Safety Data Sheet

Issuing date : September 16, 2020 **SDS # :BA0118-03**
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SECTION 1: Identification of the substance/mixture and of the company/undertaking

Product Identifier

Product name: Lithium Ion Battery NB-CP2LI
Product Code: 4822C
Watt-hour rating 41Wh
Relevant Identified Uses: Battery for CP printer

Details of the supplier of the safety data sheet

Supplier: Canon Europa NV
Address: Bovenkerkerweg 59, 1185XB Amstelveen, The Nederlands
Phone number: +31 20 5458545, +31 20 5458222
E-mail Address: www.canon-europe.com, ceu-Reach@canon-europe.com

Manufacturer: Canon Inc.
Address: 30-2, Shimomaruko 3-Chome, Ohta-ku, Tokyo 146-8501, Japan

SECTION 2: Hazards identification

For the battery cell, chemical materials are stored in a hermetically sealed metal or metal laminated plastic case, designed to withstand temperatures and pressures encountered during normal use. As a result, during normal use, there are no physical hazards such as ignition, explosion and chemical hazards due to leakage of battery contents.

However, if exposed to a fire, added mechanical shocks, decomposed, added electric stress by miss-use, the gas release vent will be operated. The battery cell case will be breached at the extreme, hazardous materials may be released.

Also, if it is heated strongly by surrounding fires or the like, there is a possibility that irritating or harmful gas may be generated.

- Most important hazard and effects

Human health effects:

Inhalation:	The steam of the electrolyte has an anesthesia action and stimulates a respiratory tract.
Skin contact:	The steam of the electrolyte stimulates a skin. The electrolyte skin contact causes a sore and stimulation on the skin.
Eye contact:	The steam of the electrolyte stimulates eyes. The electrolyte eye contact causes a sore and stimulation on the eye. Especially, substance that causes a strong inflammation of the eyes is contained.
Environmental effects:	Since a battery cell remains in the environment, do not throw out it into the environment.

- Specific hazards:

If the electrolyte contacts with water, it will generate detrimental hydrogen fluoride.

Since the leaked electrolyte is inflammable liquid, do not bring close to fire.

SECTION 3: Composition/information on ingredients

- Substance or preparation: Preparation
- Information about the chemical nature of product::

Portion	Material name	Concentration range (wt %)
Positive electrode	Lithium transition metal oxidate (Li[M]m[O]n *1)	20~60
Positive electrode's base	Aluminum	1~10
Negative electrode	Carbon	10~30
Negative electrode's base	Copper	1~15
Electrolyte	Organic electrolyte principally involves ester carbonate	5~25
Outer case	Aluminum, iron, aluminum laminated plastic	1~30

**1 The letter M means transition metal and candidates of M are Co, Mn and Ni. One compound includes one or more of these metals and one product includes one or more of the compounds.*
The letter m and n means the number of atoms.

SECTION 4: First aid measures

Spilled internal cell materials

- Inhalation:
  Make the victim blow his/her nose, gargle. Seek medical attention if necessary.
- Skin contact:
  Remove contaminated clothes and shoes immediately. Wash extraneous matter or contact region with soap and plenty of water immediately.
- Eye contact:
  Do not rub one's eyes. Immediately flush eyes with water continuously for at least 15 minutes.
  Seek medical attention immediately.

A battery cell and spilled internal cell materials

- Ingestion:
  Wash out mouth thoroughly. Do not make the victim vomit, unless instructed by medical personnel. Seek medical attention immediately.

SECTION 5: Firefighting measures

- Suitable extinguishing media: Plenty of water, carbon dioxide gas, nitrogen gas, chemical powder fire extinguishing medium and fire foam.
- Specific hazards: Corrosive gas may be emitted during fire.
- Specific methods of fire-fighting: When the battery burns with other combustibles simultaneously, take fire extinguishing method which correspond to the combustibles. Extinguish a fire from the windward as much as possible.
- Special protective equipment for firefighters: Refer to Section 8-EXPOSURE CONTROLS / PERSONAL PROTECTION (WHEN THE ELECTROLYTE LEAKS)

SECTION 6: Accidental release measures

Spilled internal cell materials, such as electrolyte leaked from a battery cell, are carefully dealt with according to the followings.

- Precautions for human body: Remove spilled materials with protective equipment (refer to Section 8-EXPOSURE CONTROLS / PERSONAL PROTECTION (WHEN THE ELECTROLYTE LEAKS)). Do not inhale the gas as much as possible. Moreover, avoid touching with as much as possible.
- Environmental precautions: Do not throw out into the environment.
- Method of cleaning up: The spilled solids are put into a container. The leaked place is wiped off with dry cloth.
- Prevention of secondary hazards: Avoid re-scattering. Do not bring the collected materials close to fire.

