

MARATHON POWER TECHNOLOGIES -- NICKEL CADMIUM BATTERY -- 6140-01-241-2296

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

Product ID:NICKEL CADMIUM BATTERY
MSDS Date:07/15/1999
FSC:6140
NIIN:01-241-2296
Status Code:A
MSDS Number: CKZBD
=== 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:254-776-0650
Chemtrec Ind/Phone:(800)424-9300
CAGE:74025

=== Contractor Identification ===

Company Name:AERO QUALITY SALES
Address:47 HARBOR VIEW AVE
Box:City:STAMFORD
State:CT
ZIP:06902
Country:US
Phone:203-351-8500
Contract Num:SP0411-01-M-EB26
CAGE:7R810
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
=====

In

gred Name:CADMIUM
CAS:7440-43-9
RTECS #:EU9800000
Fraction by Wt: NP
OSHA PEL:5 UG/M3(DUST)
ACGIH TLV:0.01 MG/M3
EPA Rpt Qty:10 LBS
DOT Rpt Qty:10 LBS

Ingred Name:CADMIUM HYDROXIDE
CAS:21041-95-2
RTECS #:EV1260000
OSHA PEL:5 UG/M3 (AS CD)
ACGIH TLV:.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 (AS NI)
ACGIH TLV:1 MG/M3 (AS NI)
EPA Rpt Qty:10 LBS
DOT Rpt Qty:10 LBS

Ingred Name:POTASSIUM HYDROXIDE
CAS:1310-58-3
RTECS #:TT2100000
OSHA PEL:2 MG/M3 (CEILING)
ACGIH TLV:2 MG/M3 (CEILING)
EPA Rpt Qty:1000 LBS
DOT Rpt Qty:1000 LBS

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

Routes of Entry: Inhalation:YES Skin:YES 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 M

AY CAUSE RESPIRATORY SYSTEMS IRRITATION, FUMES WILL ALSO IRRITATE EYE TISSUES (ACUTE); CHRONIC EXPOSURE MAY CAUSE KIDNEY DYSFUNCTION AND LUNG INJURY.

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

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

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

=====
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.

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

FI
ash Point:NON-FLAMMABLE

Lower Limits:NA

Upper Limits:NA

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 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.

=====
Accid
ental Release Measures
=====

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

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

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

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

R

Respiratory Protection:WHEN HANDLING THE LIQUID IN THE BATTERY (POTASSIUM HYDROXIDE SOLUTION); WEAR A DUST OR MIST MASK.

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

Protective Gloves:WHEN HANDLING POTASSIUM HYDROXIDE LIQUID WEAR RUBBER GLOVES TO MINIMIZE CONTACT

Eye Protection:WHEN HANDLING POTASSIUM HYDROXIDE LIQUID, WEAR EYE GOGGLES AND FACE SHIELD.

Other Protective Equipment:WHEN HANDLING POTASSIUM HYDROXIDE LIQUID, WEAR PROTECTIVE CLOTHING TO MINIMIZE SKIN CONTACT.

Supplemental Safety and Health

VENDOR'S PART NUMBER: 31004-04C, NICKEL CADMIUM BATTERY.

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

HCC:B1

Boiling Pt:=407.C, 764.6F

B.P. Text:CADMIUM

Melt/Freeze Pt:=160.5C, 320.9F

M.P/F.P Text:CADMIUM

Solubility in Water:POTASSIUM HYDROXIDE: 52%

Appearance and Odor:BATTERY: 1.39 INCHES WIDE X 3.135 INCHES LONG X 9.40 INCHES HIGH.

===== 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.

===== Ecological Information =====

Ecological:EPA REGISTRATION NUMBER: TXD 054385018.

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

Waste Disposal Methods:CELLS AND BATTERIES MAY BE RETURNED AT SENDERS EXPENSE TO A PERMITTED TREATMENT, STORAGE, DISP

OSAL FACILITY

(TSDf). DISPOSAL SHALL BE BY APPROVED METHODS.

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

Transport Information: PROPER SHIPPING NAME INCLUDED WITH COPY OF LABEL,
SENT WITH MANUFACTURER'S MSDS: BATTERIES, WET, FILLED WITH
ALKALI, UN 2795, PG. I I I. LABELS: CORROSIVE LABEL AND DOUBLE
ARROWS INDICATING UP END O F PACKAGE.

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.