

SAFT AMERICA INC TRANSPORTATION DIV -- SAFT BRAND NICKEL CADMIUM SEALED CELL BATTERY -- 6140-01-113-0014

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

Product ID:SAFT BRAND NICKEL CADMIUM SEALED CELL BATTERY

MSDS Date:10/03/1994

FSC:6140

NIIN:01-113-0014

Status Code:A

MSDS Number: CKQDS

=== Responsible Party ===

Company Name:SAFT AMERICA INC TRANSPORTATION DIV

Address:711 INDUSTRIAL BLVD

Box:1886

City:VAL

DOSTA

State:GA

ZIP:31601-1886

Country:US

Info Phone Num:912-247-2331

Emergency Phone Num:912-247-2331

Chemtrec Ind/Phone:(800)424-9300

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:CADMIUM

CAS:7440-43-9

RTECS #:EU9800000

= Wt:17.

OSHA PEL:SEE 1910.1027

EPA Rpt Qty:10 LBS

DOT

Rpt Qty:10 LBS

Ingred Name:CADMIUM HYDROXIDE

CAS:21041-95-2

RTECS #:EV1260000

= Wt:17.

OSHA PEL:5 MCG/M3 (CD)

Ingred Name:CADMIUM OXIDE

CAS:1306-19-0

RTECS #:EV1925000

= Wt:17.

OSHA PEL:5 MCG/M3 (CD)

Ingred Name:NICKEL

CAS:7440-02-0

RTECS #:QR5950000

= Wt:19.

OSHA PEL:1 MG/M3

ACGIH TLV:1 MG/M3

Ingred Name:NICKEL HYDROXIDE

CAS:12054-48-7

RTECS #:QR7040000

= Wt:19.

OSHA PEL:1 MG/M3 (AS NI)

ACGIH TLV:1 MG/M3

EPA Rpt Qty:10 LBS

DOT Rpt Qty:10 LBS

Ingred Name:NICKEL OXIDE

CAS:1313-99-1

RTECS #:Q

R8400000

= Wt:19.

OSHA PEL:1 MG/M3 (AS NI)

Ingred Name:POTASSIUM HYDROXIDE

CAS:1310-58-3

RTECS #:TT2100000

= Wt:8.

ACGIH STEL:C2 MG/M3

EPA Rpt Qty:1000 LBS

DOT Rpt Qty:1000 LBS

Ingred Name:COBALT HYDROXIDE AS COBALT METAL

CAS:7440-48-4

RTECS #:GF8750000

= Wt:1.

OSHA PEL:0.1 MG/M3

ACGIH TLV:0.02 MG/M3

==== Hazards Identification =====

LD50 LC50 Mixture:NO DATA PROVIDED BY RESPONSIBLE PARTY.

Routes of Entry: Inhalation:NO Skin:YES Ingestion:YES

Health Hazard

s Acute and Chronic: EYE EFFECTS: IN THE CASE OF A FIRE OR CELL RUPTURE THE ELECTROLYTE SOLUTION INSIDE BATTERY IS EXTREMELY CORROSIVE TO EYE TISSUES. MAY RESULT IN PERMANENT BLINDNESS. CONTACT WITH NICKEL OXIDE MAY CAUSE MINOR IRRITATION. SKIN EFFECTS: CONTACT WITH ELECTROLYTE SOLUTION INSIDE BATTERY MAY CAUSE SERIOUS BURNS TO SKIN TISSUES. CONTACT WITH NICKEL COMPOUNDS MAY CAUSE SKIN SENSITIZATION, RESULTING IN CHRONIC ECZEMA OR NICKEL ITCH. INGESTION: INGESTION OF ELECTROLYTE SOLUTION CAUSES TISSUE DAMAGE TO THROAT AREA AND GASTRO/RESPIRATORY TRACT. INGESTION OF NICKEL COMPOUND CAUSES NAUSEA AND INTESTINAL DISORDERS. INHALATION: NO EXPOSURE POSSIBLE

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

Effects of Overexposure: EYE EFFECTS: IN THE CASE OF A FIRE OR CELL RUPTURE THE ELECTROLYTE SOLUTION INSIDE BATTERY IS EXTREMELY CORROSIVE TO EYE TISSUES. MAY RESULT IN PERMANENT BLINDNESS. CONTACT WITH NICKEL OXIDE MAY CAUSE MINOR IRRITATION. SKIN EFFECTS: CONTACT WITH ELECTROLYTE SOLUTION INSIDE BATTERY MAY CAUSE SERIOUS BURNS TO SKIN TISSUES. CONTACT WITH NICKEL COMPOUNDS MAY CAUSE SKIN SENSITIZATION, RESULTING IN CHRONIC ECZEMA OR NICKEL ITCH. INGESTION: INGESTION OF ELECTROLYTE SOLUTION CAUSES TISSUE DAMAGE TO THROAT AREA AND GASTRO/RESPIRATORY TRACT. INGESTION OF NICKEL COMPOUND CAUSES NAUSEA AND INTESTINAL DISORDERS. INHALATION: NO EXPOSURE POSSIBLE

Medical Condition Aggravated by Exposure: NO DATA PROVIDED BY RESPONSIBLE PARTY.

