

Section 1. Identification of the material and the supplier

Product: **Li-ion Battery (J7065)**
 Model: BT-47
 Rating: 3.6V 3250mAh 11.7Wh

ANZ Distributor:	Getinge Australia	Getinge Australia (NZ Branch)
Address	11 Help Street Level 7, Suite 701 Chatswood NSW 2067 AUS	600 Great South Road Building B, Level 2 Ellerslie, Auckland, 1051 NZ
Telephone	1800 438 464	0800 1 438 4643

Emergency Telephone: AUS +61 2 8014 4558
 NZ +64 9 929 1483 or 0800 764 766 (National Poison Centre)

Date of SDS Preparation: 13 June 2023

Section 2. Hazards Identification

This substance is NOT hazardous according to the EPA Hazardous Substances (Classification) Notice 2020 - This product is considered as a Manufactured Article.

Section 3. Composition / Information on Ingredients

Battery Cell:

MATERIAL OR INGREDIENTS	Content (wt %)	CAS #
Cobalt Oxide	less than 30wt%	1307-96-6
Manganese dioxide	less than 30wt%	1313-13-9
Nickel oxide	less than 30wt%	1313-99-1
Carbon	less than 30wt%	7440-44-0
Electrolyte(*)	less than 20wt%	NA
Polyvinylidene fluoride(PVDF)	less than 10wt%	24937-79-9
Aluminum foil	2 wt%~10%wt%	7429-90-5
Copper foil	2 wt%~10%wt%	7440-50-8
Aluminum and inert materials	5 wt%~10%wt%	NA
Lead(Pb)*	less than 0.01wt%(100ppm)	7439-92-1
Mercury(Hg) *	less than 0.0001wt%(1ppm)	7439-97-6
Cadmium(Cd) *	less than 0.001wt%(10ppm)	7440-43-9

*Banned or restricted material

Circuit Module:

HAZARDOUS INGREDIENTS	%/wt	CAS #
Lead	<0.1	7439-92-1
Mercury	0	7439-97-6
Chromium	0	7440-47-3
Cadmium	0	7440-43-9
Plastic case and Si2O	0	N/A

Plastic Parts and Paints:

HAZARDOUS INGREDIENTS	%/wt	CAS #
Polycarbonate	More than 81	103598-77-2
Flame Retardant	Less than 12 wt%	N/A
Elastomer	Less than 7 wt%	N/A

Section 4. First Aid Measures

If exposure to internal materials within cell(pack) due to damaged outer casing, the Following actions are recommended.

If in Eyes Rinse eyes with water for 15 minutes and seek medical attention.

If on Skin Wash area thoroughly with soap and water and seek medical attention.

If Swallowed If swallowed, obtain medical attention immediately. Drink milk/water and induce vomiting; seek medical attention.

If Inhaled Leave area immediately and seek medical attention.

Most important symptoms and effects, both acute and delayed

Symptoms: No effect under routine handling and use.

Section 5. Fire Fighting Measures

Hazard Type	Cell is not flammable but internal organic material will burn if the cell is incinerated.
Hazards from products	Combustion products include, but are not limited to hydrogen fluoride, carbon monoxide and carbon dioxide.
Suitable Extinguishing media	Use extinguishing media suitable for the materials that are burning.
Precautions for firefighters and special protective clothing	Use NIOSH/MSHA approved full-face self-contained breathing apparatus (SCBA) with full protective gear. If possible, remove cell(s) from firefighting area. If heated above 125°C, cell(s) can explode/vent.
HAZCHEM CODE	None allocated

Section 6. Accidental Release Measures

Wear protective equipment as detailed in Section 8.

Place material into suitable containers for disposal as per Section 13.

Section 7. Handling and Storage

Precautions for Handling:

- No special protective clothing required for handling individual cells.

Precautions for Storage:

- Store in a cool dry place.

Section 8 Exposure Controls / Personal Protection

WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

Substance	TWA		STEL	
	ppm	mg/m ³	ppm	mg/m ³

No ingredients have exposure limits

Workplace Exposure Standard – Time Weighted Average (WES-TWA). The time-weighted average exposure standard designed to protect the worker from the effects of long-term exposure. Workplace Exposure Standard – Short-Term Exposure Limit (WESSTEL). The 15-minute average exposure standard. Applies to any 15- Minute period in the working day and is designed to protect the worker against adverse effects of irritation, chronic or irreversible tissue change, or narcosis that may increase the likelihood of accidents. The WES-STEL is not an alternative to the WES-TWA; both the short-term and time-weighted average exposures apply. Workplace Exposure Standards and Biological Exposure Indices APRIL 2022 13TH EDITION.

