

PRODUCT INFORMATION SHEET

Bren-Tronics Inc.
10 Brayton Court
Commack, N.Y. 11725

Telephone: 631-499-5155
Fax: 631-499-5504
www.bren-tronics.com

Product: Battery, dry (Nickel metal-hydride)

P/N: BB-390B/U

Effective Date: 01 Jun 2017

[Alternate P/N's: BB-390A/U, BT-70790, BT-70790B]

The batteries referenced herein are exempt articles and are not subject to OSHA Hazard Communication Standard requirements. This entire document is provided solely as an information source for the purpose of assisting our customers.

According to OSHA Regulation (29 CFR 1910.1200), Canadian WHMIS or GHS requirements, and REACH regulation (EC 1907/2006, Art 31), batteries have been defined as an 'ARTICLES', with no intended release. OSHA has defined an 'article' as a manufactured item other than a fluid or particle: (i) which is formed to a specific shape or design during manufacture; (ii) which has end use function(s) dependent in whole or in part upon its shape or design during end use; and (iii) which under normal conditions of use does not release more than minute or trace amounts of a hazardous chemical and does not pose a physical hazard or health risk to employees.

Because all of our batteries are defined as "articles", they are exempt from the legal requirements of the Hazard Communication Standard to provide an SDS or MSDS.

PRODUCT INFORMATION SHEET

From: Bren-Tronics Inc.
 10 Brayton Court
 Commack, N.Y. 11725

Telephone: 631-499-5155
Fax: 631-499-5504
www.bren-tronics.com

Emergency Telephone: If no answer above, contact Chem-Tel Corporation at 1-800-255-3924 or 1-813-248-0585

P/N: BB-390B/U

Effective Date: 01 Jun 2017

[Alternate P/N's: BB-390A/U, BT-70790, BT-70790B]

1. Product Identification

Product Name: Battery, Dry
Chemical System: Nickel Metal Hydride, (Rechargeable)
NSN: 6140-01-490-4317
Nominal Weight: 4.0 lb (1.8 Kg)
Nominal Voltage: 24 Volts (2 ea 12V sections)

2. Composition/Information on Ingredients

Although the chemical composition of the various cell manufacturers is proprietary, the following is typical of the chemistry.

Ingredients	CAS No.	--mg/m ³ -- OSHA PEL	--mg/m ³ -- ACGIH TLV	Approximate % Of Total Cell Weight
Nickel (powder)	7440-02-0	1	1	8
Nickel Hydroxide	12054-48-7	1	1	24
Cobalt	7440-48-4	0.1	0.1	3
Manganese	7439-96-5	5	5	1.3
Lanthanum	7439-91-0	n/a	n/a	4
Cerium	7440-45-1	n/a	n/a	-
Neodymium	7440-00-8	n/a	n/a	4
Potassium Hydroxide	1310-58-3	2	2	2.5
Sodium Hydroxide	1310-73-2	2	2	1

Each battery cell is contained in a sealed metal can, designed to withstand temperatures and pressures encountered during normal use. As a result, during normal use, hazardous materials are fully contained inside the battery cell. Each cell is a sealed container enclosing the electrodes and electrolyte.

3. Hazards Identification

Routes of Entry:

Inhalation? Not during normal usage. If cell case is breached from extreme heat/pressure, exposure to ingredients could occur.
Skin? Same. Electrolyte contact could cause caustic burn.
Ingestion? No

Potential Health Effects:

Chronic exposure to nickel may result in cancer, dermal contact may result in dermatitis in sensitive individuals. Cobalt has been identified as a 2B carcinogen.

Signs/Symptoms of Exposure:

N/A

4. First Aid Measures

Emergency & First Aid Procedures:

If leakage from cell contacts: Skin – flush with water; wash with soap and water. If irritation persists, contact physician. Eyes – immediately flush with copious amounts of water for 15 minutes, then see physician at once.

Respiratory Protection (Specify Type):

As in any fire situation, use self-contained breathing apparatus, (SCBA)

5. Fire Fighting Measures

Extinguishing Media:

Any class of extinguishing medium may be used on the batteries or their packing material.

