

Material Safety Data Sheet

Section 1 Identification

Product information

BAK Lithium-Ion prismatic battery

BAK Lithium-Ion prismatic product: C775004180L

Norminal Voltage: 3.7V

Watt-hour Rating: 6.66Wh

Manufacturer: Shenzhen BAK battery Co., Ltd

Address: BAK Industry Park, Kuichong, Dapeng District, Shenzhen, Guangdong Province, China

Telephone: +86-755-61886818

Section 2 Hazards Identification

Classification

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200) This product

is an article which is a sealed battery and as such does not require an MSDS per the OSHA hazard communication standard


unless ruptured. The hazards indicated are for a ruptured battery.

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
Skin sensitization	Category 1
Carcinogenicity	Category 1A

Specific target organ toxicity (repeated exposure) Category 1

GHS Label elements, including precautionary statements

Emergency Overview

Signal word	Danger	
Hazard Statements Causes skin irritation Causes serious eye irritation May cause an allergic skin reaction May cause cancer		
<p>This product is an article which contains a chemical substance. Safety information is given for exposure to the article as sold. Intended use of the product should not result in exposure to the chemical substance This is a battery. In case of rupture: the above hazards exist.</p>		
Appearance Gray	Physical State Solid	Odor Odorless

Precautionary Statements - Prevention

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Use personal protective equipment as required

Wash face, hands and any exposed skin thoroughly after handling

Contaminated work clothing should not be allowed out of the workplace

Wear protective gloves

Do not breathe dust/fume/gas/mist/vapors/spray

Do not eat, drink or smoke when using this product

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention

Specific treatment (see supplemental first aid instructions on this label)

Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing

If eye irritation persists: Get medical advice/attention

Skin

IF ON SKIN: Wash with plenty of soap and water

Take off contaminated clothing and wash before reuse

If skin irritation or rash occurs: Get medical advice/attention

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Not applicable

Signal word Danger

Hazard Statements

Causes skin irritation

Causes serious eye irritation

May cause an allergic skin reaction

May cause cancer

This product is an article which contains a chemical substance. Safety information is given for exposure to the article as sold.

Intended use of the product should not result in exposure to the chemical substance This is a battery. In case of rupture: the

above hazards exist.

Appearance Gray

Physical State Solid **Odor** Odorless

Unknown Toxicity

23.2822% of the mixture consists of ingredient(s) of unknown toxicity

Other information

Very toxic to aquatic life with long lasting effects

Repeated or prolonged skin contact may cause allergic reactions with susceptible persons

Interactions with Other Chemicals

No information available.

Section 3 Composition/Information on Ingredients

INGREDIENTS	CAS No.	Weight
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		Percentage/% (about)
Chopped continuous strand fiberglass(>5 microns in diameter)	65997-17-3	0.2
Silver	7440-22-4	0.0005
Quartz	14808-60-7	0.08
Barium sulfate	7727-43-7	0.08
Chromium oxide greens	1308-38-9	0.1
Phenol,4,4`-(1-methylethylidene)bis[2,6-dibromo-,polymer with(chloromethyl)oxirane] and 4,4`-(1-methylethylidene)bis[phenol]	26265-08-7	0.3
PVC(Chloroethylene,polymer)	9002-86-2	0.023
ABS resin	9003-56-9	0.004
Polycarbonate	25037-45-0	0.87
Silica,fused	60676-86-0	0.03
Bismuth	7440-69-9	0.0000034
Tin	7440-31-5	0.12
Phosphorus	7723-14-0	0.00003
Zinc	7440-66-6	0.00006
Chromium	7440-47-3	0.00003
Arsenic	7440-38-2	0.0000012
Boron	7440-42-8	0.0000012
Gold	7440-57-5	0.00023
Nickel ammonium sulfate	15699-18-0	0.0005
Dimethyl carbonate	616-38-6	1.8
Carbonate,methyl ethyl	623-53-0	3.8
Diethyl carbonate	105-58-8	1.2
Ethylene carbonate	96-49-1	1.9
Phosphate(1-),hexafluoro-,lithium	21324-40-3	3.8
Polytetrafluoroethylene	9002-84-0	0.3
Manganese	7439-96-5	0.13
Lron	7439-89-6	1
Polymethyl acrylate	9003-21-8	0.41
Polypropylene	9003-07-0	9.2
Nickel	7440-02-0	1.76
Silicon	7440-21-3	0.1
2,5-Furandione,polymer with 2-methyl-1-propene,ethyl ester,reaction product with N,N-dimethyl-1,3-propanediamine and polyethylene-polypropylene glycol 2-aminopropyl Me ether	497926-97-3	0.25
Copper	7440-50-8	7.1
Aluminum	7429-90-5	16.6

