

ENERGIZER POWER SYSTEMS -- ENERGIZER RECHARGABLE POWER SYSTEMS BATTERY --  
6140-01-400-2902

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

Product ID:ENERGIZER RECHARGABLE POWER SYSTEMS BATTERY

MSDS Date:08/03/1995

FSC:6140

NIIN:01-400-2902

MSDS Number: CGLHN

=== Responsible Party ===

Company Name:ENERGIZER POWER SYSTEMS

Address:US HIGHWAY 441N

City:ALACHUA

State:FL

ZIP:32615

Country:US

Info Phone Num:216-835

-7368

Emergency Phone Num:216-835-7368

CAGE:EO263

=== Contractor Identification ===

Company Name:ENERGIZER POWER SYSTEM, DIV. OF EVEREADY BATTERY

Address:US HIGHWAY 441N

Box:City:ALACHUA

State:FL

ZIP:32615

Country:US

Phone:440-835-7368

CAGE:EO263

Company Name:ENERGIZER POWER SYSTEMS (216-835-7368)

Box:UNKNOW

CAGE:ENEPS

Company Name:ROCKWELL INTL CORP COLLINS AVIONICS & COMM DIV

Address:350 COLLINS RD NE

Box:7922

City:CEDAR RAPIDS

State:IA

ZIP:52498

Country:US

CAGE:13499

===== Compositi

on/Information on Ingredients =====

Ingred Name:CADMIUM (SARA 313) (CERCLA);INGREDIENTS 1+2+3=13-22%  
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 OXIDE (SARA 302/313) (CERCLA);INGREDIENTS  
1+2+3=13-22%  
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:CADMIUM  
HYDROXIDE;INGREDIENTS 1+2+3=13-22%  
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:COBALT (SARA 313);INGREDIENTS 4+5+6=0.5-2%  
CAS:7440-48-4  
RTECS #:GF8750000  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:0.1 MG/M3  
ACGIH TLV:0.02 MG/M3; A3; 9495

Ingred Name:COBALT 2+ OXIDE;INGREDIENTS 4+5+6=0.5-2%  
CAS:1307-96-6  
RTECS #:GG2800000  
Other REC Limits:NONE RECOMMENDED

Ingred Name:COBALT HYDROXIDE;INGREDIENTS 4+5+6=0.5-2%  
CAS:21041-93-0  
RTECS

#:GG0904500  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:0.05 MG/M3 (CO)  
ACGIH TLV:0.05 MG/M3 (CO)

Ingred Name:LITHIUM HYDROXIDE  
CAS:1310-65-2  
RTECS #:OJ6307070  
Fraction by Wt: 0-4%  
Other REC Limits:NONE RECOMMENDED

Ingred Name:NICKEL (SARA 313) (CERCLA);INGREDIENTS 8+9+10=20-32%  
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 OXIDE;INGREDIENTS 8+9+10=20-32%  
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:NICKEL HYDROXIDE (SARA 313) (CERCLA);INGREDIENTS  
8+9+10=20-32%  
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:POTASSIUM HYDROXIDE (CERCLA)  
CAS:1310-58-3  
RTECS #:TT2100000  
Fraction by Wt: 0-4%  
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:100

0 LBS

Ingred Name:SODIUM HYDROXIDE (CERCLA)

CAS:1310-73-2

RTECS #:WB4900000

Fraction by Wt: 0-4%

Other REC Limits:NONE RECOMMENDED

OSHA PEL:2 MG/M3

ACGIH TLV:C 2 MG/M3; 9495

EPA Rpt Qty:1000 LBS

DOT Rpt Qty:1000 LBS

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

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

Reports of Carcinogenicity:NTP:YES IARC:YES OSHA:YES

Health Hazards Acute and Chronic:ARTICLE EYES:CONTENTS MAY CAUSE SEVERE IRRITATION OR BURNS.SKIN:

CONTENTS MAY CAUSE CHEMICAL BURNS AND

SENSITIZATION.INGEST:CONTENTS MAY CAUSE GI TRACT BURNS.CADMIUM IS TOXIC AND MAY DAMAGE LIVER AND K IDNEYS.INHAL:CONTENTS MAY CAUSE METAL FUME FEVER AND NICKEL HYPERSENSITIVITY(PULMONARY ASTHMA).

