEL:
POSSIBLE LUNG DAMAGE.

Explanation of Carcinogenicity:CADMIUM: IARC MONO, SUPP, VOL 7, PG 139,
1987: GROUP 2A. NTP 7TH ANNUAL RPT ON CARCINS, 1994: ANTIC TO BE
(SUP DAT)

Effects of Overexposure:SEE HEALTH HAZARDS.

Medical C

ond Aggravated by Exposure:NONE SPECIFIED BY MANUFACTURER.

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

First Aid:WASH THOROUGHLY WITH LARGE VOLUME OF WATER IF ELECTROLYTE IS
SPILLED. INHALATION: REMOVE TO FRESH AIR; CONTACT MD. EYES: FLUSH
WITH WATER FOR AT LEAST 15 MINUTES; CONTACT MD. SKIN: WASH WITH
LARGE VOL UME OF WATER; MILD ACID MAY BE USED TO NEUTRALIZE.
INGESTION: CONTACT MD IMMEDIATELY.

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

Extinguishing Media:SUITABLE FOR SURROUNDING FIRE.

Fire Fighting Procedures:WEAR NIOSH APPROVED SCBA & FULL PROTECTIVE
EQUIPMENT .

Unusual Fire/Explosion Hazard:TOXIC CADMIUM OXIDE FUMES MAY BE RELEASED
DURING BURNING.

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

Spill Release Procedures:FLUSH ELECTROLYTE SPILLS WITH WATER.

Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

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

Handli

ng and Storage Precautions:DO NOT BREAK OPEN BATTERY CELL. DO NOT INCINERATE OR MUTILATE. DO NOT SHORT-CIRCUIT - MAY CAUSE BURNS.

Other Precautions:NONE SPECIFIED BY MANUFACTURER.

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

Respiratory Protection:NIOSH APPROVED SCBA (IF BURNED).

Ventilation:NONE SPECIFIED BY MANUFACTURER.

Protective Gloves:NEOPRENE OR PVC IF CELL BROKEN.

Eye Protection:ANSI APPRVD CHEM WORKERS GOGG (ING 10)

Other Protective Equipment:EMERGENCY EYEWA

SH AND DELUGE SHOWER MEETING

ANSI DESIGN CRITERIA .

Work Hygienic Practices:NONE SPECIFIED BY MANUFACTURER.

Supplemental Safety and Health

APPEAR/ODOR: ELECTRODE, NICKEL ELECTRODE & KOH/NAOH ELECTROLYTE. EXPLAN OF CARCIN: CARCIN. OSHA REGULATED: CFR 29 1910.1027. HUMAN: LUNG.

CADMIUM HYDROXIDE: IARC MONO, VOL 58, PG 119, 1993: GROUP 1. C

OBALT HYDROXIDE: IARC MONO, VOL 52, PG 363, 1991: GROUP 2B. ANIMAL:

GI. NICKEL: IARC MONO, VOL 49, PG 257, 1990: (ING 8)

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

HCC:B1

Appearance and Odor:EACH BATTERY CELL IS A SEALED CYLINDRICAL CONTR ENCLOSING A CADMIUM (SUP DAT)

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

Stability Indicator/Materials to Avoid:YES

NOT APPLICABLE.

Stability Condition to Avoid:NOT APPLICABLE.

Hazardous Decomposition Products:TOXIC FUMES MAY BE RELEASED IF INCINERATED.

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

Waste Disposal

Methods:DISPOSE IN ACCORDANCE WITH APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS.

Disclaimer (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.