

Safety Data Sheet

Report No. 20260806011	
Version number 1.0	Issue Date 06-Aug-2026
Product name: ABP1820TD5 Lithium Battery pack	Revision date N/A

According to UK REACH Regulation (EC) No 1907/2006 as amended (Annex II) and GB CLP Regulation (SI 2019/720 as amended)

Product name	ABP1820TD5 Lithium Battery pack
Reference No.	20260806011
Version number:	1.0
Issue date:	06-Aug-2026
Revision date:	N/A
Supersedes:	N/A

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1.	
Product identifier:	
Product name:	ABP1820TD5 Lithium Battery pack
Brand :	ROKTOR
Battery pack model:	ABP1820TD5
Cell model:	ICR18650-2000 (TENPOWER)
Nominal voltage:	18V(20V MAX)
Capacity:	2.0Ah
Watt-hour rating:	36Wh
Weight of battery pack:	399g
Note: This product is an article as defined in Article 3(3) of UK REACH. A formal Safety Data Sheet under Article 31 is not legally required. This document is provided voluntarily for information, safe handling and transport purposes.	
1.2 Relevant identified uses of the substance or mixture and uses advised against	
Relevant identified uses: Rechargeable power source for cordless hand drills / portable power tools.	
Uses advised against: Do not open, disassemble, short-circuit, crush, puncture, incinerate, expose to fire or temperatures exceeding the manufacturer's specified limits. Do not mix with batteries of different models or types. Not intended for any other use.	
1.3 Details of the supplier of the safety data sheet	
GB Supplier / Importer / Responsible person:	
Full legal name of the UK company:	Toolstation Limited
Full UK postal address:	Express Park, Bridgwater, Somerset TA6 4RN
including postcode:	TA6 4RN
Telephone:	0330 333 3303
E-mail of the competent person responsible for the SDS:	roktor.support@positecgroup.com
Manufacturer (non-GB):	Positec Technology (China) Co., Ltd.
No. 18 Dongwang Road, Suzhou Industrial Park, 215123, Jiangsu, China	
Telephone:	+86-512-65152888
Fax:	+86-512-65152885
E-mail:	email@positecgroup.com
1.4 Emergency telephone number	
Emergency telephone number:	+44 3331 880059
Hours of operation:	Monday to Friday 09:00–17:00 UK time
Language of the service:	English
Additional information:	In the event of a medical enquiry, contact a doctor or local hospital Accident & Emergency department.

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SECTION 2: Hazards identification

2.1	
Classification of the substance or mixture	
Classification according to GB CLP Regulation (SI 2019/720 as amended):	
Classification according to GB CLP Regulation (SI 2019/720 as amended): The product in its sealed, undamaged form is not classified as hazardous under GB CLP under normal conditions of use and storage. Classification applies only if the battery casing is damaged, ruptured or leaking, exposing internal components:	
Acute Tox. 3 (Oral) – H301:	Toxic if swallowed (or Acute Tox. 4 - H302, depending on specific electrolyte content)
Acute Tox. 2 / 3 (Inhalation) – H330 / H331:	Fatal/Toxic if inhaled
Skin Corr. 1A / 1B – H314:	Causes severe skin burns and eye damage
Eye Dam. 1 – H318:	Causes serious eye damage
Skin Sens. 1 – H317:	May cause an allergic skin reaction
Carc. 1A / 1B – H350 / H350i:	May cause cancer (by inhalation) (due to Cobalt/Nickel compounds in cathode, if exposed)
STOT RE 1 – H372:	Causes damage to organs through prolonged or repeated exposure
Aquatic Acute 1 – H400:	Very toxic to aquatic life
Aquatic Chronic 1 – H410:	Very toxic to aquatic life with long lasting effects
(Note: Leaking organic carbonate solvent vapors are also Flam. Liq. 2/3 (H225/H226 - Highly flammable / Flammable liquid and vapour) and may produce hazardous hydrofluoric acid (HF) upon contact with atmospheric moisture.)	
2.2 Label elements	
Labelling according to GB CLP (for damaged/leaking condition only, if classified):	
Hazard pictograms:	
Signal word:	Danger
Hazard statements:	Acute Tox. 3 (Oral) – H301: Toxic if swallowed Acute Tox. 2 / 3 (Inhalation) – H330 / H331: Fatal/Toxic if inhaled Skin Corr. 1A / 1B – H314: Causes severe skin burns and eye damage Eye Dam. 1 – H318: Causes serious eye damage Skin Sens. 1 – H317: May cause an allergic skin reaction Carc. 1A / 1B – H350 / H350i: May cause cancer (by inhalation) (due to Cobalt/Nickel compounds in cathode, if exposed) STOT RE 1 – H372: Causes damage to organs through prolonged or repeated exposure Aquatic Acute 1 – H400: Very toxic to aquatic life Aquatic Chronic 1 – H410: Very toxic to aquatic life with long lasting effects
Precautionary statements:	P260 Do not breathe dust/fume/gas/mist/vapours/spray. P280 Wear protective gloves/protective clothing/eye protection/face protection. P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

