

Safety information

Robert Bosch GmbH

Revision: 1.6.2005 Rev.-No.: 1,00

NiMH-Battery

1. Product- and Company Name

Tradename

Ni-MH-Battery

Manufacturer/Distributor

Robert Bosch GmbH

Power Tools

Max-Lang-Str. 40-46

D-70771 Leinfelden-Echterdingen

Telephone : +49 (0)711 758-0

Emergency Response	GBK Gefahrgutbüro GmbH Mail: gbk@gbk-ingelheim.de Telephone: +49(0)6132-84463
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2. Composition/Information on ingredients

Characterisation

Battery pack with Nickel Metal Hydride accumulators

Important information

The battery should not be opened, heated above 85°C or burned since the exposition with the ingredients could be harmful under certain conditions.

Composition

The battery cell is 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 fully contained inside the battery cell. The ingredients contained in the battery can be harmful when they are released under certain circumstances like fire, explosion, extreme abuse, misuse or improper disposal, that results in breaching of the battery cell case.

The information and recommendations set forth are made in good faith and believed to be accurate as of the date of preparation. It is no warranty, expressed or implied, with respect to this information and disclaims liabilities from reliance on it.

3. Possible Risks

Not classified as dangerous according the EC-Guideline 1999/45/EG.

4. First aid measures

The batteries are hermetically closed. A risk of exposure can only occur when the cells are mechanically abused. The following first aid measures therefore only refer to the handling in the case of release of the ingredients and not on the use of the battery under normal conditions.

General information

In case of contact, take off immediately all contaminated clothing.

In case of inhalation

In case of damages possible risk of respiratory irritation. Supply fresh air. If disorders persist, contact a doctor. During normal use inhalation is an unlikely route of exposure due to containment of hazardous materials within the battery case. However, should the batteries be exposed to extreme heat or pressures causing a breach in the battery cell case, cadmium dusts and fumes may be emitted. Inhalation of cadmium dusts or fumes may cause throat dryness, respiratory irritation, headache, nausea, vomiting, chest pain, extreme restlessness and irritability,

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pneumonitis, and bronchopneumonia. In the case of high concentration exposures (e.g., above 1 to 5 mg/m³ during an eight hour period) death may occur within several days after the exposure.

In case of skin contact

In case of damages possible risk of skin irritation. In case of skin contact wash off with water and soap. If disorders persist, contact a doctor.

In case of eye contact

In case of damages possible risk of eye irritation. In case of eye contact rinse thoroughly with water. Contact a doctor.

Exposure to the electrolyte contained inside the battery may result in severe irritation and chemical burns.

5. Fire-fighting measures

Suitable extinguishing material

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

Special Fire Fighting Procedures: Exposure to temperatures of above 212°F/ 100 °C can cause evaporation of the liquid content of the potassium hydroxide electrolyte resulting in the rupture of the cello Potential for exposure to cadmium fumes during fire; use self-contained breathing apparatus.

Special exposure hazards arising from the substance, combustible products or resulting gases

In case of fire vapours containing Nickel and Cadmium may be released.

Fire fighting measures, rescue works and clearance works with impact of the smouldering fire fumes or fire gases should only be carried out with suitable respiratory protective equipment.

Additional information

Residues of fires and chemically contaminated water should be disposed in compliance with the local regulations.

6. Accidental release measures

Personal precautions

Use personal protective clothing. Avoid skin contact.

Environmental precautions

Dispose damaged batteries according pos. 13 of this safety information.

Methods for cleaning up/taking up

Soak up with suitable absorbent material and dispose in compliance with the regulations.

7. Handling and storage

Store in a cool place, but prevent condensation on cell or battery terminals. Elevated temperatures may result in reduced battery life. Optimum storage temperatures are between -31°F/ 0°C and 95°F/ 35°C.

Store only in well ventilated cool areas. Avoid Overheating, e.g. through incident solar radiation. Protect from air humidity and water.

Accidental short circuit will bring high temperature elevation to the battery as well as shorten the battery life. Be sure to avoid prolonged short circuit since the heat can burn attendant skin and even rupture the battery cell case.

Batteries packaged in bulk containers should not be shaken. Metal covered tables or belts used for assembly of batteries into devices can be the source of short circuits; apply insulating material to assembly work surface.

8. Exposure controls / personal protection

If handled in a suitable way, no personal protective equipment is necessary.

9. Physical and chemical properties

Compact battery pack with plastic shell. The battery cell is contained in a hermetically sealed-case, designed to withstand temperatures and pressures encountered during normal use.

10. Stability and Reactivity

Not applicable.

11. Toxicology

No risk if handled reasonable. In case of damages or improper use harmful or sensitizing ingredients may get released.

12. Ecology

No negative ecologic effects are expected, if the product is used and disposed regularly.

13. Disposal

Batteries have to be collected separately from other wastes. Avoid short-Circuits during collecting or storing. If damages occur, batteries have to be packed solitary in a plastic bag.

Admit to an approved disposal system (e.g. Bosch). Use only approved Containers for the collection. EWC Nr. 16 06 05 (Other batteries and accumulators). Take local legislation into account.

14. Transport information

Land transport (ADR/RID)

Dry Cells are not classified as dangerous according the regulations for land transportation. They have to be offered for transportation in a manner, that prevents the dangerous evolution of heat and short circuits.

Sea ship (IMDG)

Dry Cells are not classified as dangerous according the regulations for land transportation. They have to be offered for transportation in a manner, that prevents the dangerous evolution of heat and short circuits.

Air transport IATA/DGR

Dry Cells are not classified as dangerous according the regulations for land transportation. They have to be offered for transportation in a manner, that prevents the dangerous evolution of heat and short circuits (see Special Provision 123 of IATA/DGR).

DOT Classification

Dry Cells are not classified as dangerous according the DOT regulations. They have to be offered for transportation in a manner, that prevents the dangerous evolution of heat and short circuits (see Special Provision 130 of DOT).

Other appropriate information

Disposal of used batteries according the Multilateral Agreement M 126 (only in the states, who signed this agreement)

15. Other regulations

Labelling

The product has not to be labelled/classified according the EC-Guidelines

16. Other information

Data do not refer to the use and the regular employing of the product (in this sense consult information on use and on product), but to liberation of major amounts in case of accidents and irregularities.

The information describes exclusively the safety requirements for the product (s) and is based on the present level of our knowledge. The delivery specifications are contained in the corresponding product sheet.