1. Product and Company Identification

Applicant	: **MKB Co.,Ltd**
Address	: 15, Anyangcheon-ro 502beon-gil, Gwangmyeong-si, Gyeonggi-do, Republic of Korea
Product Name	: Rechargeable Li-ion battery
Model	**: 1BL200META-EIC**
Manufacturer	: **MOBIUS KUKIL Co.,Ltd**
Address	: Da-4403-1, joongang Circulation Complex, Guro 2Dong,Guro-gu, Seoul, Republic of korea
Emergency Tel No.	: +82 2-3666-1239
E-mail	: kdy@mkbt.co.kr

2. HAZARD IDENTIFICATION

Primary routes of entry

Skin contact	: NO
Skin absorption	: NO
Eye contact	: NO
Inhalation	: NO
Ingestion	: NO

Symptoms of exposure

Skin contact	: No effect under routine handling and use
Skin absorption	: No effect under routine handling and use
Eye contact	: No effect under routine handling and use
Inhalation	: No effect under routine handling and use

Reported as carcinogen : Not applicable

3. Composition information

	CAS No.	*Mass range in cell (g/g %)
Cobalt compound	1307-96-6	4-50
Styrene-Butadiene-Rubber	27288-99-9	<1
Polyvinylidene Fluoride	24937-79-9	<5
Aluminum Foil	7429-90-5	2-10
Copper Foil	7440-50-8	2-10
Carbon	7440-44-0	10-30
Electrolyte(Ethylene Carbonate)	96-49-1	10-20
Lithium hexafluorophosphate	2134-40-3	<5
Stainless steel, Nickel and inert materials	N/A	Remainder

4. FIRST AID MEASURES

Inhalation : Not a health hazard

Eye contact : Not a health hazard

Skin contact : Not a health hazard

ingestion : If swallowed obtain medical attention immediately.

IF EXPOSURE TO INTERNAL MATERIALS WITHIN CELL DUE TO DAMAGED OUTER CASING, THE FOLLOWING ACTIONS ARE RECOMMENDED ;

Inhalation
Leave area immediately and seek medical attention.

Eye contact
Rinse eyes with water for 15 minutes and seek medical attention

Skin contact
Wash area thoroughly with soap and water and seek medical attention.

5. FIRE FIGHTINH MEASURES
In case of Fire use CO2 or CLASS D fire extinguisher

General Hazard

Cell is not flammable but internal organic material will burn if the cell is in cinerated. Combustion products include, but are not limited to hydrogen fluoride, c arbon monoxide and carbon dioxide.

Extinguishing Media

Use extinguishing media suitable for the materials that are burning.

Special Firefighting Instructions

If possible, remove cell(s) from fire fighting area. If heated above 125°C, cell(s) may explode/vent.

Firefighting Equipment

Use NIOSH/MSHA approved full-face self-contained breathing apparatus (SCBA)w ith full protective gear.

6. ACCIDENTAA RELEASE MEASURES

On Land

Place material into suitable containers and call local fire/police department.

In Water

If possible, remove from water and call local fire/police department.

7. HANDLINH AND STORAGE

Handling

Do not disassemble, crush or otherwise abuse the battery.

Do not open battery

Storage

Store in a cool, dry place.

Do not expose to high Temperature(60℃ / 140°F)

Caution

This battery when abused may pose fire, explosion and severe burn hazard

Handle with caution

8. EXPOSURE CONTROL / PERSONAL PROTECTION

Engineering controls

Keep away from heat and open flame.

Store in a cool dry place.

Personal Protection

Respirator

Not required during normal operations. SCBA required in the event of a fire.

Eye/face protection

Not required beyond safety practices of employer.

Gloves

Not required for handling of cells.

Foot protection

Steel toed shoes recommended for large container handling.

Use safety goggles, acid resistant safety gloves, air mask if exposed to internal content of the cell/battery.

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. STABILLITY AND REACTIVITY

Reactivity
None

Incompatibilities
None during normal operation. Avoid exposure to heat, open flam
e, and corrosives

Hazardous Decomposition Products
None during normal operating conditions. If cells are opened, hydrogen fluoride and carbon monoxide may be released.

Conditions To Avoid
Avoid exposure to heat and open flame. Do not puncture, Crush, or incinerate

11. TOXICOLOGICAL INFORMATION

This product does not elicit toxicological properties during routine handling and use.

Sensitization	Teratogenicity	Reproductiv e toxicity	Acute toxicity
NO	NO	NO	NO

If the cells are opened through misuse or damage, discard immediately. components of cell are irritants and sensitizers.

12. ECOLOGICAL INFORMATION

Some materials within the cell are bioaccumulative. Under normal conditions, these materials are contained and pose no risk to persons or the surroundi ng environment.

13. DISPOSAL CONSIDERRATION

Dispose / Recycle according to the applicable municipal, state and federal regulation

Do not dispose in household or commercial waste bin.

14. TRANSPORT INFORMATION

All lithium, lithium ion and lithium polymer cells and batteries must be tested in accordance with the "UN Manual of Test and Criteria, part3, Subsection38.3

The 61th edition of the IATA Dangerous Good Regulations incorporates all amendments made by the ICAO Dangerous Goods panel in developing the content of the 2019edition of the ICAO Technical Instructions as well as changes adopted by the IATA Dangerous Good Board.

Their regulations are based on the UN Recommendations. The UN Recommendations require that lithium ion cell and batteries shall be manufactured under quality management program and their requirement is adopted by IMDG code and ICAO TI/IATA DGR.

The following lis is intended to assist the user to identify the mail changes introduced in this edition and must not be considered an exhaustive listing. the changes have been prefaced by section or subsection in which the change occurs.

Shipping Name(UN Number) :

Lithium ion batteries (UN3480)

Lithium ion batteries packed with equipment (UN3481)

Lithium ion batteries contain in equipment (UN3481)

Hazzard Classification : Class 9 (Miscellaneous)

Organizations governing the transport of lithium batteries are as follows,

Area	**Method**	**Organiztion**	**Packing instruction or special provision**
International	Air	IATA, ICAO	PI965-967
International	Maritime	IMO	SP 188
U.S.A	Air, Rail, Road, Maritime	DOT	49 CFR Section 173.185

Cell and batteries must be packed in inner packing that completely encloses the cell or battery.

Cell and batteries must be protected so as to prevent short circuits. This include protection against contact.

With conductive materials within the same packaging that could lead to a short circuit.

Each Consignment must be accompanied with a document such as an air waybill with an indication that:

The package contains lithium ion cells or batteries ;

The package must be handed with care, and that a flammability hazard exits if the package is damaged;

Special procedures should be followed in the event the package is damaged, to include inspection and repacking if necessary and a telephone number for additional information.

Each package must be labelled with a lithium battery handling label

Any person preparing or offering cells or batteries for transport must receive adequate instruction on these requirements commensurate with their responsibilities

15. Regulatory information

Special requirement be according to the local regulations.
<Dangerous Good Regulations.
<Recommendations on the transport of Dangerous Goods Model Regulation>
<International Maritime Dangerous Goods>
<Classification and code of dangerous goods>
<Occupational Safety and Health Act>
<Toxic Substance Control Act>
<Consumer product safety Act>
<Federal Environmental pollution Control Act>
<The oil pollution Act>
<Superfund Amendments and Reauthorization Act Title3
<Resource Conservation and Recovery Act>
<Safety Drinking Water Act>
<California Proposition 65>
<Code of Federal Regulations>
<2019 lithium battery guidance document, revision 1>

Photo of sample

End of MSDS