

MARATHON POWER TECHNOLOGIES -- BATTERY, STORAGE P/N 37655-001 -- 6140-00-250-4884
===== Product Identification =====

Product ID: BATTERY, STORAGE P/N 37655-001
MSDS Date: 02/03/1994
FSC: 6140
NIIN: 00-250-4884
MSDS Number: BSQZV
=== Responsible Party ===
Company Name: MARATHON POWER TECHNOLOGIES
Address: 8301 IMPERIAL DRIVE
Box: 8233
City: WACO
State: TX
ZIP: 76714-8233
Country: US
Info Phone Num: 817-776-0650
50
Emergency Phone Num: 817-776-0650/800-424-9300(CHEMTREC)
CAGE: 74025
=== Contractor Identification ===
Company Name: MARATHON POWER TECHNOLOGIES CO
Address: 8301 IMPERIAL DR
Box: City: WACO
State: TX
ZIP: 76712-6588
Country: US
Phone: 254-741-5405
CAGE: 74025

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

Ingred Name: CADMIUM (SARA III)
CAS: 7440-43-9
RTECS #: EU9800000
Other REC Limits: NONE RECOMMENDED
OSHA PEL: 0.1MG/M3 FUME; 0.2DUST
ACGIH TLV: 0.05 MG/M3 DUST; 9293
EPA Rpt Qty: 10 LBS

DOT Rpt Qty:10 LBS

Ingred Name:CADMIUM HYDROXIDE

CAS:21041-95-2

Other REC Limits:NONE RECOMMENDED

OSHA PEL:NOT ESTABLISHED.

ACGIH TLV:NOT ESTABLISHED.

Ingred Name:NICKEL (SARA III)

CAS:7440-02-0

RTECS #:QR5950000

Other REC Limits:NONE RECOMMENDED

OSHA PEL:1 MG/M3

ACGIH TLV:1 MG/M3; 9293

Ingred Name:NICKEL HYDROXIDE (SARA III)

CAS:12054-48-7

RTECS #:QR7040000

Other REC Limits:NONE RECOMMENDED

OSHA PEL:0.1 MG NI/M3

ACGIH TLV:0.1 MG NI/M3; 9293

EPA Rpt Qty:10 LBS

DOT Rpt Qty:10 LBS

Ingred Name:

POTASSIUM HYDROXIDE (SARA III)

CAS:1310-58-3

RTECS #:TT2100000

Other REC Limits:NONE RECOMMENDED

OSHA PEL:C, 2 MG/M3

ACGIH TLV:C 2 MG/M3; 9293

EPA Rpt Qty:1000 LBS

DOT Rpt Qty:1000 LBS

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

LD50 LC50 Mixture:NONE SPECIFIED BY MANUFACTURER.

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

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

Health Hazards Acute and Chronic:UNDER NORMAL CONDITIONS OF USE, NO
EXPOSURE TO

HAZARDOUS COMPONENTS EXIST. IF INCINERATED, INHALATION OF FUMES MAY CAUSE RESPIRATORY SYSTEM IRRITATION. FUMES WILL ALSO IRRITATE EYE TISSUE (ACUTE): CHRONIC EXPOSURE MAY CAUSE KIDNEY DYSFUNCTION AND LUNG INJURY.

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

Effects of Overexposure:IF INCINERATED, CHEST PAIN, COUGHING, SWEATING, CHILLS, SHORTNESS OF BREATH AND WEAKNESS ALONG WITH POSSIBLE EYE IRRITATION.

Medical Cond Aggravated by Exposure:IF INCINERATED, RESPIRATORY SYSTEM DISORDERS, PROSTATE DISORDERS, LIVER AND KIDNEY DISORDERS, VISION PROBLEMS.

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===== First Aid Measures =====
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First Aid:IF CONTACT WITH POTASSIUM HYDROXIDE ELECTROLYTE, FLUSH WITH WATER FOR 15 MINUTES AND CONTACT PHYSICIAN. IF INHALED, REMOVE FROM EXPOSURE AND CONTACT PHYSICIAN.

