

MATERIAL SAFETY DATA SHEET

JH3 Lithium-Ion Polymer Battery

LG CHEMICAL LIMITED

History

Document No.	MSDS-Cell-JH3			
Revision	MM-DD-YY	Writer	Content	Remark
1.0	15-12-07	Wonseok Chang	Establishment	

1. Identification of the Substance/Preparation and of the Company/Undertaking

Product Name

LGCHEM JH3 Lithium-Ion Polymer Battery

Manufacturer

LG Chemical Limited
Twin Tower
Youido-Dong, Youngdeungpo-Ku
Seoul, Korea

Emergency Telephone Number

+82-2-3773-6570

2. Hazards 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.

MATERIAL SAFETY DATA SHEET

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

Emergency Overview

May explode in a fire, which could release hydrogen fluoride gas.

Use extinguishing media suitable for materials burning in fire.

3. Composition/Information on Ingredients

Hazardous Ingredients	%	CAS Number
Aluminum Foil	2-10	7429-90-5
Metal Oxide (proprietary)	20-50	
Polyvinylidene Fluoride (PVDF)	<5	24937-79-9
Copper Foil	5-20	7440-50-8
Carbon (proprietary)	10-20	7440-44-0
Electrolyte (proprietary)	10-20	
Aluminum, Copper plate and inert materials	Remainder	N/A

Lithium-equivalent Content: 18.56g (233 Wh)

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.

Ingestion

Drink milk/water and induce vomiting; seek medical attention.

5. Fire-Fighting Measures

General Hazard

Cell is not flammable but internal organic material will burn if the cell is incinerated. Combustion products include, but are not limited to hydrogen fluoride, carbon 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 150°C, cell(s) may explode/vent.

Firefighting Equipment

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

6. Accidental 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. Handling and Storage

Handling

No special protective clothing required for handling individual cells.

Storage

Store in a cool, dry place.

8. Exposure Controls/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.

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

Reactivity

None

Incompatibilities

None during normal operation. Avoid exposure to heat, open flame, and corrosives.

Hazardous Decomposition Products

None during normal operating conditions. If cells are damaged, 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	Reproductive toxicity	Acute toxicity
NO	NO	NO	NO

If the cells are opened through misuse or damage, discard immediately. Internal 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 surrounding environment.

13. Disposal Considerations

California regulated debris

RCRA Waste Code : Non regulated

Dispose of according to all federal, state, and local regulations.

14. Transport Information

UN No. 3480

Proper Shipping Name: Lithium Ion Batteries

Class 9 Packing Group II Hazard Label: Miscellaneous

UN No. 3481

Proper Shipping Name: Lithium Ion Batteries contained in equipment

ICAO/IATA

Packing Instruction: 965, 967

Maximum Gross Weight per Package on Passenger and Cargo Aircraft: 5 kg

Maximum Gross Weight per Package on Cargo Only Aircraft: 35 kg

Special Provision: A45, A88, A99

IMO

Packing Instruction: P903

Special Provision: 188, 230, 310, 957

EmS: F-A, S-I

US DOT

This product is not subject to any other requirements of dangerous goods under 49 CFR 173.185 (Lithium Batteries and Cells).

15. Regulatory Information

OSHA hazard communication standard (29 CFR 1910.1200)

MATERIAL SAFETY DATA SHEET

Hazardous Non-hazardous

16. Other Information

For further information, see:

For more information, consult the Technical Data Sheet (www.lgchem.com).

Sources of key data used to compile the datasheet

Information contained in this safety data sheet is based on LG Chem owned data and public sources deemed valid or acceptable. The absence of data elements indicates, that no data meeting these requirements is available

Further information

This information is based on our present state of knowledge. It shall describe our products regarding safety requirements and shall not be construed as a guarantee or statement of condition and/or quality