Styrene-Butadiene polymer	9003-55-8	0.35
Sodium carboxymethyl cellulose	9004-32-4	0.7
1,1-Difluoroethylene polymer	24937-79-9	0.53
Ci77266	1333-86-4	15.66
Lithium Cobalt Oxide(CoLiO2)	12190-79-3	33

Section 4 First-aid Measures

First aid measures

General Advice First aid is upon rupture of sealed battery.

Eye Contact If symptoms persist, call a physician. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing.

Remove contact lenses, if present and easy to do. Continue rinsing. Do not rub affected area.

Skin Contact Wash off immediately with soap and plenty of water for at least 15 minutes. In the case of skin irritation or allergic reactions see a physician. May cause an allergic skin reaction.

Inhalation Remove to fresh air. If symptoms persist, call a physician. Get medical attention immediately if symptoms occur.

Ingestion Do NOT induce vomiting. Rinse mouth immediately and drink plenty of water.

Never give anything by mouth to an unconscious person. Call a physician.

Self-protection of the first aider Avoid contact with skin, eyes or clothing. Use personal protective equipment as

required. Wear personal protective clothing (see section 8).

Most important symptoms and effects, both acute and delayed

Most Important Symptoms and

Effects

Itching. Coughing and/ or wheezing.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically. May cause sensitization of susceptible persons.

Section 5 Fire-fighting Measures

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media

CAUTION: Use of water spray when fighting fire may be inefficient.

Specific Hazards Arising from the Chemical

Product is or contains a sensitizer. May cause sensitization by skin contact.

Hazardous Combustion Products

Carbon oxides.

Explosion Data

Sensitivity to Mechanical Impact No.

Sensitivity to Static Discharge No.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

Section 6 Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Personal Precautions Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas.

Other Information Refer to protective measures listed in Sections 7 and 8.

Environmental Precautions

Refer to protective measures listed in Sections 7 and 8. Prevent further leakage or spillage if safe to do so.

Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up

Pick up and transfer to properly labeled containers.

Section 7 Handling and Storage

Precautions for safe handling

Handling In case of rupture. Use personal protection equipment. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Do not breathe dust/fume/gas/mist/vapors/spray.

Conditions for safe storage, including any incompatibilities

Storage Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible Products Strong acids. Strong oxidizing agents. Strong bases.

Section 8 Exposure Controls/Personal Protection

Control parameters

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Lithium Cobalt Oxide (CoLiO ₂) 12190-79-3	TWA: 0.02 mg/m ³	-	
Graphite 7782-42-5	TWA: 2 mg/m ³ respirable fraction all forms except graphite fibers	TWA: 15 mg/m ³ total dust synthetic TWA: 5 mg/m ³ respirable fraction synthetic (vacated) TWA: 2.5 mg/m ³ respirable dust natural (vacated) TWA: 10 mg/m ³ total dust synthetic (vacated) TWA: 5 mg/m ³ respirable fraction synthetic TWA: 15 mppcf natural	IDLH: 1250 mg/m ³ TWA: 2.5 mg/m ³ respirable dust
Nickel 7440-02-0	TWA: 1.5 mg/m ³	TWA: 1 mg/m ³ (vacated) TWA: 1 mg/m ³	IDLH: 10 mg/m ³ TWA: 0.015 mg/m ³
Copper 7440-50-8	TWA: 0.2 mg/m ³ fume TWA: 1 mg/m ³ Cu dust and mist	TWA: 0.1 mg/m ³ fume TWA: 1 mg/m ³ dust and mist (vacated) TWA: 0.1 mg/m ³ Cu dust, fume, mist	IDLH: 100 mg/m ³ dust, fume and mist TWA: 1 mg/m ³ dust and mist TWA: 0.1 mg/m ³ fume
Aluminum 7429-90-5	TWA: 1 mg/m ³ respirable fraction	TWA: 15 mg/m ³ total dust TWA: 5 mg/m ³ respirable fraction (vacated) TWA: 15 mg/m ³ total dust (vacated) TWA: 5 mg/m ³ respirable fraction (vacated) TWA: 5 mg/m ³ Al Aluminum	TWA: 10 mg/m ³ total dust TWA: 5 mg/m ³ respirable dust
Phosphate(1-), hexafluoro-, lithium 21324-40-3	TWA: 2.5 mg/m ³ F	TWA: 2.5 mg/m ³ F TWA: 2.5 mg/m ³ dust (vacated) TWA: 2.5 mg/m ³	
Carbon black 1333-86-4	TWA: 3 mg/m ³ inhalable fraction	TWA: 3.5 mg/m ³ (vacated) TWA: 3.5 mg/m ³	IDLH: 1750 mg/m ³ TWA: 3.5 mg/m ³ TWA: 0.1 mg/m ³ Carbon black in presence of Polycyclic aromatic hydrocarbons PAH

