

## 1 Identification

### Product identifier

Trade name: 9004=03 - MyGait Heel Switch

### Recommended use and restrictions on use

General use: Lithium batteries for orthopedic procedures  
For commercial user only.

### Initial supplier identifier

Company name: Otto Bock HealthCare Canada Ltd.

Street/POB-No.: 5470 Harvester Road

Postal code, city: Burlington, ON L7L 5N5, CA  
Canada

WWW: [www.ottobock.ca](http://www.ottobock.ca)

Email: [info.canada@ottobock.com](mailto:info.canada@ottobock.com)

Telephone: (800) 665-3327

Telefax: (800) 463-3659

Department responsible for information:

Mark Agro, Telephone: (800) 665-3327 (9 am - 5 pm)

Additional information:

Corporate headquarters:  
Ottobock SE & Co. KGaA  
Max-Näder-Straße 15  
Duderstadt  
Germany

### Emergency telephone number

**COLLECT, Telephone: (613) 996-6666**

**Transport:**

**CONSULTANK Lutz Harder GmbH (Contract QUALI003)**

**Telephone: +49 (0)178-4337434 (from USA: 01149 178 4337434)**

## 2 Hazard identification

### Classification

Article not subject to hazard labelling or classification.

### Information elements

not applicable

### Other hazards known to the supplier with respect to the product

In case of ingestion: risk of suffocation!

The battery is hermetically sealed.

danger of releasing ingredients, mentioned in section 3, by damaging the battery

- with strong mechanical action,
- in case of heating and/or Fire,
- with influence of water,
- short circuit.

Hazard statements:

Harmful if swallowed. Harmful if inhaled. Causes severe skin burns and eye damage.

## 3 Composition/Information on ingredients

### Mixture

Chemical name: Lithium batteries - Article, Cell.  
The chemical materials are stored in a hermetically sealed metal case.  
Contains Electrolyte, organic.

Hazardous ingredients:

CAS No.	Designation	Content	Classification
CAS 1313-13-9	Manganese dioxide	< 50 %	Acute Toxicity 4 (oral). Acute Toxicity 4 (inhalative).
CAS -	Electrolyte, organic	< 12 %	not classified
CAS 7439-93-2	Lithium	< 10 %	Water-reactive 1. Skin Corrosion 1B.
CAS 110-71-4	1,2-Dimethoxyethane	< 4 %	Flammable Liquid 2. Acute Toxicity 4 (inhalative). Reproductive toxicity 1B.
CAS 7791-03-9	Lithium perchlorate	< 1 %	Acute Toxicity 4 (oral). Skin Irritation 2. Eye Irritation 2A. Specific Target Organ Toxicity (Single Exposure) 3.

The actual concentration or concentration range is withheld as a trade secret.

## 4 First-aid measures

### Description of necessary first-aid measures

General information: in case of damaged battery cases: Release of dangerous ingredients possible.  
Generates dangerous gases or fumes in contact with.

In case of inhalation: in case of damaged battery cases:  
Provide fresh air. Keep victim at rest in half upright position. Seek medical attention.

In case of swallowing: in case of damaged battery cases / In case of exposure to hazardous ingredients:  
Drink large quantities of water.  
Do not induce vomiting. Risk of perforation in case of vomiting!  
Immediately get medical attention. Do not try to neutralize.

In case of skin contact: in case of damaged battery cases / In case of exposure to hazardous ingredients:  
Clean with plenty of water. If possible, also wash with polyethylene glycol 400.  
Take off immediately all contaminated clothing.

In case of eye contact: in case of damaged battery cases / In case of exposure to hazardous ingredients: Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Afterwards, consult an ophthalmologist immediately.

### Most important symptoms and effects, whether acute or delayed

No hazardous reaction when handled and stored according to provisions.  
In case of ingestion: Risk of suffocation (Cell)!  
in case of damaged battery cases: health hazards. Causes severe skin burns and eye damage.

