

Lithium HPL – Primary Metal Cells and Batteries

Section 1 Identification:		
1.1 Identification:		
Product Form	Article	
Trade Name	Procell Lithium HPL Cells and Batteries (Primary Metal Cells and Batteries)	
Description	Procell Branded Consumer & OEM Lithium Battery	
Physical Description (IEC Designation)	PC CR2 (CR15H270), PC123 (CR17345), CR17450	
Document ID	PSDS – Procell Li HPL	
Date Prepared	1/1/2025	
1.2 Recommended Use and Restrictions on use:		
Use	Portable power source for electronic devices.	
Restrictions on use:	No information available	
Section 1.3 SUPPLIER/ MANUFACTURER'S INFORMATION		

	Duracell, a Berkshire Hathaway Company
Manufacturer's Name and	U.S. Operations, Inc., 14 Research Drive Bethel, CT USA 06801
Address	
	Duracell (China) Ltd.
	Hongtu High & New Technology Development Zone,
	Nan Cheng District, Dongguan, 523080 Guangdong, China
	Duracell (Jiangxi) Technologies Co., Ltd.
	No. 819 Factory, Huangtang East Street, Linkong Economic Zone, Nanchang
	City, Jiangxi Province, China
US Telephone	(203) 796-4000
Information Contact	SDS@duracell.com
Section 1.4 Emergency Telepho	ne number
Emergency Telephone	1-703-527-3887 (Collect) (Chemtrec)
Global Website	www.procell.com

#### Section 2: HAZARD IDENTIFICATION

#### 2.1 Classification of the substance or mixture or article

The batteries are not hazardous when used according to the instructions of manufacturer under normal conditions. In case of abuse, there's risk of rupture, fire, heat, leakage of internal components, which could cause casualty loss.

#### 2.2 GHS Label elements, including precautionary statements GHA Pictograms: NONE

GHS Signal Word: NONE

HAZARDS: Battery may explode or leak when heated, disassembled, short-circuited, recharged or exposed to fire or high temperature, or inserted incorrectly. Keep coin batteries out of reach of children.

GHS classification: None required according to ranking criteria. PSDS requirements and GHS classification criteria do not apply to articles or products (such as batteries) that have a fixed shape and are not intended to release a chemical. Article exemption is found in 274 of the NSW Work Health and Safety Act 2011 Section 1.3 and states: The GHS applies to pure substances, their diluted solutions and mixtures.

Labeling: <u>Required for Small Cell or Battery</u>: Keep away from children. If swallowed, consult a physician immediately. ANSI or IEC requirements



#### Section 3: COMPOSITION/INFOMRATION ON INGREDIENTS



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INGREDIENTS	CAS NUMBER	Amount		
Lithium Alloy	7439-93-2	1-6%		
Manganese Dioxide	1313-13-9	12-50%		
Organic Electrolyte		2–5 %		
1,2-Dimethoxyethane solvent	110-71-4	1-4%		
Lithium Trifluoromethanesulfonate salt	33454-82-9	0.1-1%		
Polytetrafluoroethylene (PTFE)	9002-84-0	0.1-1%		
Stainless Steel	65997-19-5	8-15%		
Other No	18%			

### Section 4: FIRST AID MEASURES (In case of electrolyte leakage from the battery.)

(in case of electrolyte)	eakage from the battery.)
Eye Contact	Flush thoroughly with copious amounts of running water for at least 15 minutes. Hold eyelids open to assure thorough flushing. Seek immediate medical attention.
Skin Contact	Immediately remove contaminated clothing and shoes while flushing with water. Continue to flush exposed skin with water for at least 15 minutes. Seek medical attention if irritation develops and persists. Launder contaminated clothing before reuse and discard shoes and other items that cannot be decontaminated.
Ingestion	Required for Small Cell or Battery: Keep away from children. If swallowed, consult a physician immediately.
	A damaged battery will release concentrated and caustic potassium hydroxide.
Note to Physician	For information on battery identification and treatment, call the 24- hour <b>National Battery Ingestion Hotline (800- 498-8666)</b> . Additional treatment information is available from the <b>National Capital Poison Control Center Button</b> <b>Battery Ingestion Triage and Treatment Guideline</b> : <u>https://www.poison.org/battery/guideline</u> . Consider radiographs to confirm passage if battery passage not observed in 10-14 days.
Poison Center World Directory	http://globalcrisis.info/poisonemergency.html#AAA
If swallowed	DO NOT GIVE IPECAC. Do not induce vomiting. Seek medical attention immediately and call 24-hour NATIONAL BATTERY INGESTION HOTLINE (800-498-8666) for assistance with battery identification and treatment. Additional treatment information is available from the National Capital Poison Control Center Button Battery Ingestion Triage and Treatment Guideline: <u>https://www.poison.org/battery/guideline</u> . Attempt to determine battery imprint code (or diameter) of companion or replacement battery. Other than honey, do not give anything by mouth.
Inhalation	Contents of leaking battery may be irritating to respiratory passages. Move to fresh air. Seek medical attention if irritation persists.

