

UER Material Safety Data Sheet  
[29 CFR 1910.1200]

## Material Safety Data Sheet

May be used to comply with OSHA's Hazard communication Standard, 29 CFR 1910.1200. Standard must be consulted for specific requirements.

## US Department of Labor

Occupational Safety and Health Administration  
(Non-Mandatory Form) Form Approved OMB  
No.1218-0072

## SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Lithium Ion Rechargeable PACK

MODEL NAME: UP130033

This Material is complying with Section II of PI 965.

MANUFACTURER: UER Technology Corporation

ADDRESS: No.2, Kebei 6<sup>th</sup> Rd., Zhunan Township, Miaoli County 35053, Taiwan

TEL : +886-37-778898

## SECTION 2: INGREDIENT

## Battery Cell

HAZARDOUS INGREDIENTS	%	CAS NUMBER
Aluminum	10-40	7429-90-5
Lithium Cobaltate (LiCoO <sub>2</sub> )	25-40	2190-79-3
Polyvinylidene Fluoride(PVDF)	<5	24937-79-9
Copper	2-10	7440-50-8
Graphite(Natural graphite)/(Artificial graphite)	10-30	7440-44-0/ 7782-42-5
Electrolyte (Proprietary)	10-20	

## Circuit Module

HAZARDOUS INGREDIENTS	%	CAS NUMBER
Lead	0.001	7439-92-1
Mercury	0	7439-97-6
Chromium	0	7440-47-3
Cadmium	0	7440-43-9
Plastic case and SiO <sub>2</sub>	0	N/A

## Plastic Parts and Paints

HAZARDOUS INGREDIENTS	%	CAS NUMBER
Lead	<0.1	7439-92-1
Nickle	<0.01	7440-02-0
CFCs	0	75-69-4
Polychlorinated Biphenyls	0	1336-36-3

## SECTION 3: HAZARDS IDENTIFICATION

## POTENTIAL HEALTH EFFECTS

## PRIMARY ROUTES OF ENTRY

Skin contact, Skin absorption, Eye contact, Inhalation, and 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.

## SECTION 4: FIRST AID MEASURES

INHALATION, EYE CONTACT, and SKIN CONTACT : Not a health hazard.

## INGESTION

If swallowed, obtain medical attention immediately.

If exposure to internal materials within cell(pack) 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.

## SECTION 5: FIRE FIGHTING MEASURES

## 5.1 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.

## 5.2 EXTINGUISHING MEDIA

Use extinguishing media suitable for the materials that are burning.

## 5.3 SPECIAL FIREFIGHTING INSTRUCTIONS

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

## 5.4 FIREFIGHTING EQUIPMENT

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

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

## 6.1 ON LAND

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

## 6.2 IN WATER

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

**SECTION 7: HANDLING AND STORAGE**

## 7.1 HANDLING

No special protective clothing required for handling individual cells.

## 7.2 STORAGE

Store in a cool, dry place.

**SECTION 8: EXPOSURE CONTROLS//PERSONAL PROTECTION**

## 8.1 ENGINEERING CONTROLS

Keep away from heat and open flame. Store in a cool dry place.

## 8.2 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.

**SECTION 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

**SECTION 10: STABILITY AND REACTIVITY**

## 10.1 REACTIVITY

None

## 10.2 INCOMPATIBILITIES

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

## 10.3 HAZARDOUS DECOMPOSITION PRODUCTS

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

## 10.4 CONDITIONS TO AVOID

Avoid exposure to heat and open flame. Do not puncture, crush or incinerate.

