SAFT NIFE INC -- 401096-017, INDUSTRIAL NICKEL CADMIUM STORAGE BATTERY -- 6140-01-274-8889

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

Product ID:401096-017, INDUSTRIAL NICKEL CADMIUM STORAGE BATTERY
MSDS Date:06/16/1994
FSC:6140
NIIN:01-274-8889
Status Code:A
MSDS Number: CKQYN
=== Responsible Party ===
Company Name:SAFT NIFE INC
Address:711 INDUSTRIAL BLVD
Box:1886
City:VALDOSTA
State:GA
ZIP:31603-1886
C
ountry:US
Info Phone Num:912-247-2331
Emergency Phone Num:912-247-2331
Chemtrec Ind/Phone:(800)424-9300
CAGE:1HB35
=== 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
Company Name:SAFT NIFE INC
Address:711 INDUSTRIAL BLVD
Box:1886
City:VALDOSTA
State:GA
ZIP:31603-1886
Country:US
Phone:912-247-2331
CAGE:1HB35

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

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Ingred Name:ACRYLIC POLYMER CONTAINER
= Wt:10.

Ingred Name:POLYSULFONE CONTAINER
= Wt:10.

Ingred Name:POLYPROPYLENE CONTAINER
= Wt:10.

Ingred Name:NICKEL OXIDE, SOLID
CAS:1313-99-1
RTECS #:QR8400000
= Wt:10.
OSHA PEL:1 MG/M3

Ingred Name:LITHIUM HYDROXIDE
CAS:1310-66-3
< Wt:1.

Ingred Name:GRAPHITE
CAS:7782-42-5
RTECS #:MD9659600
= Wt:3.
OSHA PEL:SEE TABLE Z-3
ACGIH TLV:2 MG/M3

Ingred Name:ELECTROLYTE SOLUTION (18-28% POTASSIUM HYDROXIDE)
CAS:1310-58-3
RTECS #:TT2100000
= Wt:28.
ACGI
H STEL:C2 MG/M3
EPA Rpt Qty:1000 LBS
DOT Rpt Qty:1000 LBS

Ingred Name:STEEL
= Wt:39.

Ingred Name:CADMIUM OXIDE
CAS:1306-19-0
RTECS #:EV1925000
= Wt:9.

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

LD50 LC50 Mixture:NO DATA PROVIDED BY RESPONSIBLE PARTY.
Reports of Carcinogenicity:NTP:UNKNOWN IARC:UNKNOWN OSHA:NO
Health Hazards Acute and Chronic:EYE: CONTACT WITH ELECTROLYTE SOLUTION CAUSES RAPID, SEVERE DAMAGE. EXTREMELY CORROSIVE TO EYE TISSUES. MAY RESULT

IN PERMANENT BLINDNESS. CONTACT WITH NICKEL OXIDE MAY CAUSE IRRITATION. SKIN: CONTACT WITH ELECTROLYTE SOLUTION MAY CAUSE SERIOUS BURNS TO SKIN TISSUES. CONTACT WITH NICKEL COMPOUNDS MAY CAUSE SKIN SENSITIZATION. INGESTION: INGESTION OF ELECTROLYTE CAUSES TISSUE DAMAGE TO THROAT & GAS TRO/RESPIRATORY TRACT. INGESTION OF NICKEL CAUSES NAUSEA & INTESINAL DISORDERS. INHALATION: MIST GENERATED DURING ACTIVATION MAY CAUSE VARYING DEGREES OF RESPIRATORY IRRITATION. INHALA
TION OF CADMIUM MAY CAUSE IRRITATION, PULMONARY EDEMA.

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

Effects of Overexposure:EYES: IRRITATION, BLINDNESS, RAID/SEVERE DAMAGE. SKIN: BURNS, CHRONIC ECZEMA, NICKEL ITCH. INGESTION: THROAT DAMAGE, NAUSEA, INTERNAL DISORDERS. INHALED: DRY THROAT, COUGH, HEADACHE, VOMITING, CHEST P AIN, CHILLS, PULMONARY EDEMA, BREATHING DIFFICULTY, PROSTRATION.

Medical Cond Aggra
vated by Exposure:NO DATA PROVIDED BY RESPONSIBLE PARTY.

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

First Aid:ELECTROLYTE: EYE CONTACT: FLUSH WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES. GET IMMEDIATE MEDICAL ATTENTION. SKIN CONTACT: REMOVE CONTAMINATED CLOTHING & FLUSH AFFECTED AREAS WITH PLENTY OF WATER FO R AT LEAST 15 MINUTES. INGESTION: DO NOT INDUCE VOMITING. DILUTE BY GIVING WATER. IF AVAILABLE, GIVE SEVERAL GLASSES OF MILK. GET IMMEDIA
TE MEDICAL ATTENTION. DO NOT GIVE ANYTHING BY MOUTH TO UNCONSCI OUS PERSON. INHALATION: REMOVE TO FRESH AIR. GIVE OXYGEN OR ARTIFICIAL RESPIRATION IF NEEDED. GET IMMEDIATE MEDICAL ATTENTION. NICKEL OXIDE: SKIN CONTACT: WASH WITH SOAP & WATER.

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

Extinguishing Media:CO2, SAND.

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 SOLUTION OR MIXTURE OF WATER AND SOLUTI ON. DISCONNECT OR CUT ALL CABLES TO AND FROM BATTERY.

