

SAFT AMERICA INC PORTABLE BATTERY DIVISION -- NICKEL CADMIUM SEALED CELL BATTERY --
6140-01-143-4884

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

Product ID:NICKEL CADMIUM SEALED CELL BATTERY

MSDS Date:10/03/1994

FSC:6140

NIIN:01-143-4884

MSDS Number: CFYPK

=== Responsible Party ===

Company Name:SAFT AMERICA INC PORTABLE BATTERY DIVISION

Address:711 INDUSTRIAL BLVD

Box:1886

City:VALDOSTA

State:GA

ZIP:31601

Country:US

Info Phone Num:912-247-2331

Emergency Phone Num:912-247-2331

CAGE:67237

=== Contractor Identification ===

Company Name:SAFT AMERICA INC PORTABLE BATTERY DIVISION

Address:711 INDUSTRIAL BLVD

Box:1886

City:VALDOSTA

State:GA

ZIP:31601

Country:US

Phone:912-247-2331

CAGE:67237

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

Ingred Name:CADMIUM (SARA 313) (CERCLA), % TOTAL OF INGREDIENTS #1, 2, 3.

CAS:7440-43-9

RTECS #:EU9800000

Fraction by Wt: 17%

Other REC Limits:NONE

RECOMMENDED

OSHA PEL:0.2 MG/M3 DUST; Z-2
ACGIH TLV:0.01 MG/M3 DUST;9596
EPA Rpt Qty:10 LBS
DOT Rpt Qty:10 LBS

Ingred Name:CADMIUM HYDROXIDE

CAS:21041-95-2

Fraction by Wt: SEE #1%

Other REC Limits:NONE RECOMMENDED

OSHA PEL:0.05 MG CD/M3

ACGIH TLV:0.05 MG CD/M3

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

CAS:1306-19-0

RTECS #:EV1925000

Fraction by Wt: SEE #1%

Other REC Limits:NONE RECOMMENDED

OSHA PEL:0.2 MG (CD)/M3 DUST

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

Ingred Name:NICKEL (SARA 313) (CERCLA

), % FOR TOTAL OF INGREDIENTS 4,5,6.

CAS:7440-02-0

RTECS #:QR5950000

Fraction by Wt: 19%

Other REC Limits:NONE RECOMMENDED

OSHA PEL:1 MG/M3

ACGIH TLV:1 MG/M3; 9596

Ingred Name:NICKEL HYDROXIDE (SARA 313) (CERCLA)

CAS:12054-48-7

RTECS #:QR7040000

Fraction by Wt: SEE #4%

Other REC Limits:NONE RECOMMENDED

OSHA PEL:1 MG(NI)/M3

ACGIH TLV:0.1 MG(NI)/M3; 9596

EPA Rpt Qty:10 LBS

DOT Rpt Qty:10 LBS

Ingred Name:NICKEL OXIDE

CAS:1313-99-1

RTECS #:QR8400000

Fraction by Wt: SEE #4%

Other REC Limits:NONE RECOMMENDED

ENDED
OSHA PEL:1 MG/M3 AS NI
ACGIH TLV:1 MG/M3 AS NI

Ingred Name:POTASSIUM HYDROXIDE (CERCLA)
CAS:1310-58-3
RTECS #:TT2100000
Fraction by Wt: 8%
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:AS COBALT METAL (SARA 313), COBALT HYDROXIDE
CAS:7440-48-4
RTECS #:GF8750000
Fraction by Wt: 1%
Other REC Limits:NONE RECOMMENDED
OSHA PEL:0.1 MG/M3
ACGIH TLV:0.02 MG/M3; A3; 9596

=====
Hazards Identifi
cation =====

LD50 LC50 Mixture:NOT GIVEN
Routes of Entry: Inhalation:YES Skin:YES Ingestion:NO
Reports of Carcinogenicity:NTP:YES IARC:YES OSHA:YES
Health Hazards Acute and Chronic:EYE:FIRE/CELL RUPTURE OCCURS
ELECTROLYTE SOLN INSIDE BATT EXTREMELY CORR TO EYE TISSUES.MAY
RESULT IN PERM BLINDNESS.CONTACT W/NIO MAY CAUSE MINOR
IRRIT.SKIN:CONTACT W/ELECTROLYTE SOLN MAY CAUSE SER B URNS.CONTACT
W/NI CMPDS MAY CAUSE SKIN SENS,RESULT IN CHRONIC ECZEMA/NI
|
TCH.INGEST:ELECTROLYTE SOLN CAUSES TISSUE(SUPP)
Explanation of Carcinogenicity:CONTAINS NICKEL & CADMIUM COMPOUNDS. PER
MSDS:NIOSH RECOMMENDS THAT NI & CD BE TREATED AS OCCUPATIONAL
CARCINOGENS.
Effects of Overexposure:CORR TO EYE TISSUES,PERM BLINDNESS,MINOR
IRRIT.SERIOUS SKIN BURNS,SENS,CHRONIC ECZEMA,NI ITCH.DMG TO THROAT
AREA & GASTRO/RESP TRACT,NAU,INTESTINAL DISORDERS.MILD NASAL MUC
MEMBRANES IRRIT TO DMG OF LUNG TISSUES PROPER.DRY
THROAT,COUGH,HEADACHE,VOMIT,CHES

T PAINS, CHILLS,PULM EDEMA,BREATH
DIFF,PROSTRATION,KIDNEY DMG.

