

## 1 Identification

### Product identifier

Trade name: 757B15 - X-ChangePack

### Recommended use and restrictions on use

General use: Electrical batteries and accumulators

### 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

The battery is hermetically sealed. Avoid short circuit. Avoid damage to the battery casing.

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.

May be corrosive to metals.

Harmful if swallowed or if inhaled.

Causes severe skin burns and eye damage.

May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.

Suspected of causing genetic defects. May cause cancer. May damage fertility or the unborn child.

Causes damage to organs through prolonged or repeated exposure.

Very toxic to aquatic life with long lasting effects.

## 3 Composition/Information on ingredients

### Mixture

Chemical name:

Article: Batteries, nickel-metal hydride.

The chemical materials are stored in a hermetically sealed metal case.

Contains metals: Nickel, Iron, Lanthanum, Cerium, Neodymium, Praseodymium, Cobalt, Manganese, Zinc, Aluminium

Contains plastics: Polyamide, Polypropylene, Polyvinyl chloride, Polyethylene, Rubber

Electrolyte: Potassium hydroxide, Sodium hydroxide, Lithium hydroxide, Water

Hazardous ingredients:

CAS No.	Designation	Content	Classification
CAS 7440-02-0	Nickel	30 - 50 %	Sensitization - skin 1. Carcinogenicity 2. Specific Target Organ Toxicity (Repeated Exposure) 1. Aquatic toxicity - chronic 3.
CAS 12054-48-7	Nickel dihydroxide	30 - 50 %	Acute Toxicity 4 (oral). Acute Toxicity 4 (inhalative). Skin Irritation 2. Respiratory Sensitizer 1. Sensitization - skin 1. Germ cell mutagenicity 2. Carcinogenicity 1A. Reproductive toxicity 1B. Specific Target Organ Toxicity (Repeated Exposure) 1. Aquatic toxicity - acute 1. Aquatic toxicity - chronic 1.
CAS 1313-99-1	Nickel monoxide	30 - 50 %	Sensitization - skin 1. Carcinogenicity 1A. Specific Target Organ Toxicity (Repeated Exposure) 1. Aquatic toxicity - chronic 4.
CAS 1310-58-3	Potassium hydroxide	< 7 %	Corrosive to Metals 1. Acute Toxicity 4 (oral). Skin Corrosion 1A.
CAS 7440-48-4	Cobalt	2 - 6 %	Acute Toxicity 4 (oral). Acute Toxicity 1 (inhalative). Eye Irritation 2A. Respiratory Sensitizer 1. Sensitization - skin 1. Carcinogenicity 1B. Reproductive toxicity 2. Aquatic toxicity - acute 1 (M-factor = 10). Aquatic toxicity - chronic 1.
CAS 1310-73-2	Sodium hydroxide	0 - 4 %	Corrosive to Metals 1. Skin Corrosion 1A.
CAS 1310-65-2	Lithium hydroxide	0 - 4 %	Acute Toxicity 4 (oral). Skin Corrosion 1A.

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

Additional information: The maximum workplace exposure limits are, where necessary, listed in section 8.

## 4 First-aid measures

### Description of necessary first-aid measures

General information:	In case of damaged battery cases / In case of exposure to hazardous ingredients: Take off immediately all contaminated clothing. First aider: Pay attention to self-protection!
In case of inhalation:	Provide fresh air. Keep victim at rest in half upright position. If breathing has stopped, give artificial respiration immediately. Seek medical attention.
In case of swallowing:	Rinse mouth with water. Drink large quantities of water. Never give anything by mouth to an unconscious person. Do not induce vomiting. Do not try to neutralize. Immediately get medical attention.
In case of skin contact:	Immediately clean with water and soap and, if available, apply a generous amount of polyethylene glycol 400 or protective skin cream. Wash contaminated clothing before reuse. Subsequently consult physician.

In case of eye contact: Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart.  
Remove contact lenses, if present and easy to do. Continue rinsing.  
Seek the attention of an ophthalmologist immediately.

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

The battery is hermetically sealed. No hazardous reaction when handled and stored according to provisions.

In case of damaged battery cases / In case of exposure to hazardous ingredients:

Harmful if swallowed or if inhaled.