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value OSHA PEL: Occupational Safety and Health

Administration - Permissible Exposure Limits NIOSH IDLH Immediately Dangerous to Life or Health

Other Exposure Guidelines Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962

(11th Cir., 1992) See section 15 for national exposure control parameters

Appropriate engineering controls

Engineering Measures Showers

Eyewash stations

Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/Face Protection If splashes are likely to occur: Wear safety glasses with side shields (or goggles). None required for consumer use.

Skin and Body Protection Wear protective gloves and protective clothing. Long sleeved clothing. Impervious gloves.

Respiratory Protection No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse.

Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection.

Wash hands before breaks and immediately after handling the product.

Section 9 Physical and Chemical Properties

Physical and Chemical Properties

Physical State Solid

Explosive properties No data available

Oxidizing Properties No data available

Other Information

Softening Point No data available

VOC Content (%) No data available

Particle Size No data available

Particle Size Distribution

Appearance Gray **Odor** Odorless

Color No information available **Odor Threshold** No information available

Property Values Remarks/ Method

pH No data available None known

Melting / freezing point No data available None known

Boiling point / boiling range No data available None known

Flash Point No data available None known

Evaporation Rate No data available None known

Flammability (solid, gas) No data available None known

Flammability Limit in Air

Upper flammability limit No data available

Lower flammability limit No data available

Vapor pressure No data available None known

Vapor density No data available None known

Specific Gravity No data available None known

Water Solubility Insoluble in water None known

Solubility in other solvents No data available None known

Partition coefficient: n-octanol/water 0.00001 None known

Autoignition temperature No data available None known

Decomposition temperature No data available None known

Kinematic viscosity No data available None known

Dynamic viscosity

0.00001 None known

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Section 10 Stability and Reactivity

Reactivity

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous Polymerization

Hazardous polymerization does not occur.

Conditions to avoid

None known based on information supplied.

Incompatible materials

Strong acids. Strong oxidizing agents. Strong bases.

No data available.

Hazardous Decomposition Products

Carbon oxides.

Section 11 Toxicological Information

Product Information Product does not present an acute toxicity hazard based on known or supplied information.

In case of rupture:.

Inhalation Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract.

Eye Contact Specific test data for the substance or mixture is not available. Expected to be an irritant based on components. Irritating to eyes. May cause redness, itching, and pain. May cause temporary eye irritation.

Skin Contact Specific test data for the substance or mixture is not available. Expected to be an irritant based on components. Irritating to skin. Prolonged contact may cause redness and irritation.

