



Material Safety Data Sheet (MSDS)

Regulation No. 1907/2006/EC, 1272/2008/EC

For commercial reasons NEDIS B.V. has replaced the original manufacturer contact data and product name with its own, in the pages following to this front page.

Name, address and further contact details of the manufacturer are known by NEDIS B.V. and available upon request by authorities.

Product details:

- Trade name: PC Programmable RC 4-IN-1
- Article code: KN-PCRC40
- Brand name: König
- Battery type: LR03

Company details:

- Name: NEDIS B.V.
- Address: De Tweeling 28
5215 MC 's-Hertogenbosch
The Netherlands
- Phone number: +31 73 599 1055
- Contact: Customer Service Department

For further information/ questions:

- E-mail: info@nedis.com
- Website: www.nedis.com

Authorized by: Dirk van den Heuvel

Function: Product Manager

Signature + date:



20-10-2015

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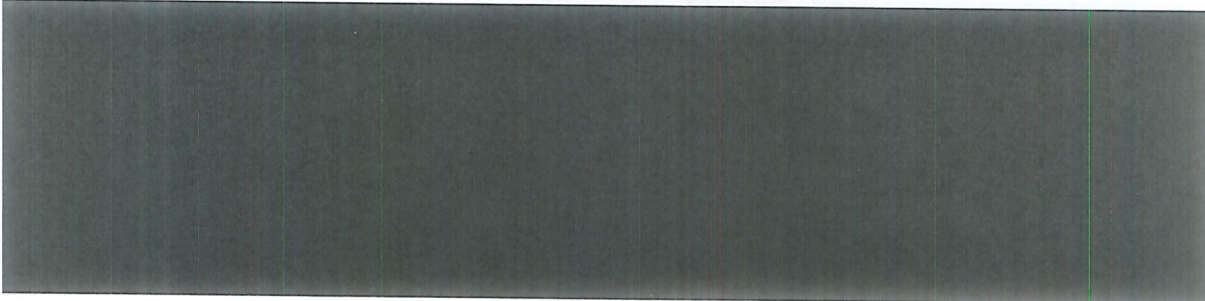
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Material Safety Data Sheet

Section 1 - Chemical Product and Company Identification



Section 2 - Hazards Identification

Fatalness grade: In accordance with Regulation (EC) No 1272/2008, the sample does not belong to dangerous article.

Invasion route: Skin touch: Contact with damaged batteries may cause burns.

Eyes touch: Contact with damaged batteries may cause burns. Eye damage is possible.

Inhalation: Inhalation of vapors or fumes released due to heat or a large number of leaking batteries may cause respiratory and eye irritation.

Ingestion: Swallowing is not anticipated due to battery size. Ingestion of battery contents may cause mouth, throat and intestinal burns and damage.

Health hazards: The chemical are contained in a sealed can. Risk of exposure occurs only if the battery is mechanically or electrically abused.

Environment hazards: Not necessary under conditions of normal use.

Burn & burst danger: Do not dispose of battery in fire and recharge battery-may explode. Do not short-circuit battery -may cause burns.

Section 3 -Composition/Information on Ingredient

Pure Admixture

Composition:

Chemical Name	In % By Weight	CAS No.	EC No.
Manganese Dioxide	48	1313-13-19	215-202-6
Zinc	28.5	7440-66-6	231-175-3
Acetylene	3.8	74-86-2	200-816-9
Stainless Steel	11.36	12681-83-3	/
Water	7.2	1310-58-3	215-181-3
Graphite	3	7782-42-5	231-955-3
others	0.84	/	/

Abbreviation: CAS No. is Chemical Abstract Service Registry Number.

EC No. is European Inventory of Existing Commercial chemical Substances Number.

/ = Not apply.

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Section 4 - First Aid Measures

Skin touch: Remove contaminated clothes and rinse the skin with plenty of water.

Eyes touch: Lifting the upper and lower eyelids, flush the eyes with plenty of water or saline water. Get medical aid.

Inhalation: Remove from exposure and move to fresh air immediately. Keep the respiratory tract smooth. Use oxygen if available. Get medical aid.

Ingestion: Drink sufficient hot water and induce vomiting. Get medical aid.

