Lithium Ion Battery Test Summary

(a) Model Number SSP-50

(b) Product manufacturer IDX Company, Ltd.

Address 6-28-11 Shukugawara, Tama-ku, Kawasaki-shi, Kanagawa-ken, 214-0021, Japan

Telephone +81-44-850-8801

e-mail idx.japan@idx.tv

URL https://www.idx.tv/

(c) Test laboratory Guangdong Anbo Testing Co., Ltd

Address Building C, No. 76 Huifeng Fourth Road, Zhongkai High tech Zone, Huizhou, Guangdong, China.

Telephone 400-003-0500

e-mail service@anbotek.com

URL https://anbowtek.com

(d) Identification number 1811C60001312701

(e) Date of test report 2026-02-04

(f) Description of Product Semi-solid battery power station

Nominal Voltage 22.2V

Capacity(mAh/Wh) 2000mAh,44.4Wh

Lithium equivalent content 3.6g

Mass 420g

Physical description Battery with outer case

(g) Test Result

No.	Test Item	Test Results	Note	
T1	Altitude Simulation	Pass	First cycle fully charged 4 Batteries	After 25 cycle fully charged 4 Batteries
T2	Thermal Test	Pass		
T3	Vibration	Pass		
T4	Shock	Pass		
T5	External Short Circuit	Pass		
T6	Impact	Pass	First cycle 50% charged 5 cells	After 25 cycle 50% charged 5 cells
T7	Overcharge	Pass	First cycle fully charged 4 Batteries	After 25 cycle fully charged 4 Batteries
T8	Forced Discharge	Pass	First cycle fully discharged 10 cells	After 25 cycle, fully discharged 10 cells

※The Battery pack Package complies with the requirements of 3m Stacking test according to regulations.

(h) Assembled Battery Testing Requirements N/A.

(i) Reference edition UN Manual of Tests and Criteria, ST/SG/AC.10/11/Rev.8/Section38.3

(j) Signature Tatsuya Ishiguro

Tatsuya Ishiguro, General Manager

Technical Development, Products Division

IDX Company, Ltd.

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SAFETY DATA SHEET FOR PRODUCT

1. PRODUCT AND COMPANY IDENTIFICATION

- Product Name: Semi-solid Battery power station(Power bank)
- Product code: SSP-50
- Company Name: IDX Company, Ltd.
- Address: 6-28-11 Shukugawara, Tama-ku, Kawasaki-shi, Kanagawa-ken, 214-0021 Japan
- Telephone number: +81-44-850-8801
- FAX number: +81-44-850-8838
- Emergency Telephone Number: +81-44-850-8831 (Technical Development. Direct)

2. HAZARDS IDENTIFICATION

GHS classification: Not applicable for an article. Under normal conditions of use, hazardous ingredients are contained in a sealed product and are not expected to be released.

Danger sort: N/A

Routes of entry:

1. Eyes and Skin - If the battery is damaged and leaking, the electrolyte solution contained in the battery irritates ocular tissues and the skin.
2. Inhalation - Respiratory (and eye) irritation may occur if fumes are released due to heat or an abundance of leaking batteries.
3. Ingestion - Ingestion of the product is unlikely. However, contents from a damaged/open battery can cause serious chemical burns of mouth, esophagus and gastrointestinal tract.

Health harm:

Exposure to leaking electrolyte from ruptured or leaking battery can cause

1. Inhalation—Burns and irritation of the respiratory system, coughing, wheezing, and shortness of breath.
2. Eyes—Redness, tearing, burns. The electrolyte is corrosive to all ocular tissues.
3. Skin—The electrolyte is corrosive and causes skin irritation and burns.
4. Ingestion—The electrolyte solution causes tissue damage to throat and gastrointestinal tract.

Environment harm: Not necessary under conditions of normal use.

Explosion danger: The battery may be explosive at high temperature (above 60°C) or exposing to the fire.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Note: The composition below refers to the internal rechargeable lithium-ion cells contained in this product. Hazardous ingredients are enclosed within the sealed battery and are not expected to be available for exposure during normal use.

Hazardous Ingredients (Chemical Name)	Concentration (%)	CAS Number
Lithium Cobalt Oxide	49.5	12190-79-3
PVDF	0.33	24937-79-9
Aluminium	7.6	7429-90-5
Graphite	16.3	7782-42-5
SBR	0.05	9003-55-8
Carboxymethylcellulose	0.28	9000-11-7
Copper	6.96	7440-50-8
Nickel	0.06	7440-02-0
Lithium Hexafluorophosphate	10.96	21324-40-3
Polyethylene	4.03	9002-88-4
Nylon	3.93	24937-16-4

4. FIRST-AID MEASURES

Skin contact: Not anticipated. If the battery is leaking and the contained material contacts the skin, flush with copious amounts of clear water for at least 15 minutes.