Engineering Controls

Keep away from heat and open flame. Store in a cool dry place.

Personal Protection Equipment:

Eyes	Not required.
Hands	Not required for handling of cells.
Skin	Steel toed shoes recommended for large container handling.
Respiratory	Not required during normal operations. SCBA required in the event of a fire.

Section 9 Physical and Chemical Properties

Appearance	Solid
Colour	Not available
Odour	Not available
Odour Threshold	Not available
pH (typical)	Not available
Boiling Point	Not available
Melting Point	Not available
Freezing Point	Not available
Flash Point	Not available
Flammability	Not available
Upper and Lower Explosive Limits	Not available
Vapour Pressure	Not available
Vapour Density	Not available
Relative Gas Density	Not available
Water Solubility	Insoluble
Partition Coefficient:	Not available
Auto-ignition Temperature	Not available
Viscosity	Not available
Particle Characteristics	Not available

Section 10. Stability and Reactivity

Product Name: **Li-ion Battery**
Date of SDS: 13 June 2023

SDS Prepared by: Technical Compliance Consultants (NZ) Ltd
Tel: 64 9 475 5240 www.techcomp.co.nz

Stability of Substance	This product is stable under normal conditions.
Possibility of hazardous reactions	None known.
Conditions to Avoid	Avoid exposure to heat, open flame, and corrosives. Do not puncture, crush or incinerate.
Incompatible Materials	None during normal operation.
Hazardous Decomposition Products	None during normal operating conditions. If cells are opened, hydrogen fluoride and carbon monoxide may be released.

Section 11 Toxicological Information

Acute Effects:

Swallowed	Does not contain any ingredients classified as acutely toxic.
Dermal	Does not contain any ingredients classified as acutely toxic.
Inhalation	Does not contain any ingredients classified as acutely toxic.
Eye	Does not contain any ingredients classified as an eye irritant/corrosive.
Skin	Does not contain any ingredients classified as a skin irritant/corrosive.

Chronic Effects:

Carcinogenicity	Does not contain any ingredients classified as carcinogenic.
Reproductive Toxicity	Does not contain any ingredients classified as toxic for reproduction.
Germ Cell Mutagenicity	Does not contain any ingredients classified as mutagenic.
Aspiration	Does not contain any ingredients classified as Asp Tox.
STOT/SE	Does not contain any ingredients classified as STOT SE.
STOT/RE	Does not contain any ingredients classified as STOT RE.

Section 12. Ecotoxicological Information

Not classified as dangerous for the environment. The batteries do not contain mercury, cadmium or other heavy metals.

Section 13. Disposal Considerations

Disposal Method:

Dispose by incineration or burial at permitted waste treatment and/or disposal sites.

Disposal methods to avoid: None known.

Section 14 Transport Information

This product is NOT classified as a Dangerous Good for transport in NZ ; NZS 5433:2020 and SNZ HB 5433:2021

Section 15 Regulatory Information

This substance is NOT hazardous according to the EPA Hazardous Substances (Classification) Notice 2020 - This product is considered as a Manufactured Article.

Section 16 Other Information

Glossary

EC ₅₀	Median effective concentration.
EEL	Environmental Exposure Limit.
EPA	Environmental Protection Authority

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HSNO	Hazardous Substances and New Organisms.
HSW	Health and Safety at Work.
LC ₅₀	Lethal concentration that will kill 50% of the test organisms inhaling or ingesting it.
LD ₅₀	Lethal dose to kill 50% of test animals/organisms.
LEL	Lower explosive level.
OSHA	American Occupational Safety and Health Administration.
TEL	Tolerable Exposure Limit.
TLV	Threshold Limit Value-an exposure limit set by responsible authority.
UEL	Upper Explosive Level
WES	Workplace Exposure Limit

References:

1. EPA Hazardous Substances (Safety Data Sheets) Notice 2017
2. Workplace Exposure Standards and Biological Exposure Indices April 2022 edition.
3. Assigning a hazardous substance to a HSNO Approval (Aug 2013).
4. Transport of Dangerous goods on land NZS 5433:2020
5. HSW (Hazardous Substances) Regulations 2017

Disclaimer

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Please contact the New Zealand distributor, if further information is required.

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