Ingestion Specific test data for the substance or mixture is not available. Ingestion may cause irritation to mucous membranes. Ingestion may cause gastrointestinal irritation, nausea,

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Graphite 7782-42-5	> 10000 mg/kg (Rat)	-	-
Iron 7439-89-6	= 984 mg/kg (Rat)	-	-
Nickel 7440-02-0	> 9000 mg/kg (Rat)	-	-
Carbon black 1333-86-4	> 15400 mg/kg (Rat)	> 3 g/kg (Rabbit)	-

Chemical Name Oral LD50 Dermal LD50 Inhalation LC50

Chemical Name Oral LD50 Dermal LD50 Inhalation LC50

Graphite7782-42-5 > 10000 mg/kg (Rat)

Iron7439-89-6 = 984 mg/kg (Rat)

Nickel7440-02-0 > 9000 mg/kg (Rat)

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Carbon black1333-86-4 > 15400 mg/kg (Rat) > 3 g/kg (Rabbit)

Information on toxicological effects

Symptoms Erythema (skin redness). May cause redness and tearing of the eyes. Itching. Rashes. Hives.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization May cause sensitization of susceptible persons. May cause sensitization by skin contact.

Mutagenic Effects No information available.

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
Lithium Cobalt Oxide (CoLiO ₂) 12190-79-3	A3	Group 2B		X
Nickel 7440-02-0		Group 1 Group 2B	Reasonably Anticipated	X
Carbon black 1333-86-4	A3	Group 2B		X

A CGIH (American Conference of Governmental Industrial Hygienists)

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

Group 2B - Possibly Carcinogenic to Humans

NTP (National Toxicology Program)

Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

Reproductive Toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure Causes damage to organs through prolonged or repeated exposure. Based on classification criteria from the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200), this product has been determined to cause systemic target organ toxicity from chronic or repeated exposure. (STOT RE).

Chronic Toxicity Contains a known or suspected carcinogen. Avoid repeated exposure. Prolonged exposure may cause chronic effects. May cause adverse liver effects. Carbon black has been classified by the International Agency for Research on Cancer (IARC) as possibly carcinogenic to humans (Group 2B) by inhalation.

Target Organ Effects Respiratory system. Eyes. Skin. Gastrointestinal tract (GI). Central Vascular System (CVS).

Kidney. Liver. Lungs. Nasal cavities.

Aspiration Hazard No information available.

Numerical measures of toxicity Product Information

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral)

6,080.00 mg/kg

ATEmix (dermal)

14,648.00 mg/kg (ATE)

ATEmix (inhalation-dust/mist)

1,898.00 mg/l

Section 12 Ecological Information

Ecotoxicity

Very toxic to aquatic life with long lasting effects.

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Iron 7439-89-6		96h LC50: = 13.6 mg/L (Morone saxatilis)		
Nickel 7440-02-0	72h EC50: = 0.18 mg/L (Pseudokirchneriella subcapitata) 96h EC50: 0.174 - 0.311 mg/L (Pseudokirchneriella subcapitata)	96h LC50: > 100 mg/L (Brachydanio rerio) 96h LC50: = 1.3 mg/L (Cyprinus carpio) 96h LC50: = 10.4 mg/L (Cyprinus carpio)		48h EC50: > 100 mg/L 48h EC50: = 1 mg/L
Copper 7440-50-8	96h EC50: 0.031 - 0.054 mg/L (Pseudokirchneriella subcapitata) 72h EC50: 0.0426 - 0.0535 mg/L (Pseudokirchneriella subcapitata)	96h LC50: 0.0068 - 0.0156 mg/L (Pimephales promelas) 96h LC50: = 0.112 mg/L (Poecilia reticulata) 96h LC50: = 0.3 mg/L (Cyprinus carpio) 96h LC50: = 0.8 mg/L (Cyprinus carpio) 96h LC50: = 1.25 mg/L (Lepomis macrochirus) 96h LC50: = 0.052 mg/L (Oncorhynchus mykiss) 96h LC50: = 0.2 mg/L (Pimephales promelas) 96h LC50: < 0.3 mg/L (Pimephales promelas)		48h EC50: = 0.03 mg/L
Carbon black 1333-86-4				24h EC50: > 5600 mg/L

Persistence and Degradability

No information available.

Bioaccumulation

No information available

Other adverse effects

No information available.

Section 13 Disposal Considerations

Waste treatment methods

Disposal methods Should not be released into the environment.

Contaminated Packaging Dispose of in accordance with federal, state and local regulations.

