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 Name:BETH SNYDER CAGE:DO617 === Contractor Identification === Comp any 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

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 EP A 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 HYDROXIDE (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 2B. NTP 7TH ANNUAL RPT ON CARCINS, 1994: ANTIC TO BE CARCIN. ANIMAL: LUNG. NICKEL HYDROXIDE: NTP (ING 9) RTECS #:99999992Z

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 #:99999992Z

LD50 LC50 Mixture:NONE SPECIFIED BY MANUFACTURER.
Routes of Entry: Inhalation:YES Skin:YES Ingestion: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 Cond Aggravated by Exposure:NONE SPECIFIED BY MANUFACTURER.

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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.

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.

Spill Release Procedures: FLUSH ELECTROLYTE SPILLS WITH WATER. Neutralizing Agent: NONE SPECIFIED BY MANUFACTURER.

Handling and Storage Precautions: DO NOT BREAK OPEN BATTERY CELL. DO NO

INCINERATE OR MUTILATE. DO NOT SHORT-CIRCUIT - MAY CAUSE BURNS. Other Precautions:NONE SPECIFIED BY MANUFACTURER.

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 EYEWASH AND DELUGE SHOWER MEETING ANSI DESIGN CRITERIA . Work Hyg ienic 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) HCC:B1 Appea rance and Odor: EACH BATTERY CELL IS A SEALED CYLINDRICAL CONTR ENCLOSING A CADMIUM (SUP DAT) Stability Indicator/Materials to Avoid:YES NOT APPLICABLE. Stability Condition to Avoid:NOT APPLICABLE. Hazardous Decomposition Products: TOXIC FUMES MAY BE RELEASED IF INCINERATED.

Waste Disposal Methods:DISPOSE IN ACCORDANCE WITH APPLICABLE LOCAL, STATE

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AND FEDERAL REGULATIONS.

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particular situation.