

MARATHON POWER TECHNOLOGIES, BATTERY PRODUCTS -- BATTERY
STORAGE,BB-412/U,NICKEL CADMIUM,SEA -- 6140-00-921-3670

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

Product ID:BATTERY STORAGE,BB-412/U,NICKEL CADMIUM,SEA

MSDS Date:12/09/1992

FSC:6140

NIIN:00-921-3670

MSDS Number: BRTGD

=== Responsible Party ===

Company Name:MARATHON POWER TECHNOLOGIES, BATTERY PRODUCTS

Address:8301 IMPERIAL DRIVE

Box:8233

City:WACO

State:TX

ZIP:75714-8233

Country:US

Info Phone Num:817-776-0650

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:SEE 1910.

1027
ACGIH TLV:0.01 MG/M3 DUST;9394
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:0.2 MG/M3 (CD DUST)
ACGIH TLV:.05 MG/M3(CD DUST)93

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:1 MG NI/M3
ACGIH TLV:0.1 MG N
I/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

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

LD50 LC50 Mixture:ORAL LD50 (RAT) IS 225 MG/KG.
Routes of Entry: Inhalation:YES Skin:NO Ingestion:NO
Reports of Carcinogenicity:NTP:YES IARC:YES OSHA:YES
Health Hazards Acute

and Chronic:PRODUCT IS A SEALED UNIT. HAZARDS ARE
BASED ON BROKEN AND LEAKING CELLS. EYES: EYE TISSUE DAMAGE. SKIN:
ALLERGIC RASHES. INHALATION: CAN BE HARMFUL OR FATAL. DUST AND
FUMES MAY CAUSE RESPIRATORY TRACT IRRITATION, IRREVERSIBLE LUNG
INJURY, KIDNEY DISEASE. INGESTION: MAY CAUSE NAUSEA, VOMITING,
DIARRHEA,ABDOMINAL CRAMPS.

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

AS CARCINOGEN.

Effects of Overexposure:EYES: IRRITATION, DAMAGE. SKIN: IRRITATION,
TISSUE DAMAGE, ALLERGIC RASHES. INHALATION: IRRITATION OF NOSE,
THROAT, RESPIRATORY TRACT, LUNG INJURY, HEADACHE, NAUSEA,
DIZZINESS, KIDNEY DISEASE, AND MAY BE FATAL. INGESTION: NAUSEA,
VOMITING,DIARRHEA, ABDOMINAL CRAMPS.

Medical Cond Aggravated by Exposure:PERSON WITH PRE-EXISTING DISEASE
INVOLVING THE EYES, SKIN OR RESPIRATORY TRACT MAY BE AT INCREASED
RISK FROM EXPOSUE TO THE INGREDIENT
S LEAKED FROM THIS BATTERY.

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

First Aid:EYES: FLUSH WITH LARGE AMOUNTS OF WATER. GET MEDICAL
ATTENTION. SKIN: WASH AREA WITH SOAP AND WATER. IF SYMPTOMS PERSIST
GET MEDICAL ATTENTION. INHALATION: MOVE TO FRESH AIR. IF NOT
BREATHING GIVE CPR . GET MEDICAL ATTENTION. INGESTION: IF
CONSCIOUS, GIVE LARGE AMOUNTS OF WATER. DO NOT INDUCE VOMITING. GET
MEDICAL ATTENTION.

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

Flash Point:NON-FLAMMABLE
Extinguishing Media:USE MEDIA APPROPRIATE FOR SURROUNDING FIRE.
Fire Fighting Procedures:USE NIOSH/MSHA APPROVED SELF-CONTAINED
BREATHING APPARATUS AND FULL PROTECTIVE GEAR IF INVOLVED IN A FIRE.
Unusual Fire/Explosion Hazard:CONTACT WITH STRONG OXIDIZERS MAY CAUSE
FIRE OR EXPLOSION. CADMIUM AND NICKEL FUMES ARE TOXIC AND CAN CAUSE
DEATH.

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

Spill Release Procedures

:CONTAIN SPILL. USE INDUSTRIAL ABSORBENT TO COLLECT LIQUID POTASSIUM HYDROXIDE IN SPILLED MATERIAL AND PLACE IN A PLASTIC-LINED CONTAINER FOR DISPOSAL. HEPA VACUUMING OF DUST IS PREFERRED. FLUSH SPILL AREA RESIDUE WITH WATER.

Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

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

Handling and Storage Precautions:NOT NORMALLY A PROBLEM. AVOID BREAKING, CRUSHING, OR DESTROYING PHYSICAL INTEGRITY OF CELL OR BATTERY.

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

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

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

Ventilation:NORMAL WORK AREA VENTILATION IS ADEQUATE FOR NORMAL HANDLING OF PRODUCT.

Protective Gloves:IMPERVIOUS GLOVES WHEN HANDLING LEAKERS.

Eye Protection:SAFETY GLASSES/GOGGLES FOR LEAKERS.

Other

Personal Protective Equipment:EYE WASH STATION. SHOWER AND CHANGE OR WEAR COVERALLS IF HANDLING LEAKERS.

Work Hygienic Practices:WASH AFTER HANDLING BROKEN CELLS AND BEFORE EATING, DRINKING, OR SMOKING. LAUNDRY CONTAMINATED CLOTHING BEFORE REUSE.

Supplemental Safety and Health

DO NOT WEAR CONTAMINATED CLOTHING HOME. KEEP FOOD AND TOBACCO AWAY FROM WORK AREA. 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.

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

HCC:N1

Solubility in Water:INSOLUBLE

Appearance and Odor:D-CELL SEALED BATTERY.

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

Stability Indicator/Materials to Avoid:YES

STRONG OXIDIZING AGENTS, NITRATES, NITRIC ACID.

Stability Condition to Avoid:NONE SPECIFIED BY MANUFACTURER.

Hazardous Decomposition Products:CADMIUM AND NICKEL FUMES ARE TOXIC AND CAN CAUSE DEATH

TH.

Conditions to Avoid Polymerization:WILL NOT OCCUR.

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

Waste Disposal Methods:DISPOSE OF WASTE IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS. CELLS AND BATTERIES MAY BE RETURNED AT SENDERS EXPENSE TO A PERMITTED TREATMENT, STORAGE, DISPOSAL FACILITY.

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