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	P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310 Immediately call a POISON CENTER/doctor.
Supplemental hazard information: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not short-circuit. Undamaged, closed batteries do not present a health hazard under normal conditions of use. The above labelling applies only in the event of damage to the battery casing resulting in leakage of internal components (electrolyte). No labelling required according to GB CLP for the intact product.	
2.3 Other hazards Physical hazards: Risk of fire, explosion or thermal runaway if the battery is short-circuited, overcharged, crushed, punctured, exposed to high temperatures or mechanically abused.	
Results of PBT and vPvB assessment:	Not applicable
Endocrine disrupting properties:	Not applicable
Other hazards:	Contents may be under pressure. Electrolyte is corrosive and flammable if released.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable (the product is an article).

3.2 Mixtures

The product is a sealed article. The following approximate composition refers to the internal components of the battery pack:

Chemical name	CAS No.	EC No.	Concentration (% w/w)	Classification (GB CLP)
Lithium nickel cobalt aluminum oxides	182442-95-1	480-390-0	30.63	Acute Tox. 2; H330 Carc. 1B; H350 STOT RE 1; H372 Aquatic Chronic 3; H412
Graphite	7782-42-5	231-955-3	18.00	Not classified
Lithium hexafluorophosphate	21324-40-3	244-334-7	2.25	Acute Tox. 3; H301 Skin Corr. 1A; H314 Eye Dam. 1; H318 STOT RE 1; H372
Polyvinylidene fluoride	24937-79-9	607-458-6	0.59	Not classified
Iron	7439-89-6	231-096-4	18.36	Not classified
Copper	7440-50-8	231-159-6	11.11	Aquatic Chronic 2; H411
Aluminum	7429-90-5	231-072-3	4.47	Not classified (or Flam. Sol. 1 / Water-react. 2 if powder)
Nickel	7440-02-0	231-111-4	0.83	Skin Sens.1,H317 Carc.2,H351 STOT RE 1,H372 AQUATIC Chronic 3,H412
Carbon black	1333-86-4	215-609-9	1.24	Not classified
Styrene-butadiene rubber	9003-55-8	618-370-2	0.67	Not classified
Carboxymethyl cellulose sodium salt	9004-32-4	618-378-6	0.28	Not classified
Electrolyte solvents:	96-49-1	202-510-0	1.72	Flam. Liq. 2, H225
Ethylene carbonate	616-38-6	210-478-4	5.20	Eye Irrit.2, H319

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Dimethyl carbonate	623-53-0	433-480-9	0.87	STOT RE 2, H373
Ethyl methyl carbonate				
Polyethylene	9002-88-4	618-339-3	2.25	Not classified
Polyethylene terephthalate	25038-59-9	607-507-1	1.53	Not classified
Note: Exact concentrations and classifications of hazardous components must be verified by a competent person. Concentration ranges may be used where exact values are confidential.				