Eye contact: Not anticipated. If the battery is leaking and the contained material contacts eyes, flush with copious amounts of clear water for at least 15 minutes. Get medical attention at once.

Inhalation: Not anticipated. If the battery is leaking, remove to fresh air. If irritation persists, consult a physician.

Ingestion: Not anticipated. If the battery is leaking and the contained material is ingested, rinse mouth and surrounding area with clear water at once. Consult a physician immediately for treatment.

5. FIRE-FIGHTING MEASURES

Unusual Fire and Explosion Hazards: Battery may explode or leak potentially hazardous vapors subject to: exposed to excessive heat (above the maximum rated temperature as specified by the manufacturer) or fire, over-charged, short circuit, punctured and crushed.

Hazardous Combustion Products: Fire, excessive heat, or over voltage conditions may produce hazardous decomposition products. Damaged batteries can result in rapid heating and the release of flammable vapors.

Extinguishing Media: Dry chemical type extinguishers are the most effective means to extinguish a battery fire. A CO2 extinguisher will also work effectively.

Fire Fighting Procedures: Use a positive pressure self-contained breathing apparatus if batteries are involved in a fire. Full protective clothing is necessary. During water application, caution is advised as burning pieces of flammable particles may be ejected from the fire.

6. ACCIDENTAL RELEASE MEASURES

The material contained within the battery would only be released under abusive conditions. In the event of battery rupture and leakage, collect all the released materials that are not hot or burning in an appropriate waste disposal container while wearing proper protective clothing and ventilate the area. Placed in an appropriate container and disposed according to the local regulations.

7. Precautions for Safe Handling and Use

Handling:

1. Batteries are designed to be recharged. However, improperly charging a battery may cause the battery to flame. When charging the battery, use dedicated chargers and follow the specified conditions.
2. Never disassemble or modify a battery.
3. Do not immerse, throw, and wet a battery in water.
4. Should a battery unintentionally be crushed, thus releasing its contents, rubber gloves must be used to handle all battery components. Avoid the inhalation of any vapors that may be emitted.
5. Short circuit causes heating. In addition, short circuit reduces the life of the battery and can lead to ignition of surrounding materials. Physical contact with to short-circuited battery can cause skin burn.
6. Avoid reversing the battery polarity, which can cause the battery to be damaged or flame.
7. In the event of skin or eye exposure to the electrolyte, refer to Section 4, First Aid Measures.

Storage:

1. Batteries should be separated from other materials and stored in a noncombustible, well ventilated, sprinkler-protected structure with sufficient clearance between walls and battery stacks. Do not place batteries near heating equipment, nor expose to direct sunlight for long periods.
2. Do not store batteries above 35℃ or below −20℃. Store batteries in a cool (about 20±5℃) in a long time, dry and ventilated area that is subject to little temperature change. Elevated temperatures can result in reduced battery cycle life. Battery exposure to temperatures in excess of 60℃ will result in the battery venting flammable liquid and gases.
3. Keep batteries in original package until use and do not jumble them.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls: Keep away from heat and open flame.

Ventilation: Not necessary under conditions of normal use. In case of abuse, use adequate mechanical ventilation (local exhaust) for the battery that vent gas or fumes.

Respiratory Protection: Not necessary under conditions of normal use. If battery is burning, leave the area immediately. During fire fighting fireman should use self-contained breathing, full-face respiratory equipment. Fires may be fought but only from a safe fire fighting distance, evacuate all persons from the area of fire immediately.

Eye Protection: Not necessary under conditions of normal use. Use safety glasses with side shields if handling a leaking or ruptured battery.

Body Protection: Not necessary under conditions of normal use. Use rubber apron and protective working in case of handling of leaking of ruptured battery.

Protective Gloves: Not necessary under conditions of normal use. Use chemical resistant rubber gloves if handling a leaking or ruptured battery.

Others: Use good chemical hygiene practice. Wash hands thoroughly after cleaning-up a battery spill caused by leaking battery. No eating, drinking, or smoking in battery storage area.

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9. PHYSICAL AND CHEMICAL PROPERTIES

State: Solid
Odor: N/A
PH: N/A
Vapor pressure: N/A
Vapor density: N/A
Boiling point: N/A
Solubility in water: Insoluble
Specific gravity: N/A
Density: N/A

10. STABILITY AND REACTIVITY

Stability: Stable under normal temperatures and pressures.
Incompatibility: Oxidizing agents.
Conditions to Avoid: Heat and open flame, short circuit, and water.
Hazardous polymerization: Will not occur.
Decomposition Products: CO, CO2, HF, Phosphorus fluoride.

