

Safety Data Sheet for Product

Section 1 : Identification of substance and company undertaking

- 1.1 Product identifier: D181A Rechargeable Lithium-ion
Battery Pack (1UR18650R-N008F)
- 1.2 Relevant substance use: Epson Portable Scanners and Printers
- 1.3 Supplier details
- Distributor :* Epson America, Inc.
Address : 3840 Kilroy Airport Way
Long Beach, CA 90806-2452
United States
Telephone : 562.276.1369
FAX : 562.997.5799
- 1.4 Emergency telephone number : 562.276.1369

Section 2 : Hazard identification

- 2.1 GHS classification : The battery pack referenced herein is an exempt "article" as defined by the U.S. Occupational Safety and Health Administration (OSHA) and is exempt from the requirements of OSHA Hazardous Communication Standard, 29 CFR Subpart 1910.1200. This sheet is provided as a service to our customers.
- 2.2 Label elements
- Symbols :* None (exempt)
Signal word : None (exempt)
Hazard statements: None (exempt)
Precautionary statements: None (exempt)

Section 3 : Composition/information on ingredients

Substance/Preparation : Battery pack is a solid state plastic casing containing inert circuit board, interface terminals, safety devices, and a cavity for lithium-ion cells. The battery pack's lithium-ion cells contain chemical materials stored in a hermetically sealed metal laminated plastic case, and has passed UN38.3 testing to be certified under UN38.3 Part III.

Battery Cell Composition	CAS No.	% By Weight	Remark
Lithium Cobalt Nickel Aluminum Oxide	193214-24-3	40 - 50	LiCoNiAlO ₂
Graphite	7440-44-0	10 - 15	C
Ethylene Carbonate	96-49-1	10 - 15	C ₃ H ₄ O ₃
Copper	7440-50-8	5 - 10	Cu
Diethylene Carbonate	105-58-8	5 - 10	C ₅ H ₁₀ O ₃
Lithium Hexafluorophosphate	21324-40-3	1 - 5	LiPF ₆

Section 4 : First aid measures

4.1 Description of measures

For spilled internal cell materials

Eyes : Do not rub eyes. Immediately flush eyes with water continuously for 15 minutes. Seek medical attention immediately.

Skin : Remove contaminated clothes and shoes immediately. Immediately wash extraneous matter or contact region with soap and water.

Inhalation : Victim should blow out his/her nose and gargle. Seek medical attention immediately.

4.2 ***For spilled internal cell materials and battery cell***

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

Section 5 : Fire-fighting measures

5.1 Extinguishing media

Suitable media : Water spray, dry chemical, carbon dioxide, or alcohol resistant foam.

Unsuitable media : None

5.2 Special hazards from mixture : Corrosive gas may be emitted during fire.

5.3 Firefighters : Use PPE, extinguish fire from windward side, avoid a leeward position.

Section 6 : Accidental electrolyte release measures

6.1 Personal precautions, protective equipment, and emergency procedures

Non-emergency personnel : Eye and skin protection required during clean-up. Use proper ventilation.

Emergency responders: Use protective glasses and gloves. Move collected materials away from fire.

6.2 Environmental precautions : Do not release to sewer, surface, or ground water.

6.3 Methods and material for containment and clean-up

Spill containment : Use sponges to wipe-up electrolyte.

Spill clean-up : Clean area with dry cloth. Place waste in closed container for disposal. Wash hands with soap and water.

Other information : Do not dispose of waste to sewer.

6.4 Reference to other sections : Please refer to Section 13 for disposal.

Section 7 : Handling and storage

7.1 Precautions for safe handling

Recommendations : Keep out of reach of children and do not dismantle battery pack.
Do not give mechanical shock or deform. Do not use unauthorized charging method.

Occupation hygiene : During normal use no physical hazards are known.
Please refer to Section 6, if leakage occurs.

7.2 Safe storage : Do not store battery pack in high or freezing temperatures, or in high humidity.
Keep battery pack out of direct sunlight, away from heat and fire sources.
Do not store battery packs with oxidizing agents, explosives, metalware, water, sea water, strong acids, conductive packaging, or near sources of static electricity.
Make sure battery pack is dry before insertion into printer or scanner.

7.3 Specific end uses: Power source for designated scanners and printers

Section 8 : Exposure controls / personnel protection in case of electrolyte leakage

8.1 Control parameters : ACGIH has not specified electrolyte control parameter.

8.2 Exposure controls

Engineering controls : Proper ventilation

Personal protection : Respirator with air cylinder and dust mask.
If there is a possibility of electrolyte exposure, wear protective gloves, clothing, eye, and face protection.