SECTION 4: First aid measures

4.1 Description of first aid measures	
General advice: The following measures apply primarily if the battery is damaged and internal materials are exposed. For intact batteries, no special first aid measures are normally required.	
Inhalation: Move the affected person to fresh air. Keep respiratory tract clear. If breathing is difficult, give oxygen. If not breathing, give artificial respiration (do not use mouth-to-mouth). Seek medical attention immediately.	
Skin contact: Immediately remove contaminated clothing and shoes. Wash skin thoroughly with soap and plenty of water. If chemical burns or persistent irritation occur, seek medical attention immediately.	
Eye contact: Rinse cautiously with clean water for at least 15 minutes, holding eyelids open and moving eyes in all directions. Remove contact lenses if present and easy to do. Continue rinsing. Seek medical attention immediately.	
Ingestion: Do NOT induce vomiting. Rinse mouth with water. Seek medical attention immediately.	
4.2 Most important symptoms and effects, both acute and delayed	
Symptoms/effects	Not expected to present a significant hazard under anticipated conditions of normal use.
4.3 Indication of any immediate medical attention and special treatment needed	
Treat symptomatically. Show this Safety Data Sheet to the doctor.	

SECTION 5: Firefighting measures

5.1 Extinguishing media	
Suitable extinguishing media:	Water spray, dry chemical powder, carbon dioxide (CO ₂), foam, sand.
Unsuitable extinguishing media:	Do not use a heavy water stream.
5.2 Special hazards arising from the substance or mixture	
Lithium-ion batteries may catch fire or explode if overheated, short-circuited or mechanically damaged. Burning batteries can release toxic and corrosive gases/fumes. Fires may re-ignite after being extinguished.	
5.3 Advice for firefighters	
Wear self-contained breathing apparatus and full protective clothing. Cool surrounding containers with water spray. Evacuate the area if necessary. Do not allow run-off to enter drains or watercourses.	

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures	
Use personal protective equipment (see Section 8). Avoid contact with skin, eyes and clothing. Avoid inhalation of fumes or dust. Ensure adequate ventilation. Keep away from ignition sources.	
6.2 Environmental precautions	
Do not allow material to enter drains, surface water or groundwater. Prevent further leakage or spillage if safe to do so.	

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6.3 Methods and material for containment and cleaning up	
For solid leakage (damaged battery):	Carefully collect mechanically and place in a suitable container for disposal. Avoid creating dust.
For liquid electrolyte:	Absorb with inert material and transfer to a suitable container. Clean the affected area thoroughly.
6.4 Reference to other sections	
See Section 8 for personal protection and Section 13 for disposal.	

SECTION 7: Handling and storage

7.1 Precautions for safe handling	
Avoid short-circuiting the battery terminals. Avoid mechanical damage (crushing, puncturing, dropping). Do not open or disassemble the battery. Keep away from open flames, hot surfaces and sources of ignition. Use only with the designated charger and tool. Do not expose to temperatures outside the manufacturer's recommended range.	
7.2 Conditions for safe storage, including any incompatibilities	
Store at room temperature (approximately 20 °C) at approximately 20–60 % of nominal capacity. Keep in the original closed container or packaging. Protect from moisture, direct sunlight and extreme temperatures. Keep away from strong oxidisers and incompatible materials.	
7.3 Specific end use(s)	
See Section 1.2.	

