

MATERIAL SAFETY DATA SHEET

EXIS +

**LITHIUM ION
RECHARGEABLE BATTERY**

The information contained within is provided as a service to our customers and for their information only. The information and recommendations set forth herein are made in good faith and are believed to be accurate at the date compiled. CorDEX Instruments makes no warranty expressed or implied.

1. Chemical Product and Company Identification

Product Identification

EXIS Lithium-Ion Rechargeable Battery

Manufacturer

CorDEX Instruments Limited
Unit 1
Owens Road
Skippers Lane
Middlesbrough
TS6 6HE

2. Composition Information

Hazardous Ingredients	%	CAS number
Aluminium Foil	2-10	7429-90-5
Metal Oxide (proprietary)	20-50	
Polyvinylidene Fluoride (PVDF)	<5	24937-79-9
Copper Foil	2-10	7440-50-8
Carbon (proprietary)	10-30	7440-44-0
Electrolyte (proprietary)	10-20	
Stainless steel, nickel and insert materials	Remainder	N/A

*Lithium content : 0.66g

3. Hazards Identification

<p>Emergency Overview</p> <p>May explode in a fire, which could release hydrogen fluoride gas.</p> <p>Use extinguishing media suitable for materials burning in fire.</p>

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

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. 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 160°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
Vapour pressure	N/A
Vapour 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 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.

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

Sensitization	Teratogenicity	Reproductive toxicity	Acute toxicity
NO	NO	NO	NO

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: Nonregulated

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

14. Transport Information

DOT Hazard Class: Nonregulated

15. Regulatory Information

OSHA hazard communication standard (29 CFR 1910.1200)

Hazardous Non-hazardous