Causes severe skin burns and eye damage.

May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.

Suspected of causing genetic defects. May cause cancer. May damage fertility or the unborn child.

Causes damage to organs through prolonged or repeated exposure.

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

Treat symptomatically. Symptoms of poisoning may develop several hours following exposure. Victim should be under medical observation for at least 48 hours after exposure.

## 5 Fire-fighting measures

### Suitable and unsuitable extinguishing media

Suitable extinguishing media:

Dry extinguishing powder

Unsuitable extinguishing media:

Water

### Specific hazards arising from the product

In case of fire may be liberated: toxic gases/vapours (metal oxide smoke), corrosive gases/vapours, carbon monoxide and carbon dioxide.

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

Wear self-contained positive pressure breathing apparatus and full firefighting protective clothing.

Additional information:

Exposure to fire may cause containers to rupture/explode.

Cool endangered containers with water spray and, if possible, remove from danger zone.

Do not allow fire water to penetrate into surface or ground water.

## 6 Accidental release measures

### Personal precautions, protective equipment and emergency procedures

Avoid exposure. Provide adequate ventilation. Eliminate all ignition sources if safe to do so.

In case of damaged battery cases:

Wear appropriate protective equipment. Take off contaminated clothing and wash it before reuse. Keep unprotected people away.

Avoid generation of dust. Do not inhale vapours or dust particles. Avoid contact with skin and eyes.

Avoid contact with liquid and vapour.

### Environmental precautions:

Product contains heavy metals. Discharge into the environment must be avoided. Special pre-treatment is necessary. If necessary, notify appropriate authorities.

### Methods and material for containment and cleaning up

In case of damaged battery cases:

Plug leak if safely possible.

Soak up with absorbent materials such as sand, siliceus earth, acid- or universal binder.

Store in special closed containers and dispose of according to ordinance.

### Additional information:

Avoid short circuit.

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.

## 7 Handling and storage

### Precautions for safe handling

Advices on safe handling: Provide adequate ventilation, and local exhaust as needed. Avoid contact with skin and eyes.

In case of damaged battery cases: Avoid exposure.

Avoid generation of dust. Wear appropriate protective equipment. Take off contaminated clothing and wash it before reuse.

### Precautions against fire and explosion:

Avoid short circuit. Eliminate all ignition sources if safe to do so.

### Conditions for safe storage, including any incompatibilities

#### Requirements for storerooms and containers:

Keep container tightly closed and dry. Store at room temperature.

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

Storage temperature: 5 °C up to 25 °C

Air humidity: 60% up to 70%

#### Hints on joint storage:

Do not store together with strong acids, strong oxidizing agents, alkalis, conductive material(s).

Keep away from food, drink and animal feedingstuffs.

#### Further details:

Avoid damage to the battery casing.

Charging temperature: 0 °C up to 45 °C

Discharging temperature: -20 °C up to 60 °C

### 8 Exposure controls/Personal protection

#### Control parameters

Occupational exposure limit values:

