



Material Safety Data Sheet

1. Product & Company Identification

Product:	Alkaline 9 V block battery 6LR61, non-rechargeable
Nominal voltage:	9 V
Manufacturer:	Conrad Electronic SE
Address:	Klaus-Conrad-Str. 1, D-92240 Hirschau
Telephone:	+49 (0) 9604 / 40 - 8988
Date of issue:	04.02.2020

2. Hazards Identification

The battery is not restricted to IATA DGR (61st Edition) according to special provision A123.

The battery is not subject to IMO IMDG Code (2018 Edition).

The battery is not subject to JT/T617-2018.

The battery is not subject to List of Dangerous Goods by Rail (2009).

Emergency Overview:

Avoid contact and inhalation the internal materials. Emit toxic fumes under fire conditions.

3. Information on Ingredients

Materials	Concentration	CAS No.	EC No.
Manganese Dioxide	28-38%	1313-13-9	215-202-6
Iron	16-26%	7439-89-6	231-096-4
Zinc	8-16%	7440-66-6	231-175-3
Water	8-15%	7732-18-5	231-791-2
Poly(l,4-butylene tere -phthalate)	8-12%	26062-94-2	607-857-5
Potassium hydroxide	3-7%	1310-58-3	215-181-3
Copper	2-4%	7410-50-8	231-159-6
Graphite	2-3%	7782-42-5	231-955-3
Polyvinyl chloride	1-2%	9002-86-2	618-338-8
Nylon	0.5-1.5%	63428-84-2	-
Nickel	0.05-0. 1%	7440-02-0	231-111-4



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4. First-Aid Measures

Skin Exposure:

If the internal battery materials of an opened battery cell come into contact with the skin, immediately flush with plenty of water.

Inhalation Exposure:

In case of inhale the internal battery materials, remove immediately to fresh air and seek medical attention.

Eye Exposure:

In case of the internal battery materials in contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

Oral Exposure:

If swallowed the internal battery materials, do not induce vomiting. Seek immediate medical attention.

5. Fire Fighting Measures

Extinguishing Media:

Suitable: Dry chemical, Carbon dioxide and appropriate foam

Firefighting:

Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Specific hazards: Emit toxic fumes under fire conditions.

Specific Hazards:

The leaking electrolyte may corrosive. Under the conditions of short-circuited, charged, overdischarged, punctured, crushed, and exposed on the temperature higher than that specified by manufacturer, the battery may burn or explode.

6. Accidental Release Measures

Procedure of Personal Precaution:

Exercise appropriate precautions to minimize direct contact with skin and eyes.

Methods for Cleaning up:

In case of internal materials leak, mix with inert material (e. g. dry sand, vermiculite) and transfer to a dry, clean, lidded container for disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete. Avoid directly release the cleaning waste water into the environment.



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7. Handling and Storage

Handling:

Wear appropriate protective clothing and safety gloves. Avoid contact and inhalation of the internal materials. Keep away from ignition sources, heat and flame. No smoking at working site.

Incompatibilities: Strong oxidizing agents, corrosives and foods.

If it is not intended to do, do not short-circuit, charge, overdischarge, puncture and crush the battery. Do not expose the battery to a temperature higher than that specified by the manufacturer.

Storage:

Store in a cool, dry, and well-ventilated area. Keep away from ignition sources, heat and flame. Store in a tightly closed container.

Incompatibilities: Strong oxidizing agents, corrosives and foods.

Such batteries must be packed in inner packaging in such a manner as to effectively prevent short circuits and to prevent movement which could lead to short circuits.

8. Exposure Control / PPE

Engineering Controls:

Use ventilation equipment if available. Safety shower and eye bath.

Personal Protective Equipment:

Respiratory: Government approved respirator if needed.

Eye: Chemical safety goggles if needed.

Clothing: Wear appropriate protective clothing.

Hand: Protective gloves.

Other Protection:

No smoking, drinking and eating at working site. Wash thoroughly after handling.



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9. Physical / Chemical Properties

Appearance: Multicolor plastic film shell

Odor: Odorless

Melting Point/°C: >300°C

Solubility: Partial soluble in water

10. Stability and Reactivity

Stability:

Stable under normal temperatures and pressures.

Conditions to Avoid:

Avoid exposure to heat and open flame. Do not puncture. Prevent short circuits.

Prevent movement which could lead to short circuits. Do not attempt to recharge this battery.

Materials to Avoid:

Strong oxidizing agents, corrosives.

Hazardous Polymerization:

Will not occur.

Hazardous Decomposition Products:

When exposed to extreme heat/fire batteries may rupture leaking corrosive material and/or emit toxic fumes. Burning batteries may emit toxic fumes of zinc oxide and manganese oxide.

11. Toxicological Information

Toxicity Data:

No data available.

Irritation Data:

The internal battery materials may cause irritation to eyes and skin.

12. Ecological Information

No data available.

13. Disposal Consideration

Appropriate Method of Disposal of Substance:

Dispose of in accordance with all applicable federal, state and local regulations.



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14. Transport Information

IATA DGR (61th Edition): Not restricted to IATA DGR according to special provision A123.

IMO IMDG Code (2018 Edition): Not subject to IMO IMDG Code.

15. Regulatory Information

Manganese Dioxide Battery is unregulated for purpose of transportation by U.S. Department of Transportation (DOT), International Civil Aviation Administration (ICAA), International Air Transport Association (IATA) and the International Maritime Dangerous Goods regulations (IMDG). The requirements for shipping these batteries, in all modes of transportation, are that they be separated from each other to prevent short-circuits and to prevent movement that could lead to short-circuits. Products must also be packed in strong packaging that can withstand the rigors normal to transportation.

16. Other Information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. We make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigation to determine the suitability of the information for their particular purposes.

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