

SAFT AMERICA INC. -- P/N 400642 -- 6140-01-142-8488

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

Product ID:P/N 400642

MSDS Date:12/01/1991

FSC:6140

NIIN:01-142-8488

MSDS Number: BYGZF

=== Responsible Party ===

Company Name:SAFT AMERICA INC.

Address:711 INDUSTRIAL BLVD.

Box:1886

City:VALDOSTA

State:GA

ZIP:31601

Country:US

Info Phone Num:912-247-2331 912-245-2880(FAX)

Emergency Phone Num:800-424-9300(CHEMTR
EC)

CAGE:09052

=== Contractor Identification ===

Company Name:AVEX ELECTRONICS CORP

Address:1683 WINCHESTER ROAD

Box:1026

City:BENSALEM

State:PA

ZIP:19020-4510

Country:US

Phone:215-638-1515

CAGE:58414

Company Name:GLS INC/GLOBAL LOGISTICAL SUPPORT INC

Address:2220 RIVER DRIVE

Box:UNKNOW

City:GREAT FALLS

State:MT

ZIP:59401

Country:US

Phone:406-453-0355

CAGE:0GBP8

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

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Composition/Information on Ingredients
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Ingred Name:CADMIUM (SARA 313) (CERCLA) INGREDIENTS 1, 2 & 3 TOTAL 17%
CAS:7440-43-9
RTECS #:EU9800000
Other REC Limits:NONE RECOMMENDED
OSHA PEL:0.2 MG/M3 DUST; Z-2
ACGIH TLV:0.01 MG/M3 DUST;9495
EPA Rpt Qty:10 LBS
DOT Rpt Qty:10 LBS

Ingred Name:CADMIUM HYDROXIDE INGREDIENTS 1, 2 & 3 TOTAL 17%.
CAS:21041-95-2
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) INGREDIENTS 1, 2 & 3
TOTAL 17%.
CAS:1306-19-0
RTECS #:EV1925000
Other REC Limits:NONE RECOMMENDED
OSHA PEL:0.2 MG (CD)/M3 DUST
ACGIH TLV:0.01 MG(CD)/M3; 9495

Ingred Name:NICKEL (SARA 313) (CERCLA) INGREDIENTS 4, 5 & 6 TOTAL 19%.
CAS:7440-02-0
RTECS #:QR5950000
Other REC Limits:NONE RECOMMENDED
OSHA PEL:1 MG/M3
ACGIH TLV:1 MG/M3; 9495

Ingred Name:NICKEL HYDROXIDE (SARA 313) (CERCLA) INGREDIENTS 4, 5 & 6
TOTAL 19%.
CAS:12054-48-7
RTECS #:QR7040000
Other REC Limits:

NONE RECOMMENDED
OSHA PEL:1 MG(NI)/M3
ACGIH TLV:0.1 MG(NI)/M3; 9495
EPA Rpt Qty:10 LBS
DOT Rpt Qty:10 LBS

Ingred Name:NICKEL OXIDE INGREDIENTS 4, 5 & 6 TOTAL 19%.
CAS:1313-99-1
RTECS #:QR8400000
Other REC Limits:NONE RECOMMENDED
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; 9495
EPA Rpt Qty:1000 LBS
DOT Rpt Qty:1000 LBS

Ingred Name:COBALT (SARA 313) (MFR LISTED THIS CAS NO. AND DESCRIBED IT AS "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; 9495

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

LD50 LC50 Mixture:TLV FOR KOH IS 2MG/M3
Routes of Entry: Inhalation:NO Skin:NO Ingestion:NO
Reports of Carcinogenicity:NTP:YES IARC:YES OSHA:NO
Health Hazards Acute and Chronic:EYES:ELECTROLYTE-CORROSIVE;MAY CAUSE BLINDNESS.NICKEL OXIDE-IRRITANT.SKIN:ELECTROLYTE MAY CAUSE BURNS.NICKEL COMPOUNDS ARE SENSITIZERS.INGEST:MAY CAUSE GI TRACT IRRITATION.INHAL:MAY CAUSE RESPIRATORY IRRITATION.CHRONIC:CADMIUM MAY DAMAGE HEART,LUNGS AND KIDNEYS.
Explanation of Carcinogenicity:NICKEL AND CADMIUM ARE LISTED UNDER IARC AND NTP. NO EXPOSURE EXPECTED UNDER NORMAL CONDITIONS OF USE.
Effects of Overexposure:SKIN(SENSITIZATION):CHRONIC ECZEMA,NICKEL ITCH.INGEST:NAUSEA.CHRONIC:PULMONARY

EDEMA,BREATHING DIFFICULTY,
PROSTRATION.