Section 5: FIRE FIGHTING MEASURES		
Substance or Mixture Specific Hazards	Batteries may rupture or leak if involved in a fire. Use any extinguishing media appropriate for the surrounding area. For incipient (beginning) fires, carbon dioxide extinguishers or copious amounts of water are effective in cooling burning lithium metal batteries. If fire progresses to where lithium metal is exposed (deep red flames), use a Class D extinguisher suitable for lithium metal.	
Fire Fighting Measures	Remove container from fire area if this can be done without risk. Avoid inhaling the material or combustion products. Keep downwind and away from low areas.	
Advice for Fire-Fighters	Large quantities of batteries involved in a fire will rupture and release corrosive potassium hydroxide. Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing. Fight fire from a distance or protected area. Cool fire-exposed containers to prevent rupture. Do not breathe smoke, gases or vapors generated	

#### Section 6: CONTROL MEASURES FOR SPILLAGE OR LEAKAGE

#### (In case of electrolyte leakage from the battery.)

Spills of Large Quantities of Loose Batteries (unpackaged)	Notify spill personnel of large spills. Irritating vapors may be released from leaking or ruptured batteries. Spread batteries apart to stop shorting. Eliminate all ignition sources. Clean-up personnel should wear appropriate PPE to avoid eye and skin contact and inhalation of vapors or fumes. Increase ventilation.
Personal Precautions, Protective Equipment and Emergency Procedures	Clean-up personnel should wear appropriate protective clothing to prevent eye and skin contact and inhalation of dust. Ventilate area of spill. Avoid creating airborne dust. Eliminate all sources of ignition. Keep spilled material away from combustible materials.
Environmental Precautions	Avoid release to the environment without proper government permits. Prevent entry into storm sewers and waterways. Report spills as required by local and national regulations.

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Methods and Material for Containment and Cleaning Up Containment and Cleaning Up

Section 7: HANDLING AND STORAGE				
Precautions for Safe Handling	Do not short circuit, charge, dispose into fire or install incorrectly.			
	Do not solder directly onto batteries.			
	Do not mix different type or brand of batteries.			
Conditions for Safe Storage, Including any Incompatibilities	Store in cool, dry place in original packaging. Do not store with acids. Store away from reducing agents. <u>Operating Temperature</u> Discharge: -20°C to 50°C			
	Storage Temperature (for shipping state)			
	3 months -20°C to 45°C 1 year -20°C to 45°C			

#### Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

This product is considered an article that does not release or result in exposure to a hazardous chemical under normal conditions of use.

No engineering controls or personal protective equipment (PPE) is required.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES		
Physical Description	Article; Solid, metallic color	
Chemical Properties	Not Applicable	

Section 10: STABILITY AND REACTIVITY		
Reactivity	Stable and Non-Reactive under 60°C.	
Chemical Stability	Cells/batteries may explode or leak and cause burn injuries when recharged, burnt/incinerated, mixed with different types of batteries, inserted backwards into appliances, or disassembled.	

#### Section 11: TOXICOLOGICAL INFORMATION

The chemicals in this product are contained in a sealed can and exposure does not occur during normal handling and use.

Venting cells may have ether smell. If strong smell persists, or cell leakage is observed, it should be disposed of per local regulations. Mercury, Lead and Cadmium are not used in the cell. (Note: If traces are found, they may be from impurity of the raw materials, not added as part of the recipe.)

#### Section 12: ECOLOGICAL INFORMATION

The chemicals in this product are contained in a sealed can and exposure does not occur during normal handling and use.

Venting cells may have ether smell. If strong smell persists, or cell leakage is observed, it should be disposed of per local regulations. Mercury, Lead and Cadmium are not used in the cell. (Note: If traces are found, they may be from impurity of the raw materials, not added as part of the recipe.)