Section 5 - Fire Fighting Measures

Danger characteristic: Batteries may burst and release hazardous decomposition products when exposed to a fire situation.

Hazardous combustion products: CO, CO₂

Fire-Fighting method & media: The staff must equip with filtermask (full mask) or isolated breathing apparatus. The staff must wear the clothes which can defense the fire and the toxic gas. Put out the fire in the upwind direction. Remove the container to the open space as soon as possible. Spray water on the containers in the fireplace to keep them cool until finish extinguishment. Media: hazy water, foam, powder, CO₂, sandy clay.

Section 6 –Accidental Release Measures

Emergency treatment: If the battery material is released, remove personnel from area until fumes dissipate. Provide maximum ventilation to clear out hazardous gases. Wipe it up with a cloth, and dispose of it in a plastic bag and put into a steel can. The preferred response is to leave the area and allow the batteries to cool and vapors to dissipate. Provide maximum ventilation. Avoid skin and eye contact or inhalation of vapors. Remove spilled liquid with absorbent and incinerate waste.

Section 7 - Handling and Storage

Handling: 1. Do not allow battery terminates to contact each other, or contact with other metals.

2. Pack batteries in separate plastic bags so that the single batteries are not mixed together.

3. Do not expose the battery to excessive physical shock or vibration.

4. Do not immerse, throw, and wet a battery in water.

5. Short-circuiting should be avoided. Short circuit will reduces the life of the battery and can lead to ignition of surrounding materials. Physical contact with to short-circuited battery can cause skin burn.

6. The batteries should not be opened, destroyed or incinerate, since they may leak or rupture and release to the environment the ingredients that they contain in the hermetically sealed container.

7. Place the cell beyond the child's reach. Take care when transport, prevent damaging the packing and container.

8. Never apply battery into a airtight compartment or sealed container.

9. Be sure to use the specified charger for battery, and follow the charging instructions correctly.

10. Do not mix old and new batteries together, neither with Ni-Cd, dry batteries or another manufacturer's batteries.

Differences in various characteristics may cause damage to batteries or product.

Storage: 1. Batteries should be separated from other materials and stored in a noncombustible, well ventilated, sprinkler-protected structure with sufficient clearance between walls and battery stacks.

2. Keep the sample in the cool, dry and well-ventilated place. Do not exposure to direct sunlight for long periods.

Keep away from fire and heating sources. Don't keep the samples with oxidizer and acid.

3. Keep batteries in original package until use and do not jumble them.

4. Equip with relevant types and quantities of the extinguishment instruments. The storage place should be

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equipped with suitable shelter materials for divulgence handling.

Section 8 - Exposure Controls, Personal Protection

Maximum admissible concentration: No standard yet

Monitoring Method: /

Engineering Control: Supply with sufficient partial air exhaust.

Respiratory Protection: Wear self-contained breathing filtermask (full mask) if the density exceed in the air. Wear breathing apparatus under the condition of emergency rescue or evacuation.

Eyes Protection: Have been mentioned in the respiratory protection.

Body Protection: Wear fireproofing, gas defense clothes.

Hands Protection: Wear suitable gloves.

Other Protections: No smoking, dining and drinking water in the workplace. Keep good habit of hygiene.

Section 9 - Physical and Chemical Properties

Appearance: colored cylinder solid

Color: black

Odour: odourless

Boiling Point: No specific data.

Flash Point: No specific data.

Melting Point: >300°C

Proportion: No specific data.

Acid Value: No specific data.

PH Value: 7-8

Density: No specific data.

Permission of solvent inhalation: No specific data.

Ignition temperature: The rate of burning is less than 2.2mm/s,so the substance does not belong to flammable solid.

Solubility: partial soluble in water/slightly soluble in water/slightly soluble in ethane

Section 10 - Stability and Reactivity

Stability: Stable under normal temperature and pressure

Distribution of Ban: strong oxidizer, strong acid

Conditions to Avoid: Fire source, heating source

Hazardous Polymerization: No specific data.

Hazardous Decomposition Products: The battery may release irrigative gas once the electrolyte leakage.

Section 11 - Toxicological Information

Acute Toxicity: No information is available.

Sub-acute and Chronic Toxicity: No information is available.