11. TOXICOLOGICAL INFORMATION

The battery does not elicit toxicological properties during routine handling and use. If the battery is opened through misuse or damage, discard immediately. Internal components of cell are irritant and sensitization.

Irritancy: The electrolytes contained in this battery can irritate eyes with any contact. Prolonged contact with the skin or mucous membranes may cause irritation.
Sensitization: No information is available.
Teratogenicity: No information is available.
Carcinogenicity: No information is available.
Mutagenicity: No information is available.
Reproductive toxicity: No information is available.

12. ECOLOGICAL INFORMATION

1. When properly used and disposed, the battery does not present environmental hazard.
2. The battery does not contain mercury, cadmium, or lead.
3. Do not let internal components enter marine environment. Avoid releasing to water ways, wastewater or ground water.

13. DISPOSAL CONSIDERATIONS

1. Disposal of the battery should be performed by permitted, professional disposal firms knowledgeable in Federal, State or Local requirements of hazardous waste treatment and hazardous waste transportation.
2. The battery should be completely discharged prior to disposal and/or the terminals taped or capped to prevent short circuit. When completely discharged it is not considered hazardous.
3. The battery contains recyclable materials. Recycling options available in your local area should be considered when disposing of this product, through licensed waste Carrier.

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14. TRANSPORT INFORMATION

In the case of transportation, avoid exposure to high temperature and prevent the formation of any condensation. Take in a cargo of them without falling, dropping and breakage. Prevent collapse of cargo piles and wet by rain. The container must be handled carefully. Do not give shocks that result in a mark of hitting on a batteries.

UN classification

- UN Number and proper shipping name :

UN3480 “Lithium ion batteries ” [or UN3481 “Lithium ion batteries packed with equipment ” or UN3481 “Lithium ion batteries contained in equipment”].

[**Watt-hour rating is not more than 100Wh**]

SSP-50

Class9 Dangerous Goods (PI965 section IB)

Cargo Aircraft Only

Exempted Dangerous Goods (PI965 section 2) is 2 batteries per one packaging.

UN Specification packaging is not required. Packaging must be test for 1.2m drop test.
Maximum of 20 spare batteries in carry-on baggage only.

All IDX Li-ion batteries have Wh rating marked on notation.
Batteries capacity is must be transport at a state of charge(SoC) not exceeding 30% of the their rated capacity.

* Although this product meets the criteria of "dangerous goods" and are classified "lithium ion batteries", depending on the battery's total capacity in the packaging, etc., they may not be subject to the fully regulated provisions.

Regulation depends on region and transportation mode

- Worldwide, Air transportation :
  ICAO/IATA-DGR [packing instruction 965 section IA, Section IB]
  (when shipping batteries "packed with" or "contained in" equipment, use packing instruction 966 or 967 as appropriate.)
- Worldwide, Ocean transportation : IMO-IMDG Code [special provision 188]
- Europe, Ground transportation : ADR [special provision 188]

* Instructions or provision in the box brackets are conditions to make the battery cell exempted from full regulation.

15. REGULATORY INFORMATION

・IMDG Code: International Maritime Dangerous Goods (IMDG) Code 2024 Edition
・ICAO TI: International Civil Aviation Organization (ICAO) Technical Instructions for the Safe Transport of Dangerous Goods by Air 2025-2026 Edition
・IATA DGR: International Air Transport Association (IATA) Dangerous Goods Regulations 67th Edition

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16. OTHER INFORMATION

- The information contained in this Safety data sheet is based on the state of knowledge and current legislation.
- This safety data sheet provides guidance on health, safety and environmental aspects of the product and should not be construed as any guarantee of technical performance or suitability for particular applications.
- IDX makes no warranty, expressed or implied regarding the accuracy of these data or the results to be obtained from the use thereof. IDX assumes no responsibility for injury from the use to the product described herein.

- Reference

・Dangerous Goods Regulations – 67th Edition Effective from 1 January 2026: International Air Transport Association (IATA)
・IMDG Code 2024 Edition (inc. Amendment 42-24):International Maritime Organization(IMO)
・Agreement concerning the International Carriage of Dangerous Goods by Road - 2025(ADR):The United Nations Economic Commission for Europe(UNECE)
SDS of raw materials prepared by the manufacturers

1st edition: March 4, 2026

Prepared and approved by
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