SECTION 8: Exposure controls/personal protection

8.1 Control parameters	
Occupational exposure limits (UK WEL):	
No specific UK Workplace Exposure Limits (WELs) established for the intact article.	
In case of damage or leakage, the following components may be relevant (EH40/2005):	
- Nickel and its inorganic compounds (as Ni): 0.5 mg/m ³ (insoluble), 0.1 mg/m ³ (soluble) (8-hour TWA)	
- Cobalt and cobalt compounds (as Co): 0.1 mg/m ³ (8-hour TWA)	
8.2 Exposure controls	
Engineering controls:	
Under normal use, no special engineering controls are required. When handling damaged batteries, ensure adequate ventilation and provide eyewash and safety shower facilities.	
Personal protective equipment:	
Eye/face protection: Not required under normal use. Wear safety goggles with side shields when handling damaged or leaking batteries.	
Hand protection: Not required under normal use. Wear chemical-resistant rubber gloves when handling damaged batteries.	
Skin and body protection: Not required under normal use. Wear protective clothing when handling damaged batteries.	
Respiratory protection: Not required under normal use. Ensure good ventilation if handling damaged batteries; do not work in confined spaces.	
Environmental exposure controls:	
Prevent release into the environment (see Section 6).	

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties	
Physical state:	Solid (sealed battery pack)
Colour:	Black
Odour:	Odourless (when sealed)
Melting point/freezing point:	Not applicable
Boiling point:	Not applicable
Flammability:	May ignite if abused
Flash point:	Not applicable
Auto-ignition temperature:	No data available

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Decomposition temperature:	No data available
pH:	Not applicable
Kinematic viscosity:	Not applicable
Solubility:	Insoluble in water (sealed)
Partition coefficient n-octanol/water:	Not applicable
Vapour pressure:	Not applicable
Density / relative density:	No data available
Relative vapour density:	Not applicable
Particle characteristics:	Not applicable
Additional information specific to the battery pack:	
Battery pack model:	ABP1820TD5
Cell model:	ICR18650-2000 (TENPOWER)
Voltage:	18V(20V MAX)
Weight:	399g
Capacity:	2.0Ah
Watt-hour rating:	36 Wh
9.2 Other information	No further relevant information available.

SECTION 10: Stability and reactivity

10.1 Reactivity	Stable under normal conditions of storage and use.
10.2 Chemical stability	Stable under recommended storage conditions.
10.3 Possibility of hazardous reactions	No hazardous reactions known under normal conditions. Risk of fire or explosion if short-circuited, overcharged or mechanically abused.
10.4 Conditions to avoid	Overheating, exposure to humidity, mechanical vibration, short-circuiting, crushing, puncturing, open flames and sources of ignition.
10.5 Incompatible materials	Strong oxidising agents.
10.6 Hazardous decomposition products	Under fire conditions, may produce toxic and corrosive fumes (including metal oxides, hydrogen fluoride, carbon oxides, etc.).

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in GB CLP	
Acute toxicity:	No data available for the intact article.
Skin corrosion/irritation:	No irritant effect under normal use. Corrosive if electrolyte is released.
Serious eye damage/irritation:	No irritating effect under normal use. Causes serious eye damage if electrolyte is released.
Respiratory or skin sensitisation:	No sensitising effects known under normal use.
Germ cell mutagenicity:	No data available.
Carcinogenicity:	No data available.
Reproductive toxicity:	No data available.
STOT-single exposure:	No data available.
STOT-single exposure:	No data available.
STOT-repeated exposure:	No data available.
Aspiration hazard:	No data available.
11.2 Information on other hazards	

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Endocrine disrupting properties: No data available.

Other information: The intact sealed battery presents no significant toxicological hazard under normal conditions of use.

SECTION 12: Ecological information

12.1 Toxicity	
No ecological damage under normal usage conditions. Do not flush into water or sanitary sewer systems.	
12.2 Persistence and degradability	
No data available.	
12.3 Bioaccumulative potential	
No data available.	
12.5 Results of PBT and vPvB assessment	Not applicable.
12.6 Endocrine disrupting properties	No data available.
12.7 Other adverse effects	No further relevant information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods	
Advice on disposal:	Recycle wherever possible. Dispose of in accordance with local, regional and national regulations. Do not dispose of with household waste. Consult the manufacturer or a licensed waste disposal contractor.
Contaminated packaging:	Dispose of in accordance with local regulations.

