

MARATHON POWER TECHNOLOGIES -- BATTERY STORAGE BB-433A/A -- 6140-01-046-1116
===== Product Identification =====

Product ID: BATTERY STORAGE BB-433A/A
MSDS Date: 03/26/1990
FSC: 6140
NIIN: 01-046-1116
MSDS Number: BRTBY
=== 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
Emergency Phone Num: 817-776-0650 OR 800-424-9300 (CHEMT)
Preparer's Name: T. MESSING
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) BP-765F, SG-8.642, MP-320.9F,
INSOLUBLE NO ODOR
CAS: 7440-43-9
RTECS #: EU9800000
Other REC Limits: NONE RECOMMENDED
OSHA PE

L: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 BP-N/A, SG-4.79, DECOMPOSES 300C,
INSOLUBLE
CAS:21041-95-2
Other REC Limits:NONE RECOMMENDED
OSHA PEL:0.1 MG/M3 (CD FUME)
ACGIH TLV:0.05 MG/M3 (CD FUME)

Ingred Name:NICKEL (SARA III) BP-2730 F, SG 8.90, MP 1455F, INSOLUBLE
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) SG-4.1
5, DECOMPOSES 230F,
INSOLUBLE
CAS:12054-48-7
RTECS #:QR7040000
Other REC Limits:NONE RECOMMENDED
OSHA PEL: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) BP-1322F, SG-2.044,
MP-360F, SOLUBLE 52% W/W
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 =====

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

Reports of Carcinogenicity:NTP:YES IARC:YES

Health Hazards Acute and Chronic:LOW LEVEL EXPOSURE TO CADMIUM

COMPOUNDS MAY CAUSE IRRIVERSIBLE LUNG INJURY, KIDNEY DISEASE AND OTHER ADVERSE EFFECTS. EXPOSURE TO POTASSIUM HYDROXIDE (KOH) MAY DAMAGE UPPER RESPIRATORY TRACT AND LUN G TISSUE WHICH COULD PRODUCE CHEMICAL PNEUMONIA.

Explanation of Carcinogenicity:NICKEL LISTED BY IARC & NTP. CADMIUM LISTED BY NTP.

Ef

ffects of Overexposure:IRRITATION OF MUCOUS MEMBRANES, DRYNESS OF MOUTH/THROAT, HEADACHE, NAUSEA AND DIZZINESS. ALLERGIC SKIN RASHES/SENSITIVITY.

Medical Cond Aggravated by Exposure:NONE SPECIFIED BY MANUFACTURER.

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

First Aid:FLUSH EYES FOR 15 MIN WITH WATER AND WASH SKIN WITH WATER. IF INGESTED AND PERSON CONSCIOUS GIVE LARGE QUANTITIES OF WATER. DO NOT INDUCE VOMITING. GET MEDICAL ATTENTION.

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

Flash Point:NON FLAMMABLE

Lower Limits:NOT APPLICAE

Upper Limits:NOT APPLICAE

Extinguishing Media:USE EXTINGUISHING MEDIA APPROPRIATE FOR SURROUNDING FIRE.

Fire Fighting Procedures:FIRE FIGHTER 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 OXIDIZING AGENTS, NITRATES, NITRIC ACID

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

Spill Release Procedures:USE INDUSTRIAL ABSORBENT TO COLLECT LIQUID POTASSIUM HYDROXIDE

Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

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

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

Other Precautions:USE ADAQUATE LOCAL EXHAUST VENTILATION WHEN HANDLING THE

LIQUID IN THE BATTERY I.E. POTASSIUM HYDROXIDE SOLUTION, WEAR A RESPIRAATOR, EYE GOGGLES AND FACE SHIELD, RUBBER GLOVES, PROTECTIVE CLOTHING TO MINIMIZE SKIN CONTACT.

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

Respiratory Protection:CONTACT LOCAL SAFETY/INDUSTRIAL HYGIENE OFFICE TO DETERMINE IF RESPIRATORY PROTECTION IS REQUIRED
Ventilation:CONTACT LOCAL SAFETY/INDUSTRIAL HYGIENE OFFICE TO DETERMINE IF LOCAL EXHAUST VENTILATION IS NEEDED
Protective
Gloves:RUBBER GLOVES
Eye Protection:CHEMICAL SAFETY GLASSES/GOGGLES
Other Protective Equipment:PROTECTIVE CLOTHING
Work Hygienic Practices:WASH THOROUGHLY AFTER HANDLING AND BEFORE EATING, DRINKING OR SMOKING. LAUNDRY CONTAMINATED CLOTHING BEFORE REUSE.
Supplemental Safety and Health

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

Boiling Pt:B.P. Text:765F,407C
Melt/Freeze Pt:M.P/F.P Text:UNK
Decomp Temp:Decomp Text:230F,110C
Vapor Pres:UNK
Vapor Density:UNK
Spec
Gravity:UNK
pH:UNK
Evaporation Rate & Reference:UNK
Solubility in Water:KAOH 52%
Appearance and Odor:NICAD BATT CONTAINS:CD & NI-SILVER METAL,CDOH & KOH-WHITE SALT,NIOH GRN-BLK SAL
Percent Volatiles by Volume:UNK
Corrosion Rate:UNK

===== 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:NONE

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

Waste Disposal Methods: DISPOSAL MUST BE IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS. COORDINATE WITH SUPPORTING INSTALLATION AND/OR MACOM ENVIRONMENTAL OFFICE PRIOR TO DISPOSAL

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