Medical Cond Aggravated by Exposure:PERSONS WITH PRE-EXISTING SKIN
AILMENTS MAY BE AT INCREASED RISK FROM EXPOSURE.

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First Aid Measures
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First Aid:SKIN:REMOVE CONTAMINATED CLOTHING;WASH WITH SOAP AND
WATER.EYES:FLUSH WITH WATER FOR 15 MINUTES.GET MEDICAL ATTENTION.
INHAL:REMOVE TO FRESH AIR.GIVE OXYGEN OR ARTIFICIAL RESPIRATION IF
NEEDED. GET ME DICAL ATTENTION.INGEST:DO NOT INDUCE VOM
ITING.GET
PROMPT QUALIFIED MEDICAL ATTENTION.IF CONSCIOUS,GIVE MILK OR WATER.

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Fire Fighting Measures
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Flash Point:NONE
Lower Limits:NOT GIVEN
Upper Limits:NOT GIVEN
Extinguishing Media:CARBON DIOXIDE,SAND.
Fire Fighting Procedures:USE A SELF-CONTAINED BREATHING APPARATUS AND
FULL PROTECTIVE EQUIPMENT.
Unusual Fire/Explosion Hazard:FIRE CONDITIONS MAY EVOLVE TOXIC FUMES.
ELECTROLYTE IS CORROSIVE.

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Accidental Release Me
asures
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Spill Release Procedures:IF BATTERY RUPTURES, WEAR PROTECTIVE GLOVES
AND SAFETY GLASSES. FLUSH WITH WATER;NEUTRALIZE WITH DILUTE CITRIC
ACID. COLLECT ALL RELEASED MATERIAL IN A PLASTIC BAG FOR WASTE
DISPOSAL. WASH AREA WITH P LENTY OF WATER.
Neutralizing Agent:DILUTE CITRIC ACID.

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Handling and Storage
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Handling and Storage Precautions:STORE IN COOL, DRY PLACE. PROTECT FROM
PHYSICAL DAMAGE, HEAT, FLAMES AND
INCOMPATIBLE MATERIALS.
Other Precautions:DO NOT SHORT CIRCUIT BATTERIES. THEY MAY CAUSE BURNS
WHEN IN CONTACT WITH SKIN OR EYES. USE PROPER BATTERY CHARGER.
OBSERVE CORRECT POLARITY.

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Exposure Controls/Personal Protection
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Respiratory Protection:USE A NIOSH/MSHA APPROVED RESPIRATOR FOR CADMIUM
OR NICKEL FUMES IF CELLS ARE RUPTURED DURING A FIRE.
Ventilation:LOCAL VENTILATION AT THE WORKSITE;MECHANICAL(GENERAL)
VENTILATION TO MAINTAIN TLV/PEL.DO NOT

ABSTRACT CELL VENTS.

Protective Gloves:SYNTHETIC RUBBER.

Eye Protection:CHEMICAL SPLASH GOGGLES

Other Protective Equipment:RUBBER APRON,AS NEEDED.PROVIDE A LOCAL EYE WASH STATION AND SAFETY SHOWER.

Work Hygienic Practices:USE REASONABLE CARE IN HANDLING THIS PRODUCT.WASH HANDS AFTER USE AND BEFORE EATING.

Supplemental Safety and Health

NONE SPECIFIED BY MANUFACTURER.

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

HCC:N1

NRC/State Lic Num:NONE

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(BASE)

Evaporation Rate & Reference:NOT GIVEN

Solubility in Water:COMPLETE(BASE)

Appearance and Odor:SEALED CELL,PLASTIC.

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

Stability Indicator/Materials to Avoid:YES

ELECTROLYTE:ORGANIC CHEMICAL(ESP.NITROCARBONS, HALOCARBONS),ACTIVE METALS(ZINC,ALUMINUM,TIN),ACIDS.

Stabili

ty Condition to Avoid:HIGH HEAT, OPEN FLAMES.

Hazardous Decomposition Products:CADMIUM(FUMES),CADMIUM OXIDE,NICKEL OXIDE, POTASSIUM HYDROXIDE.

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

Waste Disposal Methods:DISPOSE OF IN ACCORDANCE WITH FEDERAL,STATE AND LOCAL REGULATIONS.THIS BATTERY IS CONSIDERED RCRA HAZARDOUS WASTE(D002- CORROSIVE,D006-CADMIUM).

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r 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.