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

First Aid: EYE CONTACT: FLUSH WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES IF ABUSE CAUSES SAFETY VENTS TO ACTIVATE. GET IMMEDIATE MEDICAL ATTENTION. SKIN CONTACT: REMOVE CONTAMINATED CLOTHING & FLUSH AFFECTED AREAS WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES. WASH WITH SOAP & WATER. INGESTION: DO NOT INDUCE VOMITING. DILUTE BY GIVING WATER. IF AVAILABLE GIVE SEVERAL GLASSES OF MILK. GET IMMEDIATE MEDICAL ATTENTION. DO NOT GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. INHALATION: REMOVE TO FRESH AIR. GIVE OXYGEN OR ARTIFICIAL RESPIRATION IF NEEDED. GET IMMEDIATE MEDICAL ATTENTION.

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

Upper Limits: N/P  
Extinguishing Media: CARBON DIOXIDE (CO<sub>2</sub>), SAND.  
Fire Fighting Procedures: USE SELF-CONTAINED BREATHING APPARATUS

TUS TO

AVOID BREATHING TOXIC FUMES. WEAR PROTECTIVE CLOTHING AND EQUIPMENT TO PREVENT POTENTIAL BODY CONTACT WITH ELECTROLYTE SOLUTION OR MIXTURE OF WATER AND SOLUTION.

Unusual Fire/Explosion Hazard:ELECTROLYTE SOLUTION CORROSIVE TO ALL HUMAN TISSUES. REACTS VIOLENTLY W/MANY ORGANIC CHEMICALS, ESPECIALLY NITROCARBONS & CHLOROCARBONS. ELECTROLYTE SOLUTION REACTS WITH ZINC, ALUMINUM, TIN & OTHER ACTIVE MATERIALS RELEASING FLAMMABLE HYDROGEN GAS. CADMIUM FUMES MAY BE RELEASED IF BATTERY SUBJECTED TO HIGH TEMPERATURES.

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

Spill Release Procedures:ELECTROLYTE SPILLS: FLUSH WITH WATER AND NEUTRALIZE WITH DILUTE CITRIC ACID.

Neutralizing Agent:NEUTRALIZE WITH DILUTE CITRIC ACID.

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

Handling and Storage Precautions:THESE CELLS AND THE BATTERIES CONSTRUCTED FROM THEM MAY BE HIGHLY CHARGED AND ARE CAPABLE OF HIGH ENERGY

DISCHARGE. CARE SHOULD BE TAKEN TO HANDLE CELLS PROPERLY TO AVOID SHORTING OR MISUSE THAT WILL RESULT IN RAPID UNCONTROLLED ELECTRICAL, CHEMICAL, OR HEAT ENERGY RELEASE.

Other Precautions:DO NOT SHORT CIRCUIT. DO NOT BREAK OPEN CELL. DO NOT ALLOW AN EXPOSED FLAME OR SPARK TO COME NEAR THE CELLS.

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

Respiratory Protection:USE NIOSH/MSHA APPROVED RESPIRATOR IF CELL IS BROKEN OPEN DURING A FIRE TO MAINTAIN EXPOSURE LEVELS BELOW THE TWA FOR CADMIUM AND NICKEL COMPOUNDS.

Ventilation:NO DATA PROVIDED BY RESPONSIBLE PARTY.

Protective Gloves:USE ANY WATER-INSOLUBLE NON-PERMEABLE GLOVES.

Eye Protection:USE SPLASH GOGGLES OR FACE SHIELD IF CELL ACTIVATES DUE TO ABUSE.

Other Protective Equipment:RUBBER APRON 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.

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

HCC:Z5

Spec Gravity:1.170-1.250 ELDECTROLYTE

Evaporation Rate & Reference:N/D

Solubility in Water:ELECTROLYTE IS SOLUBLE

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

Stability Condition to Avoid:ALUMINUM, ZINC, TIN AND OTHER ACTIVE METALS, ACID, CHLORINATED AND AEROMATIC HYDROCARBONS, NITROCARBONS, HALOCARBONS.

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

Toxicologica

I Information:NO DATA PROVIDED BY RESPONSIBLE PARTY.

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

Ecological:NO DATA PROVIDED BY RESPONSIBLE PARTY.

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

Waste Disposal Methods:THE STORAGE BATTERY IS A HAZARDOUS WASTE UNDER RCRA. IT MAY BE RETURNED TO SAFT FOR RECYCLING.

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

Transport Information:NO DATA PROVIDED BY RESPONSIBLE PARTY.

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===== 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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