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===== Fire Fighting Measures =====
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Flash Point:NONE

Extinguishing Media:USE EXTINGUISHING MEDIA APPROPRIATE FOR SURROUNDING FIRE

Fire Fighting Procedures:FIRE FIGHTERS SHOULD WEAR PROPER PROTECTIVE EQUIPMENT AND SELF-CONTAINED BREATHING APPARATUS WITH FULL FACEPIECE OPERATED IN THE POSITIVE PRESSURE MODE.

Unusual Fire/Explosion Hazard:CONTACT WITH STRONG OXIDIZERS MAY CAUSE FIRE OR EXPLOSION. CADMIUM FUMES OR VAPORS ARE TOXIC AND CAN CAUSE DEATH.

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===== Accidental Release Measures ==
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Spill Release Procedures:BATTERY AND CELL CASES WILL NORMALLY CONTAIN MATERIALS OF CONCERN. USE INDUSTRIAL ABSORBENT TO COLLECT LIQUID POTASSIUM HYDROXIDE.

Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

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===== Handling and Storage =====
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Handling and Storage Precautions:DO NOT INVERT. AVOID BREAKING, CRUSHING OR OTHERWISE DESTROYING THE PHYSICAL INTEGRITY OF THE CELL OR BATTERY.

Other Precautions:ANALYSIS OF THE MANUFACTURI

TESTING METHODOLOGY USED TO

PRODUCE MARATHON NICKEL-CADMIUM CELLS HAS DETERMINED THAT, BELOW 320F (160C), THE CORROSIVE POTASSIUM HYDROXIDE ELECTROLYTE IS THE ONLY COMPOUND OF CONCERN.

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Exposure Controls/Personal Protection
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Respiratory Protection:WEAR A DUST OR MIST MASK WHEN HANDLING THE LIQUID IN THE BATTERY.

Ventilation:USE ADEQUATE LOCAL EXHAUST VENTILATION WHEN HANDLING THE LIQUID IN THE BATTERY.

Protective Gloves:RUBBER WHEN HANDLING LEAKERS

Eye Protection:SAFETY GOGGLES/FACE SHIELD

Other Protective Equipment:PROTECTIVE CLOTHING TO MINIMIZE SKIN CONTACT.

Work Hygienic Practices:NONE SPECIFIED BY MANUFACTURER.

Supplemental Safety and Health

THE AMOUNT OF FREE POTASSIUM HYDROXIDE IN EACH UNIT WILL DEPEND ON STATE OF CHARGE. HOWEVER, THE CONSTRUCTION OF THE "SEALED" CELLS, PRECLUDES EXPOSURE TO ELECTROLYTE, EXCEPT IN DESTRUCTIVE ANALYSIS. THE SEALED CELLS HAVE THE POTENTIAL TO EXPLODE IF INCINERATED.

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Physical/Chemical Properties
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HCC:N1

Boiling Pt:B.P. Text:765F,407C

Melt/Freeze Pt:M.P/F.P Text:321F (CD)

Decomp Temp:Decomp Text:230,NI(OH)₂

Appearance and Odor:ORANGE-BLACK (NICKEL HYDROXIDE), SILVER METAL(CD, NI) , WHITE (KOH, CD(OH)₂)

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Stability and Reactivity Data
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Stability Indicator/Materials to Avoid:YES

STRONG OXIDIZING AGENTS, NITRATES, NITRIC ACID

Stability Condition to Avoid:NONE SPECIFIED BY MANUFACTURER.

Hazardous Decomposition

Composition Products:NONE SPECIFIED BY MANUFACTURER.

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Disposal Considerations
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Waste Disposal Methods:CELLS AND BATTERIES MAY BE RETURNED AT SENDERS EXPENSE TO A PERMITTED TREATMENT, STORAGE, DISPOSAL FACILITY (TSDF). DISPOSAL SHALL BE BY APPROVED METHODS.

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