Special Fire Fighting Procedures:

Fire fighters should use self-contained breathing apparatus when a large number of cells are involved.

Unusual Fire and Explosion Hazards:

May burst when subject to extreme heat.

6. Accidental Release Measures

Ventilation:

Not required under normal use.

Protective Gloves:

When handling leaking or open batteries.

Eye Protection:

Wear safety glasses with side shields if handling a leaking battery.

7. Handling and Storage

Precautions to be taken in Handling and Storage:

Accidental short circuit could bring high temperature elevation to the battery and will shorten the battery life. Ni-MH batteries have internal short circuit protection, but condition should still be avoided. Any resulting heat can burn attendant skin and even rupture the battery cell case.

Other Precautions:

Avoid incineration or mutilation. Use battery in proper equipment and observe proper polarity. Use only proper chargers for NiCd and NiMH batteries. Store in cool, dry place.

8. Exposure Controls/Personal Protection

Steps to be taken in Case Material is Released or Spilled:

Avoid skin and eye contact. Collect all released material in a plastic bag for waste.

9. Physical Properties

Appearance: Rectangular shape

10. Stability and Reactivity

Stability:

Stable

Conditions to Avoid:

Do not heat or disassemble. Avoid heat, open flames, sparks and moisture.

Hazardous Decomposition or By-products:

Oxides of nickel.

Hazardous Polymerization:

Will not occur.

Potential Incompatibilities:

The battery cells are encased in a non-reactive container; however, if the container is breached, avoid contact of internal battery components with acids, aldehydes and carbonate compounds.

11. Toxicological Information

Carcinogenicity:	NTP?	IARC Monograph?	OSHA Regulated?
Nickel	yes	-	-
Cobalt	-	2B	-

12. Ecological Information

N/A

13. Disposal Considerations

Waste Disposal Method:

Do not incinerate. Dispose in accordance with local, state and federal regulations. Small quantities may be allowed in household trash.

Cont'd:

14. Transport Information

Domestic Transportation within the U.S:

These batteries, referred to as “Batteries, dry, sealed, n.o.s.,” (also known as Dry Cell Batteries), are generally excepted from hazardous materials regulations provided they meet the requirements of Special Provision 130 of 49 CFR, which requires ALL BATTERIES BE PACKED IN SUCH A WAY TO PREVENT SHORT CIRCUITS or the generation of dangerous quantities of heat and be contained in ‘strong outer packaging’ that prevents spillage of contents. However, nickel metal hydride batteries (UN3496) shipped by sea in quantities over 100 kg are subject to additional restrictions in accordance with Special Provision 340.

Batteries with a voltage exceeding 9 Volts and transported by aircraft must have the words “not restricted” marked on each package or on a transport document such as an air waybill accompanying the shipment.

International Transportation:

These batteries, referred to as “Batteries, electric storage, (also known as Dry Cell Batteries), are generally excepted from hazardous materials regulations provided they meet the requirements of Special Provision A123. Special Provision A199, assigned against the entry for UN3496, “Batteries, nickel-metal hydride”, states that UN3496 only applies in sea transport and that provided nickel-metal hydride batteries are prepared in accordance with this special provision, they are “not restricted” in air transport. ALL BATTERIES MUST BE PACKED IN SUCH A WAY TO PREVENT SHORT CIRCUITS or the generation of dangerous quantities of heat.

The IATA DGR require the words “Not Restricted” and “Special Provision A199,” to appear in the description of the substance on an air waybill, when an air waybill is used.

Additionally, refer to IMDG Code, Special Provision 963 for sea transport only. Dry cell batteries are not subject to regulation under the ADR

UN-DOT Hazardous Class:

N/A

15. Other Information

Charging:

This battery is designed for recharging. A loss of voltage and capacity of batteries due to self-discharging during prolonged storage is unavoidable. Charge battery before use.

Observe the specified charge rate since higher rates can cause a rise in internal gas pressure which may result in damaging heat generation or cell rupture and or venting.

This information and recommendations set forth are made in good faith and believed to be accurate as of the date of preparation. Bren-Tronics Inc. makes no warranty, expressed or implied, regarding the accuracy of the data or the results to be obtained from the use thereof.