#### Section 13: DISPOSAL CONSIDERATIONS (GHS - Section 13)

Collect and Proper Disposal	Dispose of used (or excess) batteries in compliance with federal, state/provincial, and local regulations. Do not accumulate large quantities of used batteries for disposal as accumulations could cause batteries to short-circuit. Do not incinerate.	
Requirements of EU	After use, the cells and/or batteries must be disposed separately from unsorted municipal waste and delivered to a commercial or authorized collection/recycling facility.	X
Requirements of Brazil	After use, the cells and/or batteries must be delivered to the commercial establishment or authorized technical assistance network.	X

#### Section 14: TRANSPORT INFORMATION



## **PROCELL**<sup>®</sup> PSDS – Product Safety Data Sheet

PROFESSIONAL BATTERIES	Lithium	HPL – Primary Met	al Cells and	Batteries
UN Identification	UN3090 – Lithium Metal Batteries only			
Number/Shipping Name	UN3091 – Lithium Batteries in Equipment, or Lithium Batteries with Equipment			
UN38.3 TEST Summary Documents		UN38.3 Test Summary Documents that are required by the UN Model Regulations, can be requested by sending an email request to UN38.3_duracell@duracell.com.		
Regulatory Status	Procell Lithium HPL Batteries are manufactured and distributed according to current IATA/ICAO regulations. Procell Lithium Batteries pass the tests defined in UN model regulation section 38.3. The shipping cartons for all Duracell Lithium cells/batteries are designed to prevent short circuit, displacement within the package, damage to the batteries and release of the contents of the package. Persons preparing or distributing lithium batteries for transportation are required by regulation to be trained in their level of responsibility. The information in this section has been provided for clarification. The transportation of lithium metal batteries is regulated by ICAO, IATA, IMO, US DOT, ADR			
US DOT - SP	29, A54, A100, A101			
ADR - SP	188, 230, 310, 636, 656	188, 230, 310, 636, 656		
Air Transport IATA 66 <sup>th</sup> edition	Packaging Instructions: PI 968 – PI 970			
Marine/Water Transport (IMDG) Special provisions	188, 230, 310, 957			
ANTT (National Land Transportation Agency)	Regulation 5232, 14 Dec 2016; SP 188, 230, 310, 376; Packaging Instructions P903 Complementary Instructions 5947/, 1 July 2021			
Lithium content	Catalog No.	Total Lithium Content (grams)	Туре	Total Cell/BatteryWeight (grams)
	123	0.55	Cell	17
	CR2	0.26	Cell	11
	CR17450	0.62	Cell	24
Free and the second	CHEMTREC 24-Hour Emergency Response Hotline			
Emergency Transportation Hotline	Within the United States, call: 1-800-424-9300			
	Outside of the United States, call: 1-703-527-3887 (Collect)			

#### Section 15: REGULATORY INFORMATION

GHS Article Exception	Section 1.3.2.1		
COMPLIANCE			
Declarable Substances (IEC 62474 Criteria 1) EU REACH SVHC	1,2-Dimethoxyethane (CAS#110-71-4)		
Applicable Battery Industry Standards	ANSI C18.3M Part 1, ANSI C18.3M Part 2, ANSI C18.4, IEC 60086-1, IEC 60086-2, IEC 60086-4		
Mercury Free Battery (ANSI C18.4M <5ppm)	No Mercury 无汞		
P.R.C. Provision on Mercury Content Limitation for Batteries (GB 8897.5-2005, MOD, Section 9.1(e)	No Mercury added.		
P.R.C. Mercury Free Battery (GB 24427-2009) < 1ppm	No Mercury Added 无汞		
Small Cell or Battery (ANSI C18.1M Part 2; IEC 60086-4)	Sizes: 1/3N, 123, 28L, CR2 fit inside a specially designed test cylinder 2.25 inches (57.1mm) long by 1.25 inches (31.70 mm) wide		

#### Section 16: OTHER INFORMATION



**PSDS – Product Safety Data Sheet** 

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A Lithium battery is a safe consumable product under recommended or normal usage conditions. It is not a dangerous substance or mixture. There are no PSDS supply requirements for Alkaline batteries by the Globally Harmonized System (GHS). Duracell is providing this PSDS as a service to its customers and other users who may make use of alkaline batteries in the workplace. According to standard NR-26 "Safety Signaling", manufacturers or, in the case of import, suppliers of chemical products in the domestic market must make available the PSDSs of chemical products classified as non- hazardous, but whose intended or recommended uses may give rise risks to the safety and health of workers.

**Disclaimer:** This PSDS is intended to provide a summary of our knowledge and guidance regarding the use of this product. The information contained here has been compiled from sources considered by Duracell US Operations, Inc. to be dependable and is accurate to the best of the Company's knowledge. It is not meant to be an all-inclusive document on worldwide hazard communication regulations. This information is offered in good faith. Each user of this material needs to evaluate the conditions of use and design the appropriate protective mechanisms to prevent employee exposures, property damage, or release to the environment. Duracell