

MARATHON POWER TECHNOLOGIES -- 28656-002, NICKEL CADMIUM BATTERY -- 6140-01-449-6418  
===== Product Identification =====

Product ID:28656-002, NICKEL CADMIUM BATTERY  
MSDS Date:07/15/1999  
FSC:6140  
NIIN:01-449-6418  
Status Code:A  
MSDS Number: CKHPD  
=== Responsible Party ===  
Company Name:MARATHON POWER TECHNOLOGIES  
Address:8301 IMPERIAL DRIVE  
Box:8233  
City:WACO  
State:TX  
ZIP:75714-8233  
Country:US  
Info  
Phone Num:254-776-0650  
Emergency Phone Num:(800)424-9300  
Chemtrec Ind/Phone:(800)424-9300  
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  
Contract Num:SP0430-99-C-5726  
CAGE:74025

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

Ingred Name:CADMIUM  
CAS:7440-43-9  
RTECS #:EU9800000  
OSHA PEL:.005 MG/M3 DUST  
ACGIH TLV:0.01MG/M3  
EPA Rpt Qty:10 LBS

DOT Rpt Qty:10 LBS

Ingred Name:CADMIUM HYDROXIDE

CAS:21041-95-2

RTECS #:EV1260000

OSHA PEL:.005 MG/M3

ACGIH TLV:0.05 MG/M3

Ingred Name:NICKEL

CAS:7440-02-0

RTECS #:QR5950000

OSHA PEL:1 MG/M3

ACGIH TLV:1 MG/M3

Ingred Name:NICKEL HYDROXIDE

CAS:12054-48-7

RTECS #:QR7040000

OSHA PEL:1 MG/M3

ACGIH TLV:1 MG/M3

EPA Rpt Qty:10 LBS

DOT Rpt Qty:10 LBS

Ingred Name:POTASSIUM HYDROXIDE

CAS:1310-58-3

RTECS #:TT2100000

OSHA PEL:C 2 MG/M3

ACGIH TLV:C 2 MG/M3

ACGIH STEL:C2 MG/M3

EPA Rpt Qty:1000 LBS

DOT Rpt

Qty:1000 LBS

===== 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:UNDER NORMAL CONDITIONS OF USE, NO

EXPOSURE TO HAZARDOUS COMPONENTS EXISTS. IF INCINERATED, INHALATION OF FUMES MAY CAUSE RESPIRATORY SYSTEMS IRRITATION, FUMES WILL ALSO IRRITATE EYE TISSUES (ACUTE); CHRONIC EXPOSURE MAY CAUSE KIDNEY DYSFUNCTION AND LUNG

INJURY.

Explanation of Carcinogenicity:NOT ESTABLISHED FOR BATTERIES BY NPT, IARC, AND OSHA. HOWEVER, NICKEL AND CADMIUM ARE LISTED AS POTENTIAL CARCINOGENS BY NTP, IARC, AND OSHA.

Effects of Overexposure:IF INCINERATED, CHEST PAIN, COUGHING, SWEATING, CHILLS, SHORTNESS OF BREATH AND WEAKNESS ALONG WITH POSSIBLE EYE IRRITATION. ELECTROLYTE IS CORROSIVE TO ALL TISSUES, MAY CAUSE IRRITATION AND BURNS.

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

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

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 =====

Flash Point:NONE

Extinguishing Media:USE EXTINGUISHING MEDIA APPROPRIATE FOR SURROUNDING FIRE.

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

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

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

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

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

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

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

Respiratory Protection:USE ADEQUATE LOCAL EXHAUST VENTILATION WHEN HANDLING THE LIQUID IN THE BATTERY, I.E., POTASSIUM HYDROXIDE S

OLUTION WEAR A DUST OR MIST MASK, EYE GOGGLES AND FACE SHIELD,  
RUBBER GLOVES AND PROTECTIVE CLOTHING TO MINIMIZE SKIN CONTACT.

Ventilation:USE ADEQUATE LOCAL EXHAUST VENTILATION.

Protective Gloves:RUBBER GLOVES

Eye Protection:EYE GOGGLES AND FACE SHIELD.

Other Protective Equipment:PROTECTIVE CLOTHING TO MINIMIZE SKIN  
CONTACT..

Supplemental Safety and Health

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

HCC:B1

Boiling Pt:=407.2C, 765.F

B.P. Text:CADMIUM

Melt/Free

ze Pt:=160.5C, 320.9F

M.P/F.P Text:CADMIUM

Spec Gravity:8.642

Solubility in Water:INSOLUBLE

Appearance and Odor:SILVER COLOR METAL; NO ODOR

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

Stability Indicator/Materials to Avoid:YES

STRONG OXIDIZING AGENTS, NITRATES, NITRIC ACID.

Hazardous Decomposition Products:NONE

Conditions to Avoid Polymerization:WILL NOT OCCUR.

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

Waste Disposal Methods:CELLS AND BATTERI

ES MAY BE RETURNED AT SENDERS

EXPENSE TO A PERMITTED TREATMENT, STORAGE, DISPOSAL FACILITY  
(TSD). DISPOSAL SHALL BE APPROVED METHODS, IN ACCORDANCE WITH  
LOCAL, STATE AND FEDERAL REGULATIONS.

===== MSDS Transport Information =====

Transport Information:BATTERY, WET, FILLED WITH ALKALI, UN2795.

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e 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.