Unusual Fire/Explosion Hazard:ELECTROLYTE SOLUTION IS CORROSIVE TO ALL HUMAN TISSUES. IT WILL REACT WITH MANY ORGANIC MATERIALS. ELECTROLYTE REACTS WITH ZINC, ALUMINUM, TIN 7 OTHE RACTIVE METALS RELEASING FLAMMABLE HYDROGEN GAS. C ADMIUM FUMES MAY BE RELEASED WHEN BATTERIES ARE SUBJECTED TO HIGH TEMPERATURES.

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

Spill Release Procedures:ELECTROLYTE SPILLS: SMALL (UP TO 5 GALLONS): FLUSH WITH WATER AND NEUTRALIZE WITH DILUTE CITRIC ACID. LARGE SPILL: CONTAIN MATERIAL IN SUITABLE CONTAINER OR HOLDING AREA. DO NOT ALLOW MATERIAL TO ENTE R SEWERS, STREAMS OR STORM CONDUITS. RECOVER MATERIAL WITH VACUUM TRUCK & DISPOSE OF PROPERLY. REPORTABLE QUANTITY: 1000 LBS. 40 CFR 117.13.

Neutralizing Agent:DILUTE CITRIC ACID.

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

Handling and Storage Precautions:PER FORM ACTIVATION PROCEDURES IN A WELL VENTILATED AREA. BATTERY OPERATING AREAS MUST BE WELL VENTILATED TO REMOVE NORMAL GASES GENERATED. DO NOT ALLOW AN EXPOSED FLAME OR SPARK TO COME NEAR THE CELL S.

Other Precautions:NEVER ACTIVATE OR TOP OFF WITH ACID! DO NOT TRANSPORT BATTERY WITH VENT CAP IN PLACE. WHEN REMOVING BATTERY FROM SERVICE VISUALLY INSPECT FOR LEAKAGE PRIOR TO HANDLING. IF LEAKAGE HAS OCCURRED FOLLOW SPILL MANAGEMENT PROCEDURES.

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

Respiratory Protection:USE NIOSH APPROVED MIST RESPIRATOR DURING ACTIVATION AND ACTUAL USAGE TO MAINTAIN EXPOSURE LEVELS BELOW THE TWA.

Ventilation:PERFORM ACTIVATION IN A WELL-VENTILATED AREA. BATTERY OPERATING AREAS MUST BE WELL VENTILATED TO REMOVE NORMAL GASES GENERATED.

Protective Gloves:WATER-INSOLUBLE NON-PERMEABLE GLOVES-SYNTHETIC RUBBER (NOT W

OOL OR LEATHER!)
Eye Protection:SPLASH GOGGLES OR FACE SHIELD.
Other Protective Equipment:RUBBER BOOTS, RUBBER APRON OR RAINWEAR OR EQUIVALENT IF EXPOSURE TO ELECTROLYTE SOLUTION IS LIKELY.
Work Hygienic Practices:NO DATA PROVIDED BY RESPONSIBLE PARTY.
Supplemental Safety and Health
NO DATA PROVIDED BY RESPONSIBLE PARTY.

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

HCC:B1
Vapor Pres:2 MM HG @ 68F
Spec Gravity:1.17-1.25 (ELECTROLYTE)
Evaporation Rate & Reference:
NOT DETERMINED
Solubility in Water:ELECTROLYTE-COMPLETE
Appearance and Odor:NO DATA PROVIDED BY RESPONSIBLE PARTY.

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

ALUMINUM ZINC, TIN & OTHER ACTIVE METALS; ACID, CHRLORINATED & AROMATIC HYDROCARBONS, NITROCARBONS, HALOCARBONS, TRICHLOROETHYLENE.
Stability Condition to Avoid:NO DATA PROVIDED BY RESPONSIBLE PARTY.
Hazardous Decomposition Products:NICKEL OXIDE, CADMIUM, CADMIUM OXIDE, POTASSIUM HYDROXIDE. NOTE: THE NORMA
L REACTIONS INSIDE THE BATTERY
RELEASE FLAMMABLE HYDROGEN GAS. DO SEAL BATTERY FROM ATMOSPHERE.

========== Toxicological Information ==========

Toxicological Information:NO DATA PROVIDED BY RESPONSIBLE PARTY.

========== Ecological Information ==========

Ecological:NO DATA PROVIDED BY RESPONSIBLE PARTY.

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

Waste Disposal Methods:THIS STORAGE BATTERY IS A HAZARDOUS WASTE UNDER

RCRA. IT MAY BE RETURNED TO SAFT NIFE FOR RECYCLING . BATTERY IS TCLP TOXIC. BATTERY & ELECTROLYTE ARE CORROSIVE. IF NOT RECYCLED, MUST BE DISPOSED OF I N ACCORDANCE WITH ALL FEDERAL, STATE & LOCAL REGULATIONS.

========== MSDS Transport Information ==========

Transport Information:NO DATA PROVIDED BY RESPONSIBLE PARTY.

========== Regulatory Information ==========

SARA Title III Information:NO DATA PROVIDED BY RESPONSIBLE PARTY.
Federal
Regulatory Information:NO DATA PROVIDED BY RESPONSIBLE PARTY.
State Regulatory Information:NO DATA PROVIDED BY RESPONSIBLE PARTY.

========== Other Information ==========

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