

MATERIAL SAFETY DATA SHEET
NICKEL-CADMIUM SEALED CELL BATTERY - BATTERY, STORAGE

NSN: 6140004841528
Manufacturer's CAGE: 09052
Part No. Indicator: A
Part Number/Trade Name: NICKEL-CADMIUM SEALED CELL BATTERY

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General Information
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Item Name: BATTERY, STORAGE
Company's Name: RAD INC
Company's Street: 1700 DIXON STREET
Company's P. O. Box: 3244
Company's City: DES MOINES
Company's State: IA
Company's Country: US
Company's Zip Code: 50316
Company's Emerg Ph #: 1-800-424-9300
Company's Info Ph #: 1-800-424-9300/1-800-203-6549
Record No. For Safety Entry: 001
Tot Safety Entries This Stk#: 002
Status: SE
Date MSDS Prepared: 28FEB91
Safety Data Review Date: 01JUL93
MSDS Serial Number: BQXSY
Spec Type, Grade, Class: SEALED CELLS
Hazard Characteristic Code: N1
Unit Of Issue: EA
Unit Of Issue Container Qty: VARIES, UPON STYLE OF BATTERY
Type Of Container: BATTERY
Net Unit Weight: VARIES, UPON STYLE OF BATTERY
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Ingredients/Identity Information
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Proprietary: NO
Ingredient: CADMIUM (SARA III)
Ingredient Sequence Number: 01
Percent: <20
NIOSH (RTECS) Number: EU9800000
CAS Number: 7440-43-9
OSHA PEL: SEE 1910.1027
ACGIH TLV: 0.01 MG/M3 DUST;9394
Other Recommended Limit: NONE SPECIFIED

Proprietary: NO
Ingredient: CADMIUM OXIDE (SARA III)
Ingredient Sequence Number: 02
Percent: <20
NIOSH (RTECS) Number: EV1925000
CAS Number: 1306-19-0
OSHA PEL: SEE 1910.1027

ACGIH TLV: 0.05 MG(CD)/M3; 9293
Other Recommended Limit: NONE SPECIFIED

Proprietary: NO
Ingredient: CADMIUM HYDROXIDE
Ingredient Sequence Number: 03
Percent: <20
NIOSH (RTECS) Number: 1000973CH
OSHA PEL: 0.2 MG CD/M3 DUST
ACGIH TLV: .05 MG CD/M3DUST9192
Other Recommended Limit: NONE SPECIFIED

Proprietary: NO
Ingredient: NICKEL (SARA III)
Ingredient Sequence Number: 04
Percent: <35%
NIOSH (RTECS) Number: QR5950000
CAS Number: 7440-02-0
OSHA PEL: 1 MG/M3
ACGIH TLV: 1 MG/M3, 9192
Other Recommended Limit: NONE SPECIFIED

Proprietary: NO
Ingredient: NICKEL HYDROXIDE (SARA III)
Ingredient Sequence Number: 05
Percent: <35%
NIOSH (RTECS) Number: QR7040000
CAS Number: 12054-48-7
OSHA PEL: 1 MG NI/M3
ACGIH TLV: 0.1 MG NI/M3; 9293
Other Recommended Limit: NONE SPECIFIED

Proprietary: NO
Ingredient: NICKEL OXIDE
Ingredient Sequence Number: 06
Percent: <35%
NIOSH (RTECS) Number: 1005038NC
OSHA PEL: 1 MG NI/M3 DUST
ACGIH TLV: 1 MG NI/M3 DUST 9192
Other Recommended Limit: NONE SPECIFIED
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Physical/Chemical Characteristics
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Appearance And Odor: BATTERY, PLASTIC CASE, SEALED
Specific Gravity: 1.6
Evaporation Rate And Ref: NOT APPLICABLE
Solubility In Water: NEGLIGIBLE
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Fire and Explosion Hazard Data

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Flash Point: NONE
Extinguishing Media: USE MEDIA APPROPRIATE FOR SURROUNDING FIRE. DRY
CHEMICAL, CARBON DIOXIDE, WATER.
Special Fire Fighting Proc: WEAR SELF-CONTAINED BREATHING APPARATUS AND
FULL PROTECTIVE GEAR IF INVOLVED IN A FIRE.
Unusual Fire And Expl Hazrds: NONE SPECIFIED BY MANUFACTURER.