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Nickel 7440-02-0	(hazardous constituent - no waste number)	Included in waste streams: F006, F039		

California Hazardous Waste Codes 141

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste
Lithium Cobalt Oxide (CoLiO ₂) 12190-79-3	Toxic
Nickel 7440-02-0	Toxic powder Ignitable powder
Copper 7440-50-8	Toxic
Aluminum 7429-90-5	Ignitable powder

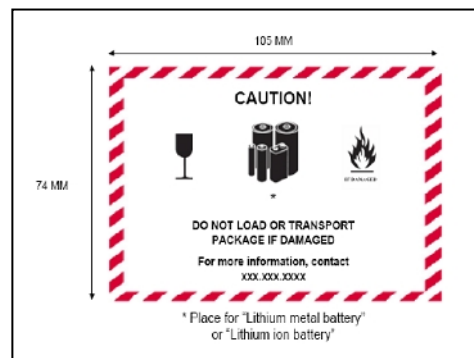
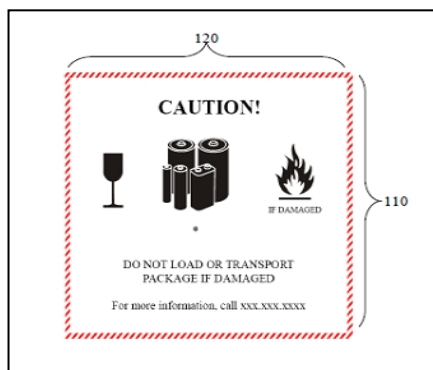
Section 14 Transport Information

For the international transport of lithium batteries, they must comply with these regulations: the International Maritime Dangerous Goods (IMDG) Code by International Maritime Organization (IMO), Dangerous Goods Regulations (DGR) by International Air Transport Association (IATA) and Technical Instructions for the Safe Transport of Dangerous Goods by Air (TI) by International Civil Aviation Organization (ICAO). These regulations are based on the UN Recommendations on the Transport of Dangerous Goods, Manual of Tests and Criteria.

Lithium batteries which meet the requirements of UN38.3 (UN Manual of Tests and Criteria, Part III, subsection 38.3) could be transported by air and by sea. If the package meets the packing instruction of IATA-DGR, could be transported as ordinary goods, otherwise should be transported according to Class 9, Packing Group 1 hazardous goods.

According to UN classification: However this product's shipping name is "lithium ion batteries"(or "Lithium ion Batteries packed with equipment" or "Lithium ion Batteries contained in equipment"), it is not recognized as "DANGEROUS GOODS" when its transport condition accords with "packing instruction 965 section II of IATA-DGR"(or "Packing instruction 966 section II" or "Packing instruction 967 section II") or "special provision 188 of IMO-IMDG Code", it could be transported as ordinary goods.

1. For lithium ion batteries, UN ID number is 3480. For lithium ion batteries contained in equipment or lithium ion batteries packed with equipment, UN ID number is 3481.
2. The consignment should be fully described by proper shipping name and packed, marked and in proper condition for carriage by air. The consignment is not classified as dangerous under the current edition of the IATA 56th Effective 01 January 2015, Dangerous goods regulation and all applicable carrier and government regulations.
3. For transported by air, Lithium-ion Cells/Batteries shipped as "Not Restricted" Cargo: Must comply with Part II of PI965-PI967 accordingly; For cells, the Watt-hour rating should not be more than 20Wh; For batteries, the Watt-hour rating should not be more than 100Wh. Watt- hour rating must be marked on the outside of the battery case (marked by manufacturer).
4. Each consignment must be accompanied with a document with an indication that: The package contains lithium ion cells or batteries; The package must be handled with care and that a flammability hazard exists if the package is damaged; Special procedures must be followed in the event the package is damaged, to include inspection and repacking if necessary; The telephone number for additional information for BAK cells/batteries is 86-755-61886818. Each package must be labeled with a lithium battery handling label, the label dimensions is 120mm×110mm, where the packages are of dimensions such that they can only bear smaller labels, the label dimensions may be 74mm×105mm. The design specifications are the same as below figures:



5. For very small cells and batteries, the packages should be satisfied:

Gross weight should be marked in each package.