### Indication of immediate medical attention and special treatment needed, if necessary

Treat symptomatically.

## 5 Fire-fighting measures

### Suitable and unsuitable extinguishing media

Suitable extinguishing media:

Extinguishing powder, Extinguishing agent on the basis of sodium chloride, sodium hydrogen carbonate, limestone, or with metal extinguishing powder.

Unsuitable extinguishing media:

Water, carbon dioxide, foam

### Specific hazards arising from the product

> 100 °C: Cell may explode.  
In case of fire may be liberated: hydrogen fluoride, Chlorine compounds, carbon monoxide and carbon dioxide.

### Special protective equipment and precautions for fire-fighters

Wear a self-contained breathing apparatus and chemical protective clothing.

## 6 Accidental release measures

### Personal precautions, protective equipment and emergency procedures

in case of damaged battery cases:  
Remove all sources of ignition.  
Provide fresh air. Avoid contact with skin and eyes.  
Wear suitable gloves.  
In case of development of vapours or dust:  
Do not inhale vapours or dust particles.

Environmental precautions:

Discharge into the environment must be avoided.

### Methods and material for containment and cleaning up

Take up mechanically. Dispose of waste according to applicable legislation.  
Avoid generation of dust.  
Electrolyte, organic: Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents) and place in closed containers for disposal. Final cleaning.

## 7 Handling and storage

### Precautions for safe handling

Advices on safe handling: Provide adequate ventilation, and local exhaust as needed.

Avoid damage to the battery casing.

in case of damaged battery cases: Avoid exposure.

Precautions against fire and explosion:

Avoid short circuit. Avoid damage to the battery casing.

Provide fire extinguishing equipment.

### Conditions for safe storage, including any incompatibilities

Requirements for storerooms and containers:

Provide adequate ventilation. Store in a dry place.

Protect from: humidity, heat, UV-radiation/sunlight

Storage temperature: < 35 °C

Hints on joint storage: Avoid contact with water, acids, alcohols, halogenic hydrocarbons and halogens.

## 8 Exposure controls/Personal protection

### Control parameters

Occupational exposure limit values:

CAS No.	Designation	Type	Limit value
1313-13-9	Manganese dioxide	Canada: Québec, VEMP	0.05 mg/m <sup>3</sup> (Aerosol, respirable fraction)
		Canada: Québec, VEMP	0.2 mg/m <sup>3</sup> (Aerosol, inhalable fraction)
110-71-4	1,2-Dimethoxyethane	Canada: Ontario, OEL TWA	18 mg/m <sup>3</sup> ; 5 ppm (may be absorbed through the skin)

Additional information: The chemical materials are stored in a sealed battery case.

### Appropriate engineering controls

In case of damaged battery cases: Provide adequate ventilation.

In case of development of vapours or dust:

The use of local exhaust ventilation is recommended.

### Individual protection measures, such as personal protective equipment

Respiratory protection: In case of damaged battery cases:  
If necessary: When vapours form combination filter Use filter type A, B, K according to OSHA Standard - 29 CFR: 1910.134 or ANSI Z88.2.

Hand protection: In case of damaged battery cases:  
Protective gloves according to OSHA Standard - 29 CFR: 1910.138.  
Glove material: rubber - breakthrough time >480 min.  
Observe glove manufacturer's instructions concerning penetrability and breakthrough time.

Eye protection: In case of damaged battery cases:  
Tightly sealed goggles according to OSHA Standard - 29 CFR: 1910.133 or ANSI Z87.1-2010

### General hygiene considerations:

Avoid damage to the battery casing.  
In case of damaged battery cases:  
Do not inhale vapours or dust particles.  
Avoid contact with skin and eyes.

### Environmental exposure controls

Refer to 6.: Section "Environmental precautions".