**SECTION 11: TOXICOLOGICAL INFORMATION**

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

Sensitization: NO Teratogenicity: NO Reproductive toxicity: NO Acute toxicity: NO

This product does not contain any kinds of the following substances and halogen-type flame retardants including Chlorine and Bromide type harmful flame retardants which are listed in Appendix of TCO documents and relevant international ECO requirements:

Polybromated Biphenyls (PBB)  
Polybromated Diphenylethers (PBDE)  
Polychlorinated Biphenyls (PCBs)  
Polychlorinated Terphenyls (PCTs)  
Polychlorinated Paphthalene (PCN)  
Chlorinated Paraffins (C10-C13)  
Chlorofluorocarbons (CFCs)  
Polyvinyl Chloride (PVC)  
Carbon Tetrachloride

None of the following substances will be exposed, leaked, or emitted during transportation, storage or any operation and any temperature condition:

Chlorinated Fluorohydrocarbon (FCKW)  
Acrylonitrile  
Styrol  
Phenol  
Benzol  
Mercury of greater than 0.0001 wt% for alkaline battery  
Mercury of greater than 0.0005 wt% for other battery  
Lithium content of greater than 0.5g/battery cell  
Cadmium, lead, and other harmful heavy metal

And will comply with the regulation of 49 CFR (DOT regulation), International Air Transport Association (IATA), and Deuche Forschungsgemeinschaft (DFG) regarding concentrations of emitted substances.

This product does not contain mercury and cadmium.

Mercury content: N/A

Cadmium content: N/A

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

## SECTION 12: ECOLOGICAL INFORMATION

Some materials within the cell are bio-accumulative. Under normal conditions, these materials are contained and pose no risk to persons or the surrounding environment.

## SECTION 13: DISPOSAL CONSIDERATIONS

CALIFORNIA REGULATED DEBRIS

RCRA Waste Code: Non regulated

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

## SECTION 14: TRANSPORT INFORMATION

UER Lithium Ion batteries are considered to be "Rechargeable batteries" and meet the requirements of transportation by the U.S. Department of Transportation(DOT), International Civil Aviation Administration(ICAO), International Air Transport Association(IATA) special provision PI965/PI966 and belong to non-dangerous goods. Our packing transport are follow PI965 and PI966 provision. If special condition of packing transport, we are follow special provision A88, A99, A154 and A164 under the current IATA DGR54(2013).

## SECTION 15: OTHER INFORMATION

Package if damaged: do not load or transport.  
UER contact window: Gary Huang  
For more information, call 037-778898 ext: 3252

## SECTION 16: UN MANUAL OF TEST CRITERIA

All battery pack model pass UN38.3 test and package drop test.

NO.	Item	Result	Remark
1	Altitude Simulation (UN38.3-1)	PASS	
2	Thermal test (UN38.3-2)	PASS	
3	Vibration test (UN38.3-3)	PASS	
4	Shock test (UN38.3-4)	PASS	
5	Short Circuit Test (UN38.3-5)	PASS	
6	Impact test (UN38.3-6)	PASS	
7	Overcharge test (UN38.3-7)	PASS	
8	Forced Discharge test (UN38.3-8)	PASS	Cell only
9	1.2M Package Drop Test	PASS	

Even classified as lithium ion or lithium polymer cells and batteries (UN 3480), 2013 IATA Dangerous Goods Regulations 54th edition Packing Instruction 965 Section IB is applied. The product is handled as Non Dangerous Goods by meeting the following requirements. )

Lithium ion cells and batteries may be offered for transport are not subject to other additional requirements of The UN Regulations if they meet the following :

1. For cells, the Watt-hour rating is not more than 20 Wh;
2. For batteries, Watt-hour rating is not more than 100 Wh. The Watt-hour rating must be marked on the outside of the battery case except those manufactured before 1 January 2009 which may be transported without this marking until 31 December 2010;
3. Each cell or battery is of the type proven to meet the requirements of each test in the UN Manual of Tests and Criteria, Part III, subsection 38.3.

And they are out of scope for Special Provision A154 and comply with Special Provision A164.

## SECTION 17: REGULATORY INFORMATION

OSHA hazard communication standard (29 CFR 1910.1200)

☐ Hazardous ☒ Non-hazardous