HENAN TROILY NEW ENERGY TECHNOLOGY CO.,LTD
TEL: 0373-7722669 FAX: 0373-7722185
Industrial cluster distr of Yudong,Xinxiang City,Henan Province,P.R.China

Material Safety Data Sheet(MSDS)

Section I – Product Information

Our brands: TROILY

NI-MH BATTERY(1.2V40mAh,60mAh,80mAh...TRQNB TR2QNB TR3QNB AA AAA etc.)

Section II – Composition / Information on Ingredients

The ingredients are contained in a hermetically-sealed case, designed to withstand temperatures and pressures encountered during normal use. As a result, during normal use, hazardous materials are partially contained inside the battery. The battery should not be opened or exposed to heat because exposure to the following ingredients contained within could be harmful under some circumstances. The following information is provided for the user's information only. The chemical names are as follows(approx. wt%)

Nickel hydroxide 10.5% H_2O 5.0% KOH+NaOH+LiOH 1.2% PVC 2.0% Polypropylene 1.5% Mischmetal Power 15.0% PTFE 0.2% Cobalt Monoxide 0.6% Nickel hydroxide 10.5% Nickel plated steel 64.0%

Nickel hydroxide 24.0% H_2O 8.0% KOH+NaOH+LiOH 4.0% CMC 0.1% Polypropylene 3.4% Mischmetal Power 25.0% PTFE 0.3% Cobalt Monoxide 1.2% Nickel plated steel25.0%

Section III – Physical/Chemical Characteristics

Boiling Point (°C): N/A

Specific Gravity: (H20=1): N/A

Vapor Pressure (mmHg): (N/A)

Vapor Density (Air=1): (N/A)

Melting Point (°C): (N/A)

Evaporation Rate (Butyl Acet.=1): (N/A)

Solubility in Water: (N/A)

Appearance and Odor:.(N/A)

Section IV – Fire and Explosion Hazard Data

Flammable Limits: Not available

But when the short circuit occurred inside the battery due to the leakage or the breach of the separator , it may cause a tiny explosion to break and spread the anode and cathode into parts and hit the person nearby. It may hurt the eye by accident. Safety precaution must be taken against this accident.

In case of fire, it is permissible to use any kind of extinguishing medium on these batteries or their packing material. Cool exterior of batteries if exposed to fire to prevent rupture.

Unusual Fire and Explosion Hazards are not available.

Section V – Health Hazard Data

Under normal conditions of use, the battery is hermetically sealed.

Routes of Entry:	**Method of prevention**
Inhalation – Yes.	Remove to fresh air.

Skin – Yes Flush with water.

Ingestion – Yes Obtain medical attention.

Health Hazards (Acute):

These chemicals are contained in a sealed can. Risk of exposure occurs only if the battery is mechanically or electrically abused. The most likely risk is that the contaminated skin will be itchy and eye will be slightly irritated in case of the electrolyte leakage.

Carcinogenicity: NTP: None IARC Monograph: None OSHA Regulated: None

Medical Conditions Generally Aggravated by Exposure: An acute exposure will not generally aggravate any medical condition.

Emergency and First Aid Procedures: In case of skin contact with contents of battery, flush immediately with water. For eye contact, flush with copious amounts of water for 15 minutes. Do not inhale leaked material. If irritation persists, get medical help immediately.

Section VI – Reactivity Data

Stability: Stable

Conditions to Avoid: Do not heat, disassemble.

Hazardous Decomposition or By-products: N/A

Hazardous polymerization will not occur.

Section VII – Safe Handling and Storing

Precautions to be Taken in Handling and Storing: Avoid mechanical or electrical abuse. Batteries may explode or cause burns, if disassembled, crushed or exposed to fire or high temperatures. Do not short or install with incorrect polarity or mix with used or other battery type, which may explode or leak and cause personal injury.

Store in a cool and dry, well ventilated area. Elevated temperatures can result in shortening

battery life.

Section VIII Control Measures

Respiratory Protection (Specify Type): Not necessary under conditions of normal use.

Ventilation: Not necessary under conditions of normal use.

Protective Gloves: Not necessary under conditions of normal use.

Eye Protection: Not necessary under conditions of normal use.

Other Protective Clothing or Equipment: Not necessary under conditions of normal use.

Section X – Transportation

The manganese dioxide batteries have been tested strictly in accordance with the requirements contained in the UN Manual of Tests and Criteria and shipped in accordance with applicable regulations.

Batteries have been packaged and offered for transportation in a good manner that prevents the dangerous evolution of heat (for example, by the effective insulation of exposed terminals) and protects against short circuits.

ON AND BEHALF OF
HENAN TROILY NEW ENERGY TECHNOLOGY CO.,LTD
March.5st,2015