## 9 Physical and chemical properties

### Information on basic physical and chemical properties

Physical state at 20 °C and 101.3 kPa	Form: solid
Colour:	No data available
Odour:	odourless
Odour threshold:	No data available
Melting point and freezing point:	No data available
Boiling point or initial boiling point and boiling range:	No data available
Flammability:	No data available
Lower and upper explosion limit or lower and upper flammability limit:	No data available
Flash point/flash point range:	No data available
Evaporation rate:	No data available
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
pH:	No data available
Solubility:	No data available
Partition coefficient — n-octanol/water:	No data available
Vapour pressure:	No data available
Density and/or relative density	No data available
Vapour density:	No data available
Particle characteristics:	Not applicable

### Additional information

Additional information:	No data available
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## 10 Stability and reactivity

Reactivity:	> 100 °C: Cell may explode.
Chemical stability:	Stable under recommended storage conditions. Not readily combustible.

### Possibility of hazardous reactions:

Fire hazard in case of technical defects.

In case of damaged battery cases:

Lithium: Reacts violently with water liberating hydrogen.

Without inert protective gas risk of spontaneous ignition.

Lithium perchlorate: Contact with combustible material may cause fire.

### Conditions to avoid:

Protect from: humidity, heat, UV-radiation/sunlight

Avoid short circuit. Avoid damage to the battery casing.

### Incompatible materials:

in case of damaged battery cases:

Avoid contact with water, acids, alcohols, halogenic hydrocarbons, nitrogen, carbon dioxide, oxygen and halogens.

Lithium perchlorate: Contact with combustible material may cause fire.

### Hazardous decomposition products:

In case of fire may be liberated: hydrogen fluoride, Chlorine compounds, carbon monoxide and carbon dioxide.

## 11 Toxicological information

### Information on the likely routes of exposure

No data available

### Health hazard information

Acute toxicity (oral): Lack of data.

Acute toxicity (dermal): Lack of data.

Acute toxicity (inhalative): Lack of data.

Skin corrosion/irritation: Lack of data.

Serious eye damage/irritation: Lack of data.

Sensitisation to the respiratory tract: Lack of data.

Skin sensitisation: Lack of data.

Germ cell mutagenicity/Genotoxicity: Lack of data.

Carcinogenicity: Lack of data.

Reproductive toxicity: Lack of data.

Effects on or via lactation: Lack of data.

Specific target organ toxicity (single exposure): Lack of data.

Specific target organ toxicity (repeated exposure): Lack of data.

Aspiration hazard: Lack of data.

### Other information:

Cell: risk of suffocation!

In case of damaged battery cases:

Harmful if swallowed. Harmful if inhaled. Causes severe skin burns and eye damage. vapours irritate eyes, mucous membranes and respiratory system.

## 12 Ecological information

### Ecotoxicity

#### Further details:

No data available

### Persistence and degradability

Further details: Product is not biodegradable.

### Bioaccumulative potential

Partition coefficient — n-octanol/water:

No data available

### Mobility in soil

No data available

### Other adverse effects

General information: Discharge into the environment must be avoided.

## 13 Disposal considerations

### Waste treatment methods

#### Product

Recommendation: Dispose of waste according to applicable legislation.

#### Package

Recommendation: Dispose of waste according to applicable legislation.  
Packing can be recycled or disposed of.