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Reactivity Data
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Stability: YES
Cond To Avoid (Stability): NONE
Materials To Avoid: NONE SPECIFIED BY MANUFACTURER.
Hazardous Decomp Products: METAL OXIDE FUMES AT TEMPERATURES ABOVE
MELTING
POINT.
Hazardous Poly Occur: NO
Conditions To Avoid (Poly): WILL NOT OCCUR.
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Health Hazard Data
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LD50-LC50 Mixture: NONE SPECIFIED BY MANUFACTURER.
Route Of Entry - Inhalation: YES
Route Of Entry - Skin: NO
Route Of Entry - Ingestion: NO
Health Haz Acute And Chronic: PRODUCT IS A SEALED UNIT. HAZARDS ARE
BASED
ON BROKEN AND LEAKING CELLS. INHALATION: DUST AND FUMES MAY CAUSE
IRRITATION OF RESPIRATORY TRACT, COUGHING, CHEST PAIN, SHORTNESS OF BREATH,
NAUSEA, VOMITING, DIARRHEA, ABDOMINAL CRAMPS, INTESTINAL DISORDERS.
Carcinogenicity - NTP: YES
Carcinogenicity - IARC: YES
Carcinogenicity - OSHA: YES
Explanation Carcinogenicity: CONTAINS Cadmium [7440-43-9] WHICH IS
LISTED
BY NTP AND IARC AND REGULATED BY OSHA AS A CARCINOGEN.
Signs/Symptoms Of Overexp: LUNG INJURY (EMPHYSEMA) AND KIDNEY
DISFUNCTION
(PROTEINURIA). BONE LESIONS CHARACTERIZED BY PAIN IN THE BACK AND
EXTREMITIES HAVE BEEN REPORTED. INHALATION OVER LONG PERIODS OF TIME MAY
POSE AN INCREASED RISK OF LUNG CANCER AND POSSIBLE OTHER FORMS OF
CANCER.
Med Cond Aggravated By Exp: PRE-EXISTING RESPIRATORY DISORDERS,
PROSTRATE
DISORDERS, LIVER AND KIDNEY DISORDERS.
WASH WITH SOAP AND WATER. INHALATION: MOVE TO FRESH AIR. IF NOT
BREATHING

GIVE CPR. GET MEDICAL ATTENTION. INGESTION: IF CONSCIOUS, INDUCE VOMITING.
GET MEDICAL ATTENTION.

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Precautions for Safe Handling and Use
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Steps If Matl Released/Spill: COLLECT SPILL AND PLACE IN A PLASTIC-LINED CONTAINER FOR DISPOSAL. HEPA VACUUMING OF DUST IS PREFERRED. FLUSH SPILL AREA WITH WATER.

Neutralizing Agent: NONE

Waste Disposal Method: DISPOSE OF WASTE IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS. IF DISCARDED, TREAT AS HAZARDOUS WASTE.

Precautions-Handling/Storing: NOT NORMALLY A PROBLEM. HOWEVER FOR HANDLING

BROKEN OR LEAKING CELLS WEAR PROPER PROTECTIVE CLOTHING AND AVOID CONTACT

WITH AND BREATHING OF DUST.

Other Precautions: AVOID GENERATING DUST WHEN HANDLING BROKEN OR LEAKING CELLS.

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Control Measures
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Respiratory Protection: NOT NORMALLY REQUIRED. USE NIOSH/MSHA APPROVED RESPIRATOR FOR DUST IF DUST FROM LEAKING CELLS IS BEING GENERATED.

Ventilation: NOT REQUIRED FOR NORMAL HANDLING OF PRODUCT.

Protective Gloves: IMPERVIOUS GLOVES WHEN HANDLING LEAKERS.

Eye Protection: SAFETY GLASSES/GOGGLES FOR LEAKERS.

Other Protective Equipment: EYE WASH STATION.

Work Hygienic Practices: WASH HANDS AFTER HANDLING BROKEN CELLS BEFORE EATING, DRINKING, OR SMOKING. DO NOT WEAR CONTAMINATED CLOTHING HOME.

Suppl. Safety & Health Data: HEALTH AND OTHER SAFETY PRECAUTIONS ARE GENERALLY FOR THE METAL DUSTS OF THE INGREDIENTS FROM BROKEN OR LEAKING CELLS. IN NORMAL USE, DUSTS ARE NOT GENERATED.

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Transportation Data
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Trans Data Review Date: 93182

DOT PSN Code: UN2570

DOT Proper Shipping Name: NOT REGULATED BY THIS MODE OF TRANSPORTATION

IMO PSN Code: UN2570

IMO Proper Shipping Name: NOT REGULATED FOR THIS MODE OF TRANSPORTATION

IATA PSN Code: UN2570

IATA Proper Shipping Name: NOT REGULATED BY THIS MODE OF TRANSPORTATION

AFI PSN Code: UN2570

AFI Prop. Shipping Name: NOT REGULATED BY THIS MODE OF TRANSPORTATION

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Disposal Data

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Label Data

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Label Required: YES

Label Status: G

Common Name: NICKEL-CADMIUM SEALED CELL BATTERY

Special Hazard Precautions: PRODUCT IS A SEALED UNIT. HAZARDS ARE BASED ON

BROKEN AND LEAKING CELLS. INHALATION: DUST AND FUMES MAY CAUSE IRRITATION

OF RESPIRATORY TRACT, COUGHING, CHEST PAIN, SHORTNESS OF BREATH, LUNG INJURY,

KIDNEY DISFUNCTION, AND DEATH FROM PULMONARY EDEMA. INGESTION: NAUSEA, VOMITING, DIARRHEA, ABDOMINAL CRAMPS, INTESTINAL DISORDERS. LUNG INJURY (EMPHYSEMA) AND KIDNEY DISFUNCTION (PROTEINURIA). BONE LESIONS

CHARACTERIZED BY PAIN IN THE BACK AND EXTREMITIES HAVE BEEN REPORTED. INHALATION OVER LONG PERIODS OF TIME MAY POSE AN INCREASED RISK OF LUNG CANCER AND POSSIBLE OTHER FORMS OF CANCER.

Label Name: POWER PATROL

Label Street: 1700 DIXON STREET

Label P.O. Box: 3244

Label City: DES MOINES

Label State: IA

Label Zip Code: 50316

Label Country: US

Label Emergency Number: 1-800-424-9300