SECTION 7: Handling and storage

- Handling suggestions
  - Do not connect positive terminal to the negative terminal with electrical wire or chain.
  - Avoid polarity reverse connection when installing the battery to an instrument.
  - Do not wet the battery with water, seawater, drink or acid; or expose to strong oxidizer.
  - Keep the battery away from heat and fire.
  - Do not disassemble or reconstruct the battery; or solder the battery directly.
  - Do not give a mechanical shock or deform.
  - Do not unauthorized charger or other charging method. Terminate charging when the charging process doesn't end within specified time.
- Storage
  - Do not store the battery with metalware, water, seawater, strong acid or strong oxidizer.
  - Make the charge amount 50% then store at room temperature or less (temperature=-20~40 degree C) in a dry (humidity: 45~85%) place. Avoid direct sunlight, high temperature, and high humidity.
  - Use insulative and adequately strong packaging material to prevent short circuit between positive and negative terminal when the packaging breaks during normal handling. Do not use conductive or easy to break packaging material.

SECTION 8: Exposure controls/personal protection

- Control parameters

  ACGIH has not mentioned control parameter of electrolyte.
- Personal protective equipment

  Respiratory protection: Respirator with air cylinder, dust mask
  Hand protection: Protective gloves
  Eye protection: Goggle or protective glasses designed to protect against liquid splashes
  Skin and body protection: Working clothes with long sleeve and long trousers

SECTION 9: Physical and chemical properties

- Appearance

  Physical state: Solid
  Internal battery cell form: Cylindrical
  Internal battery cell color: Metallic color (cell has a red tube)
  Odor: No odor

SECTION 10: Stability and reactivity

・Stability:	Normally stable unless a strong shock is applied or heated strongly
・Possibility of hazardous reactions:	Damage to the container may cause leakage of contents. Contents may leak or ignite due to temperature rise.
・Conditions to avoid:	Crushing or deformation, use and storage at 80 degree C or higher or at high humidity. Usage at a voltage or a current outside the rating and external short circuit.
・Incompatible materials:	Conductive material such as water or metal pieces. Oxidizing agent such as bleach.
・Hazardous decomposition products:	Acrid or harmful gas is emitted during leakage or fire.

SECTION 11: Toxicological information

Organic Electrolyte

- Acute toxicity: LD50, oral – rat 2,000mg/kg or more
- Irritating nature: Irritative to skin and eye.

SECTION 12: Ecological information

- Persistence/degradability:

Since a battery cell and the internal materials remain in the environment, do not bury or throw out into the environment.

SECTION 13: Disposal considerations

- Recommended methods for safe and environmentally preferred disposal:

Product (waste from residues)

Specified collection or disposal of lithium ion battery is required by the law like as "battery control law" in several nations. Collection or recycle of the battery is mainly imposed on battery's manufacturer or importer in the nations recycle is required.

Contaminated packaging

Neither a container nor packing is contaminated during normal use. When internal materials leaked from a battery cell contaminates, dispose as industrial wastes subject to special control.

SECTION 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 cell. Please refer to Section 7-HANDLING AND STORAGE also.

UN regulation

- UN number: 3480 (3481 when the battery is contained in equipment or packed with equipment)
- Proper shipping name:
  Lithium ion batteries ("lithium ion batteries contained in equipment" or "lithium ion batteries packed with equipment")
- Class: 9 *
- Packing group: IB *

** However this product is defined as above, it is **not** recognized as "DANGEROUS GOODS" or its treated as almost non-DANGEROUS GOODS when its transport condition accords with instructions or provisions depend on region and transportation mode. About the instructions or provisions, please see descriptions in box brackets of following regulations.*

Regulation depends on region and transportation mode

- Worldwide - Air transportation:
  ICAO TI/IATA-DGR
- Worldwide - Ocean transportation:
  IMO-IMDG Code
- Europe - Ground transportation:
  ADR

SECTION 15: Regulatory information

- Regulations specifically applicable to the product:
  Wastes Disposal and Public Cleaning Law [Japan]
  Law for Promotion of Effective Utilization of resources [Japan]
  US Department of Transportation 49 Code of Federal Regulations [USA]

** About overlapping regulations, please refer to Section 14-TRANSPORT INFOMATION.*

SECTION 16: Other information

- This safety data sheet is offered an agency who handles this product to handle it safely.
- The agency should utilize this safety data sheet effectively (put it up, educate person in charge) and take proper measures.
- ***The information contained in this Safety data sheet is based on the present 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.

Reference

Dangerous Goods Regulations –63rd Edition Effective 1 January 2022: International Air Transport Association (IATA)
IMDG Code - 2020 Edition: International Maritime Organization (IMO)
The European Agreement concerning the International Carriage of Dangerous Goods by Road - 2021:
The United Nations Economic Commission for Europe (UNECE)