## 14 Transport information

### UN number

TDG: UN3091

IMDG, IATA-DGR: UN 3091

### UN proper shipping name

TDG, IMDG, IATA-DGR: UN 3091, LITHIUM METAL BATTERIES CONTAINED IN EQUIPMENT

### Transport hazard class

TDG: 9

IMDG: Class 9, Subrisk -

IATA-DGR: Class 9



### Packing group

TDG, IATA-DGR: not applicable

IMDG: -

### Environmental hazards

Marine pollutant: no

### Special precautions in connection with transport or conveyance either within or outside the premises

#### Canada: Transportation of Dangerous Goods (TDG)

Special Provisions: 34, 123, 137, 138, 1

Explosive limit and limited quantity index: 0

Passenger carrying road or rail index: 5 kg

#### Sea transport (IMDG)

EmS: F-A, S-I

Special Provisions: 188 230 310 360 376 377 384 387 390

Limited quantities: 0

Excepted quantities: E0

Package - Instructions: P903, P908, P909, P910, P911, LP903, LP904, LP905, LP906

Package - Provisions: -

IBC - Instructions: -

IBC - Provisions: -

Tank instructions - IMO: -

Tank instructions - UN: -

Tank instructions - Provisions: -

Stowage and handling: Category A. SW19

Properties and observations: Electrical batteries containing lithium metal may react (e.g., flame, heat, emission of toxic, corrosive or flammable gases or vapours) or disassemble due to damage, defects or short circuit.

Marine pollutant: no

Segregation group: none

Remarks: In compliance with Special provision 188

#### Air transport (IATA)

Proper shipping name: UN 3091, LITHIUM METAL BATTERIES CONTAINED IN EQUIPMENT

Hazard label: Lithium batt or Sodium-ion batt

Excepted Quantity Code: E0

Passenger and Cargo Aircraft: Ltd.Qty.: Forbidden

Passenger and Cargo Aircraft: Pack.Instr. 970 - Max. Net Qty/Pkg. 5 kg

Cargo Aircraft only: Pack.Instr. 970 - Max. Net Qty/Pkg. 35 kg

Special Provisions: A48 A88 A99 A154 A181 A185 A213 A220

Emergency Response Guide-Code (ERG): 12FZ

Remarks: In compliance with Special provision

## 15 Regulatory information

#### National regulations - Canada

Manganese dioxide: DSL: listed

Lithium: DSL: listed

1,2-Dimethoxyethane: DSL: listed

Lithium perchlorate: DSL: listed

#### Further regulations, limitations and legal requirements

No data available



### 16 Other information

Revision date: 1/1/2026

Date of first version: 17/2/2016

Reason of change: Changes in section 14: IATA-DGR 2026

Abbreviations and acronyms:

Acute Toxicity: Acute toxicity  
 AS/NZS: Australian Standards/New Zealand Standards  
 CAS: Chemical Abstracts Service  
 CFR: Code of Federal Regulations  
 CLP: Classification, Labelling and Packaging  
 DMEL: Derived minimal effect level  
 DNEL: Derived no-effect level  
 DSL: Domestic Substances List  
 EC: European Community  
 EmS: Emergency Response Procedures for Ships Carrying Dangerous Goods  
 EN: European Standard  
 EQ: Excepted quantities  
 Eye Irritation: Eye irritation  
 Flammable Liquid: Flammable liquid  
 IATA: International Air Transport Association  
 IATA-DGR: International Air Transport Association – Dangerous Goods Regulations  
 IBC Code: International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk  
 IMDG Code: International Maritime Dangerous Goods Code  
 IMO: International Maritime Organization  
 MARPOL: Maritime Pollution: The International Convention for the Prevention of Pollution from Ships  
 OSHA: Occupational Safety and Health Administration  
 PBT: Persistent, bioaccumulative and toxic  
 PNEC: Predicted no-effect concentration  
 REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals  
 Reproductive toxicity: Reproductive toxicity  
 Skin Corrosion: Skin corrosion  
 Skin Irritation: Skin irritation  
 STOT SE: Specific target organ toxicity - single exposure  
 SVHC: Substance of very high concern  
 TDG: Transportation of Dangerous Goods Regulation in Canada  
 TRGS: Technical Rules for Hazardous Substances  
 TSCA: Toxic Substance Control Act  
 UN: United Nations  
 UV: Ultraviolet  
 vPvB: Very persistent and very bioaccumulative  
 Water-reactive: Water-reactive

### Department issuing data sheet

Contact person: see section 1: Department responsible for information

The information in this data sheet has been established to our best knowledge and was up-to-date at time of revision. It does not represent a guarantee for the properties of the product described in terms of the legal warranty regulations.