SAFETY DATA SHEET

(GB / UK version)

According to UK REACH (Regulation (EC) No 1907/2006 as retained and amended by the REACH etc. (Amendment etc.) (EU Exit) Regulations 2019), Annex II, & GB CLP (Regulation (EC) No 1272/2008 as retained)

Section 1 — Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Sample Name:Rechargeable Lithium-ion Battery

Sample Code:5AT3S3(Cell model: NCR18650BD)

Rating:3.6 V, 5960 mAh, 21.456 Wh

Trade Name:RING

1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses:Rechargeable power source for electronic equipment

Uses advised against:N/A

1.3 Details of the supplier of the safety data sheet

Manufacturer:DONGGUAN KAYO BATTERY CO.,LTD

GB / UK supplier (importer / authorised representative):Thames Distribution Ltd. 8 Horseshoe Park, Reading, RG8 7JW.

1.4 Emergency telephone number

24-hour emergency contact:0118 976 7130

Section 2 — Hazards identification

2.1 Classification of the substance or mixture (according to GB CLP, Regulation (EC) No 1272/2008 as retained):

- Carcinogenicity — Category 2
- Reproductive Toxicity — Category 1A
- Specific Target Organ Toxicity (Single Exposure) — Category 1
- Specific Target Organ Toxicity (Repeated Exposure) — Category 1
- Hazardous to the Aquatic Environment, Long-term (Chronic) — Category 2

2.2 Label elements

Signal word:Danger

Hazard statements:H351 Suspected of causing cancer; H360 May damage fertility or the unborn child; H370 Causes damage to organs; H372 Causes damage to organs through prolonged or repeated exposure; H411 Toxic to aquatic life with long lasting effects

Precautionary statements:P203, P280, P260, P264, P270, P273, P318, P308+P316, P321, P319, P391, P405, P501

2.3 Other hazards

Product does not contain ingredients meeting PBT or vPvB criteria per UK REACH Annex XIII. UFI / Poison Centre Notification (PCN) is an EU Annex VIII requirement and is NOT currently mandatory under GB — no UFI required for this GB version.

Section 3 — Composition/information on ingredients

General chemical description: the product is a mixture.

Chemical Name	CAS No.	EC No.	Weight %
Cobalt lithium Manganese nickel oxide	182442-95-1	--	35.05
Graphite	7782-42-5	231-955-3	15.98
Carbon black	1333-86-4	215-609-9	0.79
Polychloroprene rubber	69028-37-1	--	10.36
Styrene butadiene rubber	61789-96-6	612-382-1	0.71
Polypropylene	9003-07-0	618-352-4	1.74
Lithium hexafluorophosphate	21324-40-3	244-334-7	1.27
Ethylene carbonate (EC)	96-49-1	202-510-0	6.34
Diethyl carbonate (DEC)	105-58-8	203-311-1	4.76
Propylene carbonate (PC)	108-32-7	203-572-1	1.11
Copper	7440-50-8	231-159-6	8.39
Polyethylene	9002-88-4	618-339-3	1.27
Aluminium	7429-90-5	626-020-5	11.12
Polycaprolactam	25038-54-4	607-506-6	1.11

Section 4 — First aid measures

Inhalation:Remove victim to fresh air; administer artificial respiration if breathing is difficult; seek medical attention.

Skin contact:Remove contaminated clothing/shoes; wash with water and soap and rinse thoroughly; if irritation occurs, get medical attention.

Eye contact:Flush eyes with plenty of water for several minutes while holding eyelids open; get medical attention if irritation persists.

Ingestion:Do not induce vomiting; get medical attention.

Most important symptoms:See Section 11. Treat symptomatically and supportively.

Section 5 — Firefighting measures

Suitable extinguishing media:Small fire: dry chemical, CO_2, water spray or regular foam. Large fire: water spray, fog or regular foam.

Special hazards:Battery may burst and release hazardous decomposition products in a fire. Flammable electrolyte may vent, ignite and produce sparks at high temperature (>150 °C), or when damaged/abused; may burn rapidly. Combustion may produce irritating, corrosive and/or toxic gases.

Advice for firefighters:Wear positive-pressure self-contained breathing apparatus (SCBA).

Section 6 — Accidental release measures

Personal precautions:Eliminate all ignition sources; do not touch or walk through spilled material; absorb with earth, sand or other non-combustible material; place leaking batteries and contaminated absorbent in metal containers. Isolate spill area ≥25 m; large spill consider downwind evacuation ≥100 m.

Environmental precautions:Prevent entry into waterways, sewers, basements or confined areas.

Containment/cleaning:Use clean non-sparking tools to collect absorbed material.

Section 7 — Handling and storage

Safe handling:Provide training on health effects and handling. Avoid contact with eyes/skin/clothing; avoid ingestion and inhalation; ensure good local exhaust ventilation; keep away from ignition/heat sources.

Safe storage:Store in a cool, dry, well-ventilated area away from incompatible substances, foods and beverages; keep away from heat, sparks and flame; keep containers tightly sealed; avoid physical damage.