CAS No.	Designation	Type	Limit value
7440-02-0	Nickel	Canada: Alberta, OEL 8 hour	1.5 mg/m <sup>3</sup> (metal)
		Canada: BC, OEL TWA	0.05 mg/m <sup>3</sup> (compounds, insoluble)
		Canada: BC, OEL TWA	0.05 mg/m <sup>3</sup> (compounds, soluble)
		Canada: Ontario, OEL TWA	1 mg/m <sup>3</sup> (metal, inhalable fraction)
		Canada: Québec, VEMP	1.5 mg/m <sup>3</sup> (inhalable fraction)
1310-58-3	Potassium hydroxide	Canada: Alberta, OEL Ceiling	2 mg/m <sup>3</sup>
		Canada: BC, OEL Ceiling	2 mg/m <sup>3</sup>
		Canada: Québec, Plafond	2 mg/m <sup>3</sup>
7440-48-4	Cobalt	Canada: Alberta, OEL 8 hour	0.02 mg/m <sup>3</sup>
		Canada: BC, OEL TWA	0.02 mg/m <sup>3</sup>
			(Cobalt and compounds, inorganic; inhalable fraction)
		Canada: Québec, VEMP	0.02 mg/m <sup>3</sup> (Aerosol, inhalable fraction)
1310-73-2	Sodium hydroxide	Canada: Alberta, OEL Ceiling	2 mg/m <sup>3</sup>
		Canada: BC, OEL Ceiling	2 mg/m <sup>3</sup>
		Canada: Québec, Plafond	2 mg/m <sup>3</sup>
1310-65-2	Lithium hydroxide	Canada: BC, OEL Ceiling	1 mg/m <sup>3</sup>
		Canada: Ontario, OEL STEL	1 mg/m <sup>3</sup>
7439-96-5	Manganese	Canada: BC, OEL TWA	0.02 mg/m <sup>3</sup> (respirable fraction)
		Canada: BC, OEL TWA	0.1 mg/m <sup>3</sup> (inhalable fraction)
		Canada: Ontario, OEL TWA	0.2 mg/m <sup>3</sup>
7429-90-5	Aluminium	Canada: Alberta, OEL 8 hour	10 mg/m <sup>3</sup> (metal, dust)
		Canada: Alberta, OEL 8 hour	5 mg/m <sup>3</sup>
			(Aluminium powder, pyrotechnic)
		Canada: BC, OEL TWA	1 mg/m <sup>3</sup> (Pyrotechnical powders)
9002-86-2	PVC	Canada: BC, OEL TWA	1 mg/m <sup>3</sup>

Biological limit values:

CAS No.	Designation	Type	Limit value	Parameter	Sampling
7440-02-0	Nickel	USA: ACGIH-BEI, urine	30 µg/L	Nickel after exposure to soluble compounds	end of shift at end of work week
		USA: ACGIH-BEI, urine	5 µg/L	Nickel after exposure to elemental Nickel and poorly soluble compounds	end of shift at end of work week
7440-48-4	Cobalt	USA: ACGIH-BEI, urine	15 µg/L	Cobalt; not combined with Tungsten Carbide	end of shift at end of work week

Additional information: The battery is hermetically sealed.

### Appropriate engineering controls

In case of damaged battery cases: Provide adequate ventilation.  
The use of local exhaust ventilation is recommended.

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

Respiratory protection:	In case of damaged battery cases: For short or minimal exposure: respiratory filter; in cases of longer exposure: supplied air respirator. The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used.
Hand protection:	In case of damaged battery cases: Protective gloves according to OSHA Standard - 29 CFR: 1910.138. Glove material: nitrile rubber or neoprene. 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.
Body protection:	In case of damaged battery cases: Wear appropriate protective equipment.
General hygiene considerations:	Keep away from sources of ignition - No smoking. Avoid contact with skin and eyes. Take off immediately all contaminated clothing. Safety shower and eye wash station should be easily accessible to the work area. When using do not eat or drink. Wash hands before breaks and after work. Keep away from food, drink and animal feedingstuffs.  In case of damaged battery cases: Do not inhale vapours or dust particles. Avoid contact with the product.

### 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	solid Form: Cells: 5 (plastic casing)
Colour:	beige
Odour:	No data available
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:	Not applicable
Evaporation rate:	No data available

Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
pH:	Not applicable
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:	No data available

### Additional information

Additional information: Weight: approx. 80 g

## 10 Stability and reactivity

Reactivity:	In case of damaged battery cases: May be corrosive to metals.
Chemical stability:	Stable under recommended storage conditions.
Possibility of hazardous reactions:	Fire hazard in case of technical defects. In case of damaged battery cases: Information about Potassium hydroxide and Sodium hydroxide: Reacts with metals and light metals. Formation of hydrogen. Danger of explosion!
Conditions to avoid:	Humidity, heat, UV-radiation/sunlight. Avoid short circuit. In case of damaged battery cases: Keep away from sources of ignition - No smoking.
Incompatible materials:	Strong acids, strong oxidizing agents, alkalis, conductive material(s).



## 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:

In case of damaged battery cases:

Harmful if swallowed or if inhaled.

Causes severe skin burns and eye damage.

May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.

Suspected of causing genetic defects. May cause cancer. May damage fertility or the unborn child.

Causes damage to organs through prolonged or repeated exposure.

## 12 Ecological information

### Ecotoxicity

Aquatic toxicity:

In case of damaged battery cases:

Very toxic to aquatic life with long lasting effects.

