

ALEXANDER MFG CO. -- NICAD BATTERY SEALED -- 6140-01-314-8413

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

Product ID:NICAD BATTERY SEALED

MSDS Date:12/01/1992

FSC:6140

NIIN:01-314-8413

MSDS Number: BTSTN

=== Responsible Party ===

Company Name:ALEXANDER MFG CO.

Address:1511 S. GARFIELD PL

Box:1508

City:MASON CITY

State:IA

ZIP:50401-5662

Country:US

Info Phone Num:515-423-8955 / 515-423-1644

Emergency Phone N

um:515-423-8955 / 515-423-1644

CAGE:56469

=== Contractor Identification ===

Company Name:ALEXANDER TECHNOLOGIES INC

Address:1511 S. GARFIELD PL

Box:1508

City:MASON CITY

State:IA

ZIP:50401

Country:US

Phone:515-423-1161/8955

CAGE:56469

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

Ingred Name:NICKEL (SARA III) (INGREDIENTS 1 & 2 = 20-30%)

CAS:7440-02-0

RTECS #:QR5950000

Other REC Limits:NONE RECOMMENDED

OSHA PEL:1 MG/M3

ACGIH TLV:1 MG/M3; 9394

Ingred Name:NICKEL HYDROXID

E (SARA III) (INGREDIENTS 1 & 2 = 20-30%)
CAS:12054-48-7
RTECS #:QR7040000
Other REC Limits:NONE RECOMMENDED
OSHA PEL:1 MG (NI)/M3
ACGIH TLV:0.1 MG(NI)/M3; 9394
EPA Rpt Qty:10 LBS
DOT Rpt Qty:10 LBS

Ingred Name:CADMIUM (SARA III)
CAS:7440-43-9
RTECS #:EU9800000
Fraction by Wt: 13-15%
Other REC Limits:NONE RECOMMENDED
OSHA PEL:0.2 MG/M3 DUST; Z-2
ACGIH TLV:0.01 MG/M3 DUST;9394
EPA Rpt Qty:10 LBS
DOT Rpt Qty:10 LBS

Ingred Name:POTASSIUM HYDROXIDE (SARA III)
CAS:1310-58-3
RTECS #:TT2100000
Fraction by Wt: 2-4% %
Other REC Limits:NONE RECOMMENDED
OSHA PEL:C 2 MG/M3
ACGIH TLV:C 2 MG/M3; 9394
EPA Rpt Qty:1000 LBS
DOT Rpt Qty:1000 LBS

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

LD50 LC50 Mixture:NOT GIVEN FOR PRODUCT AS A WHOLE
Routes of Entry: Inhalation:NO Skin:NO Ingestion:NO
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO
Health Hazards Acute and Chronic:UNDER NORMAL USE, BATTERY DOES NOT
RELEASE TOXIC MATERIALS AND THEREFORE IS NOT A HEALTH HAZARD

D. IF
BATTERY RUPTURES: SKIN MAY COME IN CONTACT WITH POTASSIUM HYDROXIDE
AND BURN; EYES MAY COME IN CONTACT WITH POTASSIUM HYDROXIDE AND
BURN; CADMIUM FUMES MAY BE INHALED.
Explanation of Carcinogenicity:THIS COMPOUND CONTAINS NO INGREDIENTS AT
CONCENTRATIONS OF 0.1% OR GREATER THAT ARE CARCINOGENS OR SUSPECT
CARCINOGENS.

Effects of Overexposure:EYE BURNS/IRRITATION, SKIN BURNS/IRRITATION,
RESPIRATORY TRACT IRRITATION.

Medical Condition Aggravated by Exposure:NONE SPECIFIED

BY MANUFACTURER.

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

First Aid:EYES: FLUSH WITH WATER FOR 15 MINUTES WHILE HOLDING EYELIDS OPEN. GET MEDICAL ATTENTION. SKIN: REMOVE CONTAMINATED CLOTHING. WASH WITH SOAP AND WATER. IF IRRITATION PERSISTS, GET MEDICAL ATTENTION. IN HALATION: REMOVE TO FRESH AIR. RESTORE BREATHING. GET MEDICAL ATTENTION. INGESTION: DO NOT INDUCE VOMITING. GET MEDICAL ATTENTION.