Environmental exposure controls : Not established

Section 9 : Physical and chemical properties

9.1 Physical and chemical properties

Appearance : Rectangular solid in solid state plastic casing

Odor : None

Normal voltage : 3.6 volts DC

Section 10 : Stability and reactivity

10.1 Reactivity : Stable under normal temperature and pressure

10.2 Chemical stability : Stable under normal temperature and pressure

10.3 Hazard reactions : None under normal use

10.4 Conditions to avoid : High and freezing temperatures, and high humidity.
Crushing, deformation, or damage to container that may cause leakage of contents.

10.5 Incompatible materials : Oxidizing agents, explosives, metalware, water, sea water, strong acids, conductive packaging, and sources of static electricity.

10.6 Hazard decomposition : Acrid or harmful gas can be emitted during leakage or fire.

Section 11 : Toxicological information

11.1 Toxicological effects of electrolyte leakage

<i>Acute toxicity Oral LD₅₀ :</i>	>2000 mg/kg (rats)
<i>Acute toxicity Dermal LD₅₀ :</i>	Not specified
<i>Irritation Eye :</i>	Irritative to eyes
<i>Irritation Skin :</i>	Irritive to skin
<i>Corrosivity :</i>	Not specified
<i>Sensitization :</i>	Not specified
<i>Carcinogenicity :</i>	Not specified
<i>Mutagenicity :</i>	Not specified
<i>Chronic toxicity :</i>	Not specified

Section 12 : Ecological information

12.1 Toxicity :	No data available
12.2 Persistence and degradability :	No data available
12.3 Bio accumulative potential :	No data available
12.4 Mobility in soil :	No data available
12.5 PBT and vPvB assessment :	No data available
12.6 Other adverse effects :	No data available

Section 13 : Disposal considerations

13.1 Waste treatment methods :	Disposal should be in accordance with federal, state, and local requirements. Spent battery packs may be subject to recycling regulations.
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Section 14 : Transportation information

14.1 UN number :	3480 or 3481 (when contained in equipment or packed with equipment)
14.2 Proper shipping name :	Lithium ion batteries ("lithium ion batteries contained in equipment" or "lithium ion batteries packed with equipment")
14.3 Transport hazard class :	9
14.5 Environmental hazards :	Not applicable
14.6 Special precautions :	Battery pack has passed and satisfied the UN Manual of Tests and Criteria Part III, subsection 38.3, testing requirements.
14.7 ICAO TI / IATA-DGR Air Transport :	Packing instruction 965, 966, or 967 (as appropriate) with section IB or II

Section 15 : Regulation information (safety, health, and environmental)

15.1 U.S. Information

<i>OSHA Inhalation Hazard :</i>	Not Regulated (29 CFR 1910.1000(d)(1)(ii))
<i>TSCA Sec. 4(a) Final Test Rules :</i>	Not Regulated
<i>TSCA Sec. 5 SNUR :</i>	Not Regulated
<i>TSCA Sec.8(a) PAIR :</i>	Not Regulated
<i>TSCA Sec. 12(b) 1-time Export :</i>	Not Regulated
<i>Clean Air Act Sec. 112 HAP :</i>	Not Regulated
<i>EPCRA Sec. 313 (SARA Title III) :</i>	Not Regulated
<i>NFPA Hazard Rating :</i>	Health(1), Flammability(1), Instability/Reactivity(0), Other(0)
<i>HMIS Hazard Rating :</i>	Health(1), Flammability(1), Instability/Reactivity(0), PPE (D)
<i>California Proposition 65 :</i>	Not Regulated

15.2 Canada Information :

WHMIS Controlled Product : Not applicable (manufactured article)

15.3 Chemical safety

assessment : Chemical safety assessment on battery pack has not been conducted

Section 16 : Other information

This SDS adheres to U.S. regulatory requirements and standards and may not meet the regulatory requirements in other locations.

This is a revised Safety Data Sheet which replaces all prior U.S. SDS for this substance.

This "Safety Data Sheet" contains health, safety, and environmental information. It does not replace any precautionary language or uses and disposal information which may accompany the substance. The information contained herein is believed to be accurate at the time of preparation, but should only be used as a guide. Epson does not warrant the completeness or accuracy of the information contained herein. It is subject to revision from time to time.