Explanation of Carcinogenicity:CONTAINS CADMIUM [7440-43-9] WHICH IS LISTED BY NTP AND IARC AND REGULATED BY OSHA.NICKEL AND COBALT LISTED NTP AND IARC

Effects of Overexposure:INGEST:SALIVATION,CHOKING,NAUSEA,PERSISTENT VOMITING,ABDOMINAL

PAIN,DIZZINESS,FAINTNESS,UNCONSCIOUSNESS.SKIN:CONTACT DERMATITIS.

Medical Cond Aggravated by Exposure:NONE SPECIFIED BY MANUFACTURER.

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

First Aid:SKIN:REMOVE CONTAMINATED CLOTHING;WASH WITH SOAP AND WATER.SEEK IMMEDIATE MEDICAL ATTENTION FOR CHEMICAL BURNS.EYES: FLUSH WITH WATER FOR 15 MINUTES.SEEK MEDICAL ATTENTION.INHAL:REMOVE TO FRESH AIR.GI VE OXYGEN OR ARTIFICIAL RESPIRATION IF NEEDED.INGEST:DO NOT INDUCE V

OMITING.GET PROMPT QUALIFIED MEDICAL

ATTENTION.CALL THE NATIONAL BATTERY HOTLINE;202-625-3333.

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

Flash Point:NONE

Extinguishing Media:USE MEDIA APPROPRIATE FOR SURROUNDING FIRE.

Fire Fighting Procedures:USE A SELF-CONTAINED BREATHING APPARATUS AND FULL PROTECTIVE EQUIPMENT.COOL FIRE EXPOSED CONTAINERS WITH WATER FOG.

Unusual Fire/Explosion Hazard:FIRE CONDITIONS MAY EVOLVE TOXIC FUMES.

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===== Accidenta

I Release Measures =====

Spill Release Procedures:SOAK UP SPILLED LIQUID WITH NON-COMBUSTIBLE INERT ADSORBANT(EG.CLAY);PLACE COLLECTED MATERIAL IN AN APPROPRIATE CONTAINER FOR DISPOSAL;CLEAN SPILL AREA.

Neutralizing Agent:NOT REPORTED.

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

Handling and Storage Precautions:STORE IN A COOL,DRY,WELL-VENTILATED PLACE.

Other Precautions:AVOID SHORT CIRCUITING(THIS BATTERY DELIVERS VERY HIGH SHORT CIRCUIT CURRENT).DO NOT MIX WITH OTHER BATTERY TYPES.

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

Respiratory Protection:NOT NEEDED IN NORMAL SERVICE.

Ventilation:NOT NEEDED IN NORMAL SERVICE.

Protective Gloves:NEOPRENE OR NBR FOR LEAKERS.

Eye Protection:SAFETY GLASSES W/SIDESHIELDS FOR LEAKERS

Other Protective Equipment:PROTECTIVE CLOTHING,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

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

HCC:N1

Solubility in Water:INSOLUBLE

Appearance and Odor:C-TYPE,SEALED BATTERY

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

Stability Indicator/Materials to Avoid:YES

NONE SPECIFIED BY MANUFACTURER.

Stability Condition to Avoid:NONE SPECIFIED BY MANUFACTURER.

Hazardous Decomposition Products:NICKEL,NICKEL OXIDES,CADMIUM,CADMIU

M

OXIDES, COBALT OXIDES.

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

Waste Disposal Methods:DISPOSE OF IN ACCORDANCE WITH FEDERAL,STATE AND LOCAL REGULATIONS.RCRA CODE IS D006(CADMIUM).

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