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

Flash Point:NONFLAMMABLE

Lower Limits:NOT GIVEN

Upper Limits:NOT GIVEN

Extinguishing Media:NONFLAMMABLE. USE MEDIA SUITABLE FOR SURROUNDING FIRE.

Fire Fighting Procedures:FIRE FIGHTERS SHOULD USE NIOSH APPROVED SCBA & FULL PROTECTIVE EQUIPMENT WHEN FIGHTING CHEMICAL FIRE.

Unusual Fire/Explosion Hazard:CADMIUM FUMES MAY BE RELEASED DURING BURNING.

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

Spill Release Procedures:ELECTROLYTE, POTASSIUM HYDROXIDE IS CAUSTIC.

DO NOT ALLOW SKIN OR EYE CONTACT. FLUSH WITH WATER. THERE IS ONLY A TRACE AMOUNT OF POTASSIUM HYDROXIDE AVAILABLE IN THE BATTERY.

Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

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

Handling and Storage Precautions:DO NOT INCINERATE OR MUTILATE; MAY CAUSE BURSTING WHICH WOULD RELEASE TOXIC MATERIAL.

Other Precautions:DO NOT SHORT CIRCUIT BATTERY; IT MAY CAUSE BURNS WHEN IN CONTACT WITH THE SKIN OR EYES.

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

Respiratory Protection:NOT NORMALLY REQUIRED.

Ventilation:LOCAL EXHAUST AND MECHANICAL (GENERAL) VENTILATION TO MAINTAIN EXPOSURE LEVELS.

Protective Gloves:NONE SPECIFIED BY MANUFACTURER.

Eye Protection:NONE SPECIFIED BY MANUFACTURER.

Other Protective Equipment:NONE SPECIFIED BY MANUFACTURER.

Work Hygienic Practices:WASH WITH SOAP AND WATER AFTER HANDLING PRODUCT AND BEFORE EATING DRINKING OR SMOKING.

Sup

plemental Safety and Health

MFR CONSIDERS THIS BATTERY AN "ARTICLE" AS DEFINED IN 29 CFR 1910-1200 SECTION (C). FURTHER, THIS ARTICLE DOES NOT RELEASE OR OTHERWISE RESULT IN EXPOSURE TO A HAZARDOUS CHEMICAL UNDER THE CONDITIONS OF INTENDED USE. EACH CELL OF THE BATTERY IS A SEALED CONTAINER ENCLOSING A NICKEL ELECTRODE, A CADMIUM ELECTRODE & KOH.

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

HCC:N1

Boiling Pt:B.P. Text:NOT GIVEN

Melt/Freeze Pt:M.P/F.P Te

xt:NOT GIVEN

Vapor Pres:NOT GIVEN

Vapor Density:NOT GIVEN

Spec Gravity:NOT GIVEN

Evaporation Rate & Reference:NOT GIVEN

Solubility in Water:NOT GIVEN

Appearance and Odor:BATTERY IS SEALED CONTAINER WITH A NICKEL ELECTRODE, A CADMIUM ELECTRODE & KOH

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

Stability Indicator/Materials to Avoid:YES

NONE SPECIFIED BY MANUFACTURER.

Stability Condition to Avoid:PHYSICAL DAMAGE, RUPTURE OF BATTERY CELL.

Hazardous Decomposition Pro

ducts:CADMIUM FUMES MAY BE RELEASED DURING A FIRE.

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

Waste Disposal Methods:PREVENT WASTE FROM CONTAMINATING SURROUNDING ENVIRONMENT. DISCARD ANY PRODUCT, RESIDUE, DISPOSAL CONTAINER OR LINER IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS.

Disclaimer (provided with this information by the compiling agencies):

This information is formulated for 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.