Section 8 — Exposure controls/personal protection

8.1 Control parameters — Workplace Exposure Limits (EH40/2005, HSE)

Substance (CAS No.)	EH40/2005 WEL (8-hr TWA)
Cobalt & compounds — as Co (from Cobalt lithium Manganese nickel oxide, 182442-95-1)	0.02 mg/m^3
Carbon black (1333-86-4)	3.5 mg/m^3 (inhalable)
Copper — as Cu (7440-50-8)	fume 0.2 mg/m^3; dust & mist 1 mg/m^3
Aluminium metal (7429-90-5)	10 mg/m^3 inhalable / 4 mg/m^3 respirable
Graphite (7782-42-5)	**2 mg/m^3 F**
Phosphate(1-), hexafluoro-, lithium(21324-40-3)	2.5 mg/m^3 F

(Dimethyl / Ethyl methyl / Ethylene / Diethyl / Propylene carbonate,Graphite,PVDF-HFP,SBR,Lithium hexafluorophosphate)— No WEL assigned under EH40/2005.

DNEL / PNEC

Substance (CAS No.)	DNEL	PNEC
Cobalt & compounds — as Co (from Cobalt lithium Manganese nickel oxide, 182442-95-1)	0.05mg/m^3	0.05 mg/L
Carbon black (1333-86-4)	2 mg/m^3	5 mg/L
Copper — as Cu (7440-50-8)	137 mg/kg bw/day	7.8 µg/L
Aluminium metal (7429-90-5)	Not applicable	0.0749 mg/L
Graphite (7782-42-5)	0.01 mg/m^3	1 mg/L
Phosphate(1-), hexafluoro-, lithium(21324-40-3)	0.931 mg/m^3	0.31 mg/L
Ethylene carbonate (EC)(96-49-1)	**15 mg/m^3**	**5.9 mg/L**
Diethyl carbonate (105-58-8)	69.79 mg/m^3	0.1 mg/L
Propylene carbonate (PC) (108-32-7)	17.4 mg/m^3	7.2 mg/L
Nickel & compounds — as Ni (from Cobalt lithium Manganese nickel oxide, 182442-95-1)	0.1 mg/m^3	1 ng/L

*Values for General Population

8.2 Exposure controls

Engineering controls:Adequate general or local exhaust ventilation; ground all handling equipment; provide eyewash and safety shower.

Eye/face protection:Appropriate safety spectacles when required.

Skin protection:Appropriate gloves and protective clothing when required.

Section 9 — Physical and chemical properties

9.1 Basic physical and chemical properties: physical state / colour / odour / melting point / boiling point / flammability / explosion limits / flash point / auto-ignition / decomposition temperature / pH / viscosity / solubility / partition coefficient / vapour pressure / density / particle characteristics — No data available (solid article).

9.2 Other information:Voltage 3.6 V; Electric capacity 5960 mAh; Electric energy 21.456 Wh

Section 10 — Stability and reactivity

Reactivity / hazardous reactions:No data available

Chemical stability:Stable

Conditions to avoid:Flames, sparks and other ignition sources; incompatible materials

Incompatible materials:Oxidising agents, acids, bases

Hazardous decomposition products:Carbon monoxide, carbon dioxide, lithium oxide fumes

Section 11 — Toxicological information

Acute toxicity, skin/eye irritation, sensitisation, mutagenicity, repeated-dose toxicity, carcinogenicity, aspiration hazard, and potential health effects (eye/skin/ingestion/inhalation): No data available. Note the mixture classification in Section 2 (Carc. 2 / Repr. 1A / STOT SE 1 / STOT RE 1).

Section 12 — Ecological information

Toxicity, persistence/degradability, bioaccumulative potential, mobility in soil, PBT/vPvB results and other adverse effects: No data available. Classified Aquatic Chronic 2 (H411).

Section 13 — Disposal considerations

Waste treatment methods:Determine hazardous-waste classification before disposal. Dispose via a licensed waste disposal contractor in accordance with UK / regional waste regulations. Contaminated packaging treated equivalent to residual chemical.

Section 14 — Transport information

UN number:UN3480 (IATA / IMDG/ADR)

Proper shipping name:Lithium ion batteries

Transport hazard class:9 (IATA / IMDG/ADR)

Packing group:N/A

Environmental hazards (marine pollutant):No; IMDG EmS F-A, S-I

Additional:The rechargeable Li-ion battery has passed UN 38.3. IATA DGR PI965 Section IB (cargo aircraft only). SoC ≤30% of rated capacity by air. Not restricted as per ADR/CDG Special Provision 188. Not restricted as per IMDG Code Special Provision 188 and can be shipped as non-dangerous goods.

Section 15 — Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture (GB / UK):

- UK REACH — Regulation (EC) No 1907/2006 as retained and amended by the REACH etc. (Amendment etc.) (EU Exit) Regulations 2019
- GB CLP — Regulation (EC) No 1272/2008 as retained (as amended for GB)
- GB Mandatory Classification List (GB MCL)
- EH40/2005 Workplace Exposure Limits (HSE)
- UK waste legislation (e.g. Waste (England and Wales) Regulations; Hazardous Waste Regulations) and applicable UK transport of dangerous goods legislation (CDG Regulations)

15.2 Chemical safety assessment:No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

Section 16 — Other information

SDS version:GB / UK version (localised from EU (EU) 2020/878 version, Issue Date 2026-08-26)

Issued by:DONGGUAN KAYO BATTERY CO.,LTD

Issue date (GB version):2026/09/30

Hazard statement full text: H351 / H360 / H370 / H372 / H411 (see Section 2).

Abbreviations: WEL Workplace Exposure Limit; TWA Time-Weighted Average; DNEL Derived No-Effect Level; PNEC Predicted No-Effect Concentration; UK REACH / GB CLP as defined above; UN 38.3 UN Manual of Tests and Criteria, Part III, sub-section 38.3.

Notice to reader: To the best of our knowledge the information herein is accurate; no liability is assumed for its accuracy or completeness. Final determination of suitability of any material is the sole responsibility of the user.