Irritation: The liquid in the battery may irritate.

Sensitization: The liquid in the battery may cause sensitization to some person.

Mutagenicity: No information is available.

Carcinogenicity: No information is available.

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Others: Since the materials in this battery are sealed in the can, the potential for exposure to the components of the battery is negligible, when the battery is used as directed. However technical or electrical abuse of the battery may result in the release of battery contents.

Section 12 - Ecological Information

Eco-toxicity: No information is available.

Biodegradable: No information is available.

Non-biodegradable: No information is available.

Bioconcentration or biological accumulation: No information is available.

Other harmful effects: Don't abandon the battery into environment, may cause water or soil pollution.

Section 13 - Disposal Considerations

Nature of waste: No specific data.

Waste disposal methods: Refer to National or Local regulations before handling. Disposal of the battery should be performed by permitted, professional disposal firms knowledgeable in National or Local regulations of hazardous waste treatment and hazardous waste transportation.

Attention abandoned: The battery should be completely discharged prior to disposal in order to prevent short circuit. The battery contains recyclable materials. It is suggested recycle.

Section 14 - Transport Information

Number of dangerous goods: No applicable.

UN Number: No specific data.

Packaging Mark: No specific data.

Packaging Method: No specific data.

Transport Attentions: The batteries are considered to be "Dry cell" batteries and are unregulated for purpose of transportation by the U.S. Department of Transportation (DOT), International Civil Aviation Administration (ICAO), International Air Transport Association (IATA) and International Maritime Dangerous Goods Regulations (IMDG).

The batteries should be securely packed and protected against short-circuits. Examine whether the package of the containers are integrate and tighten closed before transport. Take in a cargo of them without falling, dropping, and breakage. Prevent collapse of cargo piles and wet by rain. The transport vehicle and ship must be cleaned and sterilized otherwise it is not allowed to assemble articles. During transport, the vehicle should prevent exposure, rain and high temperature. For stopovers, the vehicle should be away from fire and heat sources. When transported by sea, the assemble place should keep away from bedroom and kitchen, and isolated from the engine room, power and fire source. Under the condition of Road Transportation, the driver should drive in accordance with regulated route, don't stop over in the residential area and congested area.

The only DOT requirement for shipping these batteries is special provision 130 which states: "Batteries, dry are not subject to the requirements of this subchapter only when they are offered for transportation in a manner that prevents the dangerous evolution of heat (for example, by the effective insulation of exposed terminals)

The only requirements for shipping these cells by ICAO and IATA is Special Provision A123 which states: "An electrical battery or battery powered device having the potential of dangerous evolutions of heat that is not prepared so as to prevent 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) is forbidden from transportation.

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The International Maritime Dangerous Goods Code (IMDG) regulate them for ocean transportation under special provision 304 which says: batteries, dry, containing corrosive electrolyte which will not flow out of the battery if the battery case is cracked are not subject to the provision of this code provided the batteries are securely packed and protected against short-circuits. Example of such batteries are: alkali-manganese, zinc carbon, nickel metal hydride and nickel-cadmium batteries. Such batteries have been packed in inner packaging in such a manner as to effectively prevent short circuit and movement that could lead to short-circuit.

For air transportation, the words "Not Restricted" and the Special Provision number "A 123" must be included in the description of the substance on the Air Waybill, when an Air Waybill is issued.

Section 15 - Regulatory Information

Regulatory Information:

ISO 11014-2009 Safety data sheet for chemical products - Content and order of sections.

Regulation (EC) No. 1272/2008-Classification, Labeling and Packaging of Substances and Mixtures.

The International Maritime Dangerous Goods (IMDG) Code (inc Admit 35-10, 2010 Edition).

The International Air Transport Association (IATA) Dangerous Goods Regulations, 54th Edition, 2013.

Section 16 - Additional Information

The above information is based on the data of which we are aware and is believed to be correct as of the data hereof. Since this information may be applied under conditions beyond our control and with which may be unfamiliar and since data made available subsequent to the data hereof may suggest modifications of the information, we do not assume any responsibility for the results of its use. This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.

Note:

-This MSDS refer to A001C111118024001-2.

- Photo is included

Photograph of Sample



Super heavy duty Battery

End of MSDS