

SAFETY DATA SHEET

Creation Date : 11 April 2006
Last Update : 11 February 2010

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Product name Nickel Metal Hydride Battery

4. FIRST AID MEASURES

General advice

Show this safety data sheet to the doctor in attendance.

The information below refers to exposure to the ingredients.

Inhalation

Immediate medical attention is required. Move to fresh air. If symptoms persist, call a physician.

Skin contact

Immediate medical attention is required. Wash off immediately with plenty of water for at least 15 minutes. Remove and wash contaminated clothing before re-use. If skin irritation persists, call a physician.

Eye contact

Immediate medical attention is required.
Remove contact lenses. Rinse immediately with plenty of water for at least 15 minutes.

Ingestion

Immediate medical attention is required. Gently wipe or rinse the inside of the mouth with water. Give small amounts of water to drink. Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a physician or Poison Control Centre immediately.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Dry powder, carbon dioxide (CO₂), sand.

Extinguishing media which must not be used for safety reasons

Water, water spray.

Specific hazards

Risk of receptacle bursting.

Special protective equipment for firefighters

In the event of fire, wear self contained breathing apparatus. Wear personal protective equipment.

Hazardous decomposition products

Nickel and cobalt compounds.

6. ACCIDENTAL RELEASE MEASURES

The information below refers to exposure to the ingredients.

Personal precautions

Use personal protective equipment.
Avoid contact with skin and eyes.

Environmental precautions

Prevent further leakage or spillage if safe to do so.
Do not allow material to contaminate ground water system.

Methods for cleaning up

Pick up and transfer to properly labelled containers.
Dispose of in accordance with local regulations.

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7. HANDLING AND STORAGE

Handling

Technical measures/Precautions

No special technical protective measures required.
Do not obstruct safety vent by soldering or welding tabs on the positive top.

Safe handling advice

Avoid contact with skin and eyes.
Use personal protective equipment.

Storage

Technical measures/Storage conditions

Keep in a dry, cool and well-ventilated place, preferably in the temperature range of +5 to +25°C at 65%(± 5%) relative humidity.
Keep away from heat and sources of ignition.
Ensure battery terminals are protected during storage.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational exposure controls

Engineering measures

Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

Not required under normal use.

The information below refers to exposure to the ingredients.

Respiratory protection

Wear a positive-pressure supplied-air respirator with full facepiece.

Hand protection

Neoprene gloves (EN374).

Eye protection

Safety glasses with side-shields conforming to EN166.

Skin and body protection

Boots, apron, protective suit.

Hygiene measures

General industrial hygiene practice.

Environmental exposure controls

The information below refers to exposure to the ingredients.

Prevent product from entering drains.
Do not allow material to contaminate ground water system.

9. PHYSICAL AND CHEMICAL PROPERTIES

General Information

Form battery (sealed unit) **Colour** not applicable **Odour** odourless

Important Health Safety and Environmental Information

not applicable

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10. STABILITY AND REACTIVITY

Stability

Stable under normal conditions.

Hazardous polymerisation

Hazardous polymerisation does not occur.

Conditions to avoid

Keep away from heat and sources of ignition.

Materials to avoid

Exposure to moisture.

Hazardous decomposition products

Nickel and cobalt compounds.

11. TOXICOLOGICAL INFORMATION

The information below refers to exposure to the ingredients.

Local effects

Causes severe burns. Risk of serious damage to eyes. Harmful by inhalation and if swallowed.

Long term toxicity

No data available. Avoid repeated exposure.

Specific effects

May cause sensitization by inhalation and skin contact.
Limited evidence of a carcinogenic effect.

12. ECOLOGICAL INFORMATION

If used as directed, and if the integrity of the battery casing and security vent are maintained, the ingredients are not expected to pose a significant risk to the environment.

Mobility

No data available.

Persistence and degradability

No data available.

Ecotoxicity effects

The information below refers to exposure to the ingredients.

Nickel hydroxide: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

13. DISPOSAL CONSIDERATIONS

Waste from residues / unused products

Dispose of in accordance with local regulations. It must undergo special treatment, e.g. at suitable disposal site, to comply with local regulations. Should not be released into the environment.

Contaminated packaging

Not applicable.

Further information

EWC waste disposal No: 200133 - batteries and accumulators included in 16 06 01, 16 06 02 or 16 06 03 and unsorted batteries and accumulators containing these batteries.

Never incinerate Ni-MH batteries. Never dispose Ni-MH batteries as landfill.

Nickel-Metal Hydride batteries - which in some countries may not be subject to collection & recycling and/or disposal requirements – do however contain recyclable materials and UNIROSS recommends

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proper recycling of these batteries whenever possible.

14. TRANSPORT INFORMATION

Uniross sealed Nickel Metal Hydride batteries are not subject to dangerous goods regulations. They are unregulated for purposes of transportation by International Civil Administration (ICAO), International Air Transport Association (IATA), International Maritime Organization (IMO) and ADR.

UN recommendations (UNECE-rev16) state that

- a) batteries shall be protected against short circuits
- b) batteries stacked shall be adequately secured in tiers separated by a layer of non-conductive material
- c) battery terminals shall not support the weight of other superimposed elements
- d) battery shall be packaged or secured to prevent inadvertent movement

IATA requirement for shipping these batteries by air is special provision A164 which states: *"Any electrical battery or battery-powered device, equipment of vehicle having the potential of a dangerous evolution of heat must be prepared for transport so as to prevent*

- a) *a short-circuit (e.g. in the case of batteries by the effective insulation of exposed terminals or in the case of equipment, by disconnection of the battery and protection of exposed terminals); and,*
- b) *unintentional activation"*

15. REGULATORY INFORMATION

Symbol C – Corrosive
 N – Dangerous for the environment

Text of R phrases mentioned in Section 2

R22 - Harmful if swallowed.
R20/22 - Harmful by inhalation and if swallowed.
R35 - Causes severe burns
R40 - Limited evidence of a carcinogenic effect.
R42/43 - May cause sensitization by inhalation and skin contact.
R43 - May cause sensitization by skin contact.
R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

16. OTHER INFORMATION

S -phrases S 1/2 - Keep locked up and out of the reach of children.
 S36/37/39 - Wear suitable protective clothing, gloves and eye/face protection.
 S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
 S60 - This material and its container must be disposed of as hazardous waste.
 S61 - Avoid release to the environment. Refer to special instructions/safety data sheets.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.