Medical Cond Aggravated by Exposure:NONE SPECIFIED BY MANUFACTURER.

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

First Aid:EYES: IMMEDIATELY FLUSH WITH WATER FOR 15 MINUTES. GET
MEDICAL ATTENTION ASAP. INHALATION: MOVE TO FRESH AIR. TREAT
SYMPTOMATICALLY. GET MEDICAL ATTENTION. SKIN: IMMEDIATELY REMOVE
CONTAMINATED CLOTHI NG AND WASH WITH SOAP AND WATER. GET MEDICAL
ATTENTION. INGESTION:

DO NOT INDUCE VOMITING. GIVE VICTIM A GLASS
OF WATER. NEVER GIVE ANYTHING BY MOUTH IF UNCONSCIOUS. CALL
PHYSICIAN OR POISON CONTROL.

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

Flash Point:NOT GIVEN

Autoignition Temp:Autoignition Temp Text:NP

Lower Limits:NOT GIVEN

Upper Limits:NOT GIVEN

Extinguishing Media:CO2, SAND.

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

REVENT POTENTIAL BODY CONTACT WITH ELECTROLYTE.

Unusual Fire/Explosion Hazard:ELECTROLYTE IS CORROSIVE. IT WILL REACT
VIOLENTLY WITH MANY ORGANIC CHEMICAL, ESPECIALLY NITROCARBONS &
CHLOROCARBONS. ALSO REACTS WITH ZN, AL, SN, ACTIVE METAL

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

Spill Release Procedures:ELECTROLYTE SPILLS:FLUSH W/WATER & NEUTRALIZE
W/DILUTE CITRIC ACID.

Neutralizing Agent:ELECTROLYTE:NEUTRALIZE W/DILUTE CITRIC ACID.

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= Handling and Storage =====

Handling and Storage Precautions:IN CASE OF FIRE DON'T BREATH
SMOKE/FUME. THESE CELLS/BATT CONSTRUCTED FROM THEM MAY BE HIGHLY
CHARGE/CAPABLE OF HI ENERGY DISCHARGE.DON;T BREAK OPN CE

Other Precautions:CARE SHOULD BE TAKEN IN HNDL CELLS PROPERLY TO AVOID
SHORTING/MISUSE THAT WILL RESULT IN RAPID UNCONTROLLED
ELECTRICAL/CHEM/HEAT ENERGY RELEASE.DO NOT SHORT CIRCUIT-MAY CAUSE
BURNS.DO NOT ALLOW FLAMES / SPARK TO COME NEAR CELLS.

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

Respiratory Protection:USE NIOSH/MSHA APPROVED RESPIRATOR IF CELL
BROKEN OPN DURING FIRE TO MAINTAIN EXPO LEVELS BEL TWA FOR CADMIUM
& NICKEL COMPOUNDS.

Ventilation:NONE SPECIFIED BY MANUFACTURER.

Protective Gloves:WATER-INSOLUBLE, NON-PERM GLOVE(SYN RUBB)

Eye Protection:SPLASH GOGGLES, FACE SHIELDS.

Other Protective Equipment:DO NOT USE LEATHER OR WOOL GLOVES.RUBBER
APRON OR EQUIVALENT IF EXPO TO ELECTROLYTE SOLN IS
LIKELY.

Work Hygienic Practices:WASH HANDS THOROUGHLY WITH SOAP AND WATER
BEFORE EATING, DRINKING, SMOKING OR USING TOILET FACILITIES.

Supplemental Safety and Health

HEALTH HAZ:DMG TO THROAT AREA/GASTRO/RESP TRACT.NI CMPDS
INGEST:NAU/INTESTINAL DISORDER.INHAL:NO EXPO EXCEPT IN CASE OF
FIRE/ABUSE.CD &/OR NI CMPD:VARY FRM MILD NASAL MUC MEMB IRRIT TO
LUNG TISSUES PR OPER DMG.CDO MAY CAUSE DRY
THROAT, COUGH, HEAD, VOMIT, CHEST PAIN, CHILLS.CHRONIC:PULM
EDEMA, BREATH DIFFI, PROSTR
ATION, KID DM

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

HCC:N1

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 GIVEN

Vapor Density:NOT GIVEN

Spec Gravity:1.17-1.25 ELECT

Viscosity:NP

Evaporation Rate & Reference:NOT DETERMINED

Solubility in Water:ELECT SOLUBLE.

Appearance and Odor:NONE SPECIFIED BY MANUFACTURER.

Percent Volatiles by Volume:NP

===== Stability and Reactivity Data ==

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Stability Indicator/Materials to Avoid:YES

AL, ZN, SN, OTHER ACTIVE METALS; ACID; CHLORINATED & AROMATIC
HYDROCARBONS; NITROCARBONS; HALOCARBONS.

Stability Condition to Avoid:AVOID PHYSICAL DAMAGE THAT WOULD EXPOSE
ELECTROLYTE.

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

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

Waste Disposal Methods:STORAGE BATT IS HAZ WASTE UNDER RCRA.IT MAY BE
RETURNED TO SA

FT FOR RECYCLING.BATT IS TCLP TOXIC.BATT/ELECTRO SOLN
ARE CORR.IF NOT RECYLCED MUST BE DISPOSED OF IAW ALL FED/STATE/LOC
REGS.

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