Product ID:BB-390A/U NICKEL METAL HYDRIDE BATTERY MSDS Date:04/22/1996 FSC:6140 NIIN:01-419-8187 MSDS Number: CFGVG === Responsible Party === Company Name: BREN-TRONICS INC Address:10 BRAYTON CT City:COMMACK State:NY ZIP:11725-3104 Country:US Info Phone Num:516-499-5155 **Emergency Phone** Num:516-499-5155 CAGE:51828 === Contractor Identification === Company Name: BREN-TRONICS INC Address:10 BRAYTON CT Box:City:COMMACK State:NY ZIP:11725-3104 Country:US Phone:631-499-5155 CAGE:51828

Ingred Name:NICKEL (SUSPECTED ANIMAL/HUMAN CARCINOGEN BY IARC GROUP 2B, SUSPECTED CARCINOGEN BY NTP) *97-2* CAS:7440-02-0 RTECS #:QR5950000 Fraction by Wt: 31-35.5% Other REC Limits:1 MG/CUM OSHA PEL:1 MG/CUM ACGIH TLV:0.05 MG /CUM IC

Ingred Name:COBALT (ANIMAL CARCINOGEN BY IARC - GROUP 2B) *97-2* CAS:7440-48-4 RTECS #:GF8750000 Fraction by Wt: 3-3.8% Other REC Limits:0.05 PPM OSHA PEL:0.1 MG/CUM ACGIH TLV:0.05 MG/CUM

Ingred Name:MANGANESE *97-2* CAS:7439-96-5 RTECS #:OO9275000 Fraction by Wt: 0.9-1.5% OSHA PEL:5 MG/CUM ACGIH TLV:5 MG/CUM (DUST)

Ingred Name:POTASSIUM HYDROXIDE CAS:1310-58-3 RTECS #:TT2100000 Fraction by Wt: 2.4-2.8% Other REC Limits:2 MG/CUM (CEILING) OSHA PEL:2 MG/CUM ACGIH TLV:2 MG/CUM (C EILING) EPA Rpt Qty:1000 LBS DOT Rpt Qty:1000 LBS

Ingred Name:LANTHANUM *97-2* CAS:7439-91-0 Fraction by Wt: 3.5-5.5%

Ingred Name:PRASEODYMIUM *97-2* CAS:7440-10-0 Fraction by Wt: 0.8-1.4%

Ingred Name:NEODYMIUM *97-2* CAS:7440-00-8 RTECS #:QO8575000 Fraction by Wt: 3-4.6%

Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES Reports of Carcinogenicity:NTP:YES IARC:YES OSHA:NO Health Hazards Acute and Chr

onic:ELECTROLYTE-CAUSTIC. MAY CAUSE SKIN/EYE IRRITATION. POTASSIUM HYDROXIDE-MAY CAUSE SKIN & EYE CHEMICAL BURNS. Explanation of Carcinogenicity:SEE INGREDIENTS. Effects of Overexposure:ELECTROLYTE-IRRITATION. POTASSIUM HYDROXIDE-CHEMICAL BURNS.
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First Aid:EYES/SKIN: FLUSH W/PLENTY OF RUNNING WATER FOR 15 MINS. OBTAIN MEDICAL ATTENTION IN ALL CASES.
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Extinguishing Media:WATER, CO2, SAND. Fire Fighting Procedures:WEAR A SCBA, PROTECTIVE GLOVES & EYE PROTECTION. Unusual Fire/Explosion Hazard:NICKEL FUMES MAY BE RELEASED DURING BURNING. CONTENTS MAY IGNITE WHEN EXPOSED TO AIR IF CELLS ARE DISASSEMBLED.
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Spill Release Procedures:FLUSH ELECTROLYTE W/WATER. AVOID EYE & SKIN CONTACT.
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 Han dling and Storage Precautions:AVOID MECHANICAL/ELECTRICAL ABUSE. DON'T SHORT CIRCUIT. DON'T DISASSEMBLE CELLS, CONTENTS MAY IGNITE WHEN EXPOSED TO AIR. Other Precautions:AVOID INCINERATION/UNUSUAL HIGH CURRENT CHARGE/REVERSE CHARGE WHICH MAY CAUSE FIRE/RUPTURE.
Evenerus Controle/Deregand Protection

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

Respiratory Protection:WEAR A SCBA WHEN LARGE NUMBER OF CELLS ARE INVOLVED IN A FIRE. Ventilation:AS MUCH AS POSSIBLE. Protective Gloves:NEOPRENE, RUBBE R/LATEX NITRILE Eye Protection:SAFETY GLASSES Other Protective Equipment:NONE Supplemental Safety and Health PHYSICAL CHARACTERISTIC INFORMATION IS FOR NICKEL. EACH CELL IS A SEALED CONTAINER. BOILING POINT INFORMATION IS FOR COBALT.

HCC:Z7 Boiling Pt:B.P. Text:5198F(SUPP) Melt/Freeze Pt:M.P/F.P Text:2647.4F Vapor Pres:1 (SUPP) Spec Gravity:8.9 (SUPP) Solubility in Water:0% (SUPP) Appearance and Odor:SILVERY-WHITE METAL. (SUPP)

Stability Indicator/Materials to Avoid:YES Stability Condition to Avoid:DISASSEMBLY, HEAT. Hazardous Decomposition Products:BY BURNING: NICKEL FUMES. BY INCINERATION/MULILATION: TOXIC MATERIAL.

Waste Disposal Methods:DISPOSE OF IAW/FEDERAL, STATE & LOCAL REGULATIONS.

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