SECTION 14: Transport information

14.1 UN number				
UN 3481	UN 3481	UN 3481	UN 3481	UN 3481
14.2 UN proper shipping name				
Lithium Battery pack	Lithium Battery pack	Lithium Battery pack	Lithium Battery pack	Lithium Battery pack
14.3 Transport hazard class(es)				
9	9	9	9	9
				
14.4 Packing group				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5 Environmental hazards				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.6 Special precautions for user				

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The lithium-ion battery packs contained in equipment are packed in compliance with the requirements of the latest edition of the IATA Dangerous Goods Regulations Packing Instruction 965 Section II (67th Edition, 2026), such that they can be transported as not restricted (non-hazardous / non-dangerous) goods under the conditions of Section II.

Relevant regulations considered:

- ICAO Technical Instructions, Packing Instruction 965, Section II (2025-2026 Edition)
- IATA Dangerous Goods Regulations, Packing Instruction 967, Section II (67th Edition, 2026)
- IMDG Code (42-24 Edition), Special Provision 188
- ADR, Special Provision 188
- US 49 CFR Sections 173.185
- UN Recommendations on the Transport of Dangerous Goods, Manual of Tests and Criteria, Section 38.3, Rev. 7

Net weight of lithium battery: Not exceed 5 kg

14.7 Maritime transport in bulk according to IMO instruments	Not applicable
Additional transport information (by mode):	DOT / ADR / RID / ADN / IMDG / IATA / ICAO
Proper Shipping Name:	Lithium battery pack
Hazard Class:	9
UN Number:	3481
EmS-No.:	F-A, S-I (where applicable)
Special provisions:	188 (IMDG/ADR)

The product has been tested and fulfils the requirements of UN Manual of Tests and Criteria, Section 38.3 (T1–T8):

Test item	Result	Remarks
T1 Altitude Simulation	P	–
T2 Thermal Test	P	–
T3 Vibration	P	–
T4 Shock	P	–
T5 External Short Circuit	P	–

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T6 Impact / Crush	P	–
T7 Overcharge	P	–
T8 Forced Discharge	P	–

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
• UK REACH Regulation (as amended) • GB CLP Regulation (SI 2019/720 as amended) • Health and Safety at Work etc. Act 1974 • Control of Substances Hazardous to Health Regulations (COSHH) • UK Batteries and Accumulators Regulations (as applicable) • Authorisations: No information available • Restrictions on use: No information available
15.2 Chemical safety assessment
A chemical safety assessment has not been carried out for this article.

SECTION 16: Other information

Full text of H-statements referred to under Sections 2 and 3:	H225 Highly flammable liquid and vapour. H228 Flammable solid. H261 In contact with water releases flammable gases. H301 Toxic if swallowed. H314 Causes severe skin burns and eye damage. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H319 Causes serious eye irritation. H330 Fatal if inhaled. H331 Toxic if inhaled. H350 May cause cancer. H350i May cause cancer by inhalation. H351 Suspected of causing cancer. H372 Causes damage to organs through prolonged or repeated exposure. H373 May cause damage to organs through prolonged or repeated exposure. H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects. H411 Toxic to aquatic life with long lasting effects. H412 Harmful to aquatic life with long lasting effects.
Abbreviations and acronyms:	
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
CAS	Chemical Abstracts Service
CLP	Classification, Labelling and Packaging
GB	Great Britain

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IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
PBT	Persistent, Bioaccumulative and Toxic
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
vPvB	very Persistent and very Bioaccumulative
WEL	Workplace Exposure Limit

Further information:

This information is based on our present knowledge. It shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Disclaimer

The information provided is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release, and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Author	Reviewer	Approval
Hengxing Zhang 06-Aug-2026	Yanping Yan 06-Aug-2026	Allen Ding 06-Aug-2026

---End of Safety Data Sheet---