Maha Energy Corp.
545-C W. Lambert Rd. Brea, CA 92821
Tel: 1-800-376-9992 -or- (714) 990-4557 Fax: (714) 990-1325
Point your browser at: ***http://www.maha-comm.com***
Internet E-mail: ***tech@maha-comm.com***

MAHA

"Your Supplier, Your Partner, Your Friend!"

MATERIAL SAFETY DATA SHEET

Company: Maha Energy Corp.
Applicable Product Part Number: MH-AA155, MH-AAA650, MH-C380, MH-D800, MH-9V160
Voltage : 1.2 V
Product Name : Nickel Metal Hydride Battery Cells
Chemical System : Nickel Metal Hydride.
Rechargeable : Yes

I – HAZERDOUS INGREDIENTS

IMPORT NOTE : The battery should not be opened, burned, or disassembled Exposure to the ingredients contained within or products formed by their combustion could be harmful.

MATERIAL OR INGREDIENT	**wt**
Aluminum	< 0.6
Nickel	30-50
As nickel hydroxide, nickel oxide and nickel powder	
Cobalt	2.5-6.0
As cobalt metal, cobalt oxide and cobalt hydroxide	
Zinc	<0.4
Misc.	
Including Lanthanum, Cerium, Neodymium and Praseodymium	<20
	<0.2
Lithium Hydroxide	<4
Potassium Hydroxide	<1.5
Sodium Hydroxide	<0.5
Graphite	<1
PTFE	0-4
Lithium Hydroxide	free
Lead	free
Cadmium	free
Mercury	

Maha Energy Corp.
545-C W. Lambert Rd. Brea, CA 92821
Tel: 1-800-376-9992 -or- (714) 990-4557 Fax: (714) 990-1325
Point your browser at: ***http://www.maha-comm.com***
Internet E-mail: ***tech@maha-comm.com***

MAHA

"Your Supplier, Your Partner, Your Friend!"

III-FIRE AND EXPLOSION HAZARD DATA

If fire or explosion occurs when batteries are been charged, disconnect power to charger.

In case of fire where nickel hydroxide batteries are present, apply a smothering agent such as sand, dry ground dolomite, or soda ash, or flood the area with water. A smothering agent will extinguish burning nickel metal hydroxide batteries. Water may not extinguish burning batteries but will cool the adjacent areas and control the spread of fire. Burning batteries will combust completely. Virtually all fires involving nickel metal hydroxide batteries can be controlled with water. When water is used, however, hydrogen gas may evolve. In a confined space, hydrogen gas can form an explosive mixture. In the situation, smothering agents are recommended.
Fire fighters should wear self-contained breathing apparatus. Burning nickel metal hydroxide batteries can produce toxic fumes including oxide of nickel, cobalt, aluminum, lanthanum, cerium, neodymium, and praseodymium.

IV-HEALTH HAZARD DATA

Under normal use, the battery is hermetically sealed.
Ingestion: swallowing a battery can be harmful
Contents of an open battery can cause serious chemical burns of mouth, esophagus, and gastrointestinal tract.
If battery or open battery is ingested, do not induce vomiting of the mouth or give food or drink. Seek medical attention immediately. Call national battery ingestion hotline for advice and follow-up
Inhalation: contents of an open battery can cause respiratory irritation hypersensitivity to nickel can cause allergic pulmonary asthma. Provide fresh air and seek medical attention.
Skin contact: contents of an open battery can cause skin irritation and/or chemical burns. Nickel, nickel compounds, cobalt, and cobalt compounds can cause skin sensitization and allergic contact dermatitis. Remove contaminated irritation persists, seek medical attention.
Eye contact: contents of an open battery can cause severe irritation and chemical burns. Immediately flush eyes thoroughly with water for at least 15 minutes, lifting upper and lower lids, until no evidence of the chemical remains. Seek medical attention.

V –PRECAUTIONS FOR SAFE HANDLING AND USE

Storage: store in a cool, well-ventilated area. Elevated temperature can result in shortening the battery life.
Mechanical containment: never seal or encapsulate nickel metal hydroxide battery. Do not obstruct safety release vents on batteries. Encapsulation(potting) of batteries will prevent cell venting and can cause high pressure rupture.
Handling: Accidental short circuit for a few seconds will not seriously effect the battery.

However, this battery is capable of delivering very high short circuit currents. Prolonged short circuits will cause high cell temperatures which can cause skin burns. Sources of short circuits include jumbled batteries in bulk containers, metal jewelry, and metal covered tables or metal belts used for assembly of batteries into devices.
If soldering or welding to the battery is required, use of labeled batteries is recommended. Do not open the battery. The negative electrode material may be pyrophobia. Should an individual cell from a battery become disassembled, spontaneous combustion of the negative electrode is possible. This is much more likely to happen if the electrode is removed from its metal container. There can be a delay between exposure to air and spontaneous combustion.
Charging: this battery is made to be charged for many times. Because it gradually loses its charge over a few months, it is good practice to charge battery before use. Use the recommended charger. Improper charging can cause heat damage or even high pressure rupture. Observe proper charging polarity.

VI –SPECIAL PROTECTION INFORMATION

Ventilation requirement : not necessary under normal conditions.
Respiratory protection: not necessary under normal conditions.
Eye protection: not necessary under normal conditions. Wear safety glasses with side shields if handling an open or leaking battery.
Gloved: not necessary under normal conditions. Use neoprene or natural rubber glover if handling an open or leaking battery.
Open battery storage: battery should not be opened. Should a cell become disassembled, the electrode should be stored in a fireproof cabinet, away from combustibles.