### Persistence and degradability

Further details:

No data available

### Bioaccumulative potential

Partition coefficient — n-octanol/water:

No data available

### Mobility in soil

No data available

## Other adverse effects

General information: Product contains heavy metals. Discharge into the environment must be avoided. Special pre-treatment is necessary.  
Avoid spills and leaks. Very small amounts contaminates drinking water.

## 13 Disposal considerations

### Waste treatment methods

#### Product

Recommendation: Product contains metallic oxides containing heavy metals.  
Recycling or special waste incineration.

#### Package

Recommendation: Dispose of waste according to applicable legislation.

## 14 Transport information

### UN number

TDG: UN3496  
IMDG, IATA-DGR: UN 3496

### UN proper shipping name

TDG: UN 3496, Batteries, nickel-metal hydride  
IMDG, IATA-DGR: UN 3496, BATTERIES, NICKEL-METAL HYDRIDE

### 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: 97  
Explosive limit and limited quantity index: 0

### Sea transport (IMDG)

EmS:	F-A, S-I
Special Provisions:	117 963
Limited quantities:	0
Excepted quantities:	E0
Package - Instructions:	See SP963
Package - Provisions:	-
IBC - Instructions:	IBC08
IBC - Provisions:	-
Tank instructions - IMO:	-
Tank instructions - UN:	-
Tank instructions - Provisions:	-
Stowage and handling:	Category A. SW1
Properties and observations:	Nickel-metal hydride cells or batteries packed with or contained in equipment and nickel-metal hydride button cells are not subject to provisions of this code.
Marine pollutant:	no
Segregation group:	none

### Air transport (IATA)

Proper shipping name:	UN 3496, BATTERIES, NICKEL-METAL HYDRIDE
Passenger and Cargo Aircraft: Ltd.Qty.:	Forbidden
Passenger and Cargo Aircraft:	Pack.Instr. SeeA199 - Max. Net Qty/Pkg. SeeA199
Cargo Aircraft only:	Pack.Instr. SeeA199 - Max. Net Qty/Pkg. SeeA199
Special Provisions:	A199
Emergency Response Guide-Code (ERG):	9L

## 15 Regulatory information

### National regulations - Canada

Nickel:	DSL: listed
Nickel dihydroxide:	DSL: listed
Nickel monoxide:	DSL: listed
Iron:	DSL: listed
Lanthanum:	DSL: listed
Cerium:	DSL: listed
Water:	DSL: listed
Potassium hydroxide:	DSL: listed
Cobalt:	DSL: listed
Sodium hydroxide:	DSL: listed
Lithium hydroxide:	DSL: listed
Polypropylene:	DSL: listed
Manganese:	DSL: listed
PVC:	DSL: listed
Polyethylene:	DSL: listed
EPDM:	DSL: listed

### Further regulations, limitations and legal requirements

No data available

## 16 Other information

Revision date: 2/3/2026

Date of first version: 17/1/2017

Reason of change: Changes in section 8: Biological Limit Value

Abbreviations and acronyms:

Acute Toxicity: Acute toxicity  
 Aquatic toxicity - acute: Hazardous to the aquatic environment - acute  
 Aquatic toxicity - chronic: Hazardous to the aquatic environment - chronic  
 AS/NZS: Australian Standards/New Zealand Standards  
 Carcinogenicity: Carcinogenicity  
 CAS: Chemical Abstracts Service  
 CFR: Code of Federal Regulations  
 CLP: Classification, Labelling and Packaging  
 Corrosive to Metals: Corrosive to metals  
 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  
 Germ cell mutagenicity: Mutagenicity  
 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  
 M-factor: Multiplication factor  
 OSHA: Occupational Safety and Health Administration  
 PBT: Persistent, bioaccumulative and toxic  
 PNEC: Predicted no-effect concentration  
 Reproductive toxicity: Reproductive toxicity  
 Respiratory Sensitizer: Sensitisation to the respiratory tract  
 Sensitization - skin: Skin sensitisation  
 Skin Corrosion: Skin corrosion  
 Skin Irritation: Skin irritation  
 STOT RE: Specific target organ toxicity - repeated exposure  
 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

### 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.