For 2.7Wh or less cells and batteries, the limit quantity per package shall not exceed 2.5 kg. For 2.7Wh to 20Wh cells, the limit quantity per package shall not exceed 8pcs. For 2.7Wh to 100Wh batteries, the limit quantity per package shall not exceed 2pcs.

For lithium ion batteries contained in equipment or lithium ion batteries packed with equipment, the

battery limit quantity per package shall not exceed 5kg.

PI965-II	Cells and batteries $\leq 2.7\text{Wh}$	$2.7\text{Wh} < \text{cell} \leq 20\text{Wh}$	$2.7\text{Wh} < \text{battery} \leq 100\text{Wh}$
Max numbers/package	No limit	8 cells	2 batteries
Max net weight/package	2.5KG	N/A	N/A

6. Each package must be capable of withstanding a 1.2m drop test in any orientation without damage of cells or batteries contained therein.
7. Lithium batteries which meet the requirements of A154 could be transported by air, and the batteries manufactured by BAK meet these requirements. (A154 Lithium batteries identified by the manufacturer as being defective for safety reasons, or that have been damaged, that have the potential of producing a dangerous evolution of heat, fire or short circuit are forbidden for transport.)
8. Cells and batteries must be protected so as to prevent short circuits. This includes protection against contact with conductive materials within the same packaging that could lead to short circuit.
9. Transport condition should accord with "special provision 188 of IMO-IMDG Code".

Section 15 Regulatory Information

International Inventories

TSCA Complies

DSL All components are listed either on the DSL or NDSL.

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical

or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	CAS No	Weight-%	SARA 313 - Threshold Values %
Lithium Cobalt Oxide (CoLiO ₂) - 12190-79-3	12190-79-3	15 - 40	0.1
Nickel - 7440-02-0	7440-02-0	5 - 10	0.1
Copper - 7440-50-8	7440-50-8	5 - 10	1.0
Aluminum - 7429-90-5	7429-90-5	1 - 5	1.0

SARA 311/312 Hazard Categories

Acute Health Hazard No

Chronic Health Hazard No

Fire Hazard No

Sudden release of pressure hazard No

Reactive Hazard No

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Nickel 7440-02-0		X	X	
Copper 7440-50-8		X	X	

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive

Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
Nickel 7440-02-0	100 lb		RQ 100 lb final RQ RQ 45.4 kg final RQ
Copper 7440-50-8	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals.

Chemical Name	California Proposition 65
Nickel - 7440-02-0	Carcinogen
Carbon black - 1333-86-4	Carcinogen

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania	Rhode Island	Illinois
Lithium Cobalt Oxide (CoLiO2) 12190-79-3	X		X	X	X
Graphite 7782-42-5	X	X	X		
Nickel 7440-02-0	X	X	X	X	X
Copper 7440-50-8	X	X	X	X	X
Dimethyl carbonate 616-38-6	X	X	X		
Aluminum 7429-90-5	X	X	X	X	
Silicon 7440-21-3	X	X	X		
Carbon black 1333-86-4	X	X	X		X

International Regulations

Mexico

National occupational exposure limits

Component	Carcinogen Status	Exposure Limits
Graphite 7782-42-5 (10 - 30)		Mexico: TWVA= 2 mg/m ³
Nickel 7440-02-0 (5 - 10)		Mexico: TWVA 1 mg/m ³
Copper 7440-50-8 (5 - 10)		Mexico: TWVA= 1 mg/m ³ Mexico: TWVA= 0.2 mg/m ³ Mexico: STEL= 2 mg/m ³
Aluminum 7429-90-5 (1 - 5)		Mexico: TWVA= 10 mg/m ³
Carbon black 1333-86-4 (0.1 - 1)		Mexico: TWA 3.5 mg/m ³ Mexico: STEL 7 mg/m ³

Mexico - Occupational Exposure Limits - Carcinogens

Canada

WHMIS Hazard Class

Non-controlled

Section 16 Other Information

This information is not effective to all the batteries manufactured by BAK. This information comes from reliable sources, but no warranty is made to the completeness and accuracy of information contained. BAK doesn't assume responsibility for any damage or loss because of misuse of batteries. Users should grasp the correct use method and be responsible for the use of batteries.