Safety Data Sheet

Product name

Small Lithium Ion Rechargeable Battery

Reference No. ：SLBSDS-06J（E）

Model No. ：SLB04255L040

Date of Preparation：Jan.1,2025

Capacitor Business Headquaters
NICHICON CORPORATION

Introduction

The SDS system does not cover products that are used in a sealed condition, and this battery is not covered by the system because it is sealed. Therefore, the information contained herein is provided only as reference information for the safe handling of this battery and does not constitute a guarantee of safety. The operator must take appropriate measures on their own responsibility based on this information.

The content, physico-chemical properties, and other numerical values are not guaranteed values. This document has been prepared to be faithful and accurate to the data and information available at the time of preparation, but is subject to revision based on new findings.

1. Product and Company Identification

Product Name	: Small Lithium Ion Rechargeable Battery
Supplier's Name	: NICHICON CORPORATION
Supplier's Address	: Karasumadori Oike-agaru, Nakagyo-ku, Kyoto, 604-0845 Japan
Section in Charge	: Capacitor Headquaters
Telephone Number	: +81-75-231-8461
Manufacturer's Name	: NICHICON (OHNO) CORPORATION (FUKUI FACTORY)
Manufacturer's Address	: 4 Tsuchifugo, Ohno-shi, Fukui Pref., 912-0805 Japan
Emergency Contact	: +81-779-65-8800

2. Hazard Identification

GHS Classification	: No applicable
Hazard	: Short-circuiting between battery terminals may cause overheating and electrolyte leakage. If electrolyte leaks, keep away from fire immediately as it is flammable.
Toxicity	: If the batteries burn, the vapors generated may irritate the eyes, skin, and throat.

3. Composition/ Information on Ingredients

Substance Name	: Lithium ion Rechargeable Battery	
CAS No.	: No applicable	
Main material content of single cell		
Positive Electrode	: Lithium manganese oxide	8～10 wt%
Negative Electrode	: Lithium titanate oxide	7～9 wt%
Electrolyte	: organic electrolyte mainly composed of carbonate ester	17～21 wt%

4. First Aid Measures

If electrolyte leaks from the product, take the following measures.

・Skin contact

Immediately wash the contacted area with soap and water or warm water, and consult a physician.

・Eye contact

Immediately rinse with tap water for at least 15 minutes and consult a physician.

・Inhalation

Immediately move to fresh air, keep at rest, and consult a physician.

5. Fire Fighting Measures

Fire extinguishing agent ：Use powder, carbon dioxide, dry sand and so on.

Fire extinguishing method：Cut off the combustion source and extinguish with a fire extinguishing agent. Since vapor, generated from burning batteries may make eyes, nose and throat irritate, be sure to extinguish the fire on the windward side. Wear the respiratory protection equipment in some cases.

6. Accidental Release Measures

・Keep the battery away from fire or heat.

7. Handling and Storage

Handling

・Pack the product with materials that are strong enough not to be easily damaged by dropping, stacking, shock, vibration, etc. during transportation.

・Pack batteries in a way that their terminals will not short-circuit externally.

・Never short-circuit, put into fire, heat, submerge in water, or disassemble.

・Do not apply excessive load to the battery terminals.

・Do not charge or discharge batteries under conditions other than those specified.

Storage

・Do not store batteries with their terminals in contact with each other or with their conductors.

・Avoid storing batteries in the following environments

a) Direct exposure to water, high temperatures above 35°C, high humidity, and condensation
b) Environment directly exposed to oil or filled with oil components in a gaseous state
c) Directly exposed to salt water and salt-filled environments
d) Environment filled with toxic gases (hydrogen sulfide, sulfurous acid, nitrous acid, chlorine, bromine, methyl bromide, ammonia, etc.)
e) Environments exposed to direct sunlight, ozone, ultraviolet light, and radiation
f) Environments exposed to acidic and alkaline solvents

8. Exposure Controls and Personal Protection

Acceptable Concentration : Not specified in normal use.

Facilities : Nnothing in particular.

Protective Equipment : Nnothing in particular.

Use the following protective equipment in the event of electrolyte leakage from the battery.

- Respiratory protection : Protective mask
- Hand protection : Synthetic rubber gloves
- Eye protection : Goggles or glasses

9. Physical and Chemical Properties

- Shape : Cylindrical shape
- Nominal Voltage : 2.4V
- Operating Voltage range : 1.8～2.8V (Charging limit voltage 2.8V)
- Nominal capacity : 4mAh
- Rated Capacity : 4mAh
- Rated Electric Energy : 9.6mWh

10. Stability and Reactivity

Although stable under normal handling, however, batteries are chemical products that use chemical reactions, and their performance deteriorates with prolonged use and long-term storage.

If proper conditions (e.g., temperature, charge/discharge conditions, etc.) are not maintained in use, the battery may deteriorate in service life, deform in appearance, leak electrolyte, generate heat, rupture, or catch fire.

Conditions to avoid : See section 7.

Hazardous decomposition products : Flammable vapors, Hydrofluoric acid

11. Toxicological Information

No applicable

12. Ecological Information

No applicable

13. Disposal Considerations

When disposing of batteries, follow the laws and regulations of each local government.

In particular, businesses in Japan must follow the "Waste Disposal and Public Cleansing Law" and contract with an industrial waste disposal company to dispose of the batteries properly.

Even used batteries may still contain electrical energy, so they should be discharged before disposal, or their terminals should be covered with insulation tape to prevent short circuits.

14. Transportation Information

International Regulation

UN number(Proper Shipping Name)	: UN3480(Lithium Ion Batteries) UN3481(Lithium Ion Batteries Contained in Equipment) UN3481(Lithium Ion Batteries Packed with Equipment)
Packing Instruction	: PI 965 Section Ⅰ B(For air transportation)
UN Classification	: Class 9 Substances and Articles

Transport regulations include ICAO and IATA for air transport and IMO for sea transport, both of which are based on UN Recommendations.

This battery is classified as Class 9 dangerous goods by the United Nations, but is exempt from some of the transport requirements for dangerous goods because it meets the following requirements (Marine Transport SP188, or Air Transport Packing Instructions 966,967 Section II).

(A) The watt-hour rating of each cell is 20Wh or less.

(B) Each cell has been certified to meet the requirements of each test in the UN Manual of Tests and Criteria, Part III, sub-section 38.3. The test summary is available at the following website:
https://www.nichicon.co.jp/english/products/slb/transport/

(C) Each cell is manufactured in an ISO9001 certified facility under an appropriate quality control program.

When transporting this battery, please follow the appropriate local laws and regulations. Also, check with the shipping company in advance for details on packing labels and shipping documents, as some countries, regions, or shipping companies may have their own regulations. Please refer to the following reference information about concrete ways of transportation.

Information of reference

	Reference	Packing Instruction(PI)/ Special provision(SP)	Note
Air Transport	IATA,ICAO	PI965 Section Ⅰ B	Cells; SOC≦30%, Cargo Aircraft only Net quantity per package Max 10kg
		PI966 Section Ⅱ	Lithium Ion Batteries Packed with Equipment Net quantity per package Max 5kg
		PI967 Section Ⅱ	Lithium Ion Batteries Contained in Equipment Net quantity per package Max 5kg
Marine Transport	IMO	SP188	

Domestic (Japan) Regulations

Marine Transport	: Ship Safety Law
Air Transport	: Regulation for Enforcement of the Civil Aeronautics Act
Land Transport	: Fire Service Act

15. Regulatory Information

The main applicable laws and regulations regarding the environment are as follows

・EU BATTERY REGULATION (REGULATION (EU) 2023/1542)

・EU REACH REGULATION (REGULATION (EC) No.1907/2006 on the Registration, Evaluation, Authorisation and Restriction of Chemicals)

The main applicable laws and regulations regarding transportation are as follows

・UN(United Nations): Recommendations on the Transport of Dangerous Goods, Model Regulations 23rd revised edition

・IATA(International Air Transport Association) : Dangerous Goods Regulations, 66th Edition

・ICAO(International Civil Aviation Organization) : Technical Instructions for the Safe Transport of Dangerous Goods by Air, 2025-2026 Edition

・IMO(International Maritime Organization) : International Maritime Dangerous Goods (IMDG) Code 2024 Edition

Domestic (Japan) Laws

・Fire Service Act

・Civil Aeronautics Act

・Ship Safety Act, Regulations for the Carriage and Storage of Dangerous Goods in Ship

・Waste Management and Public Cleansing Act

16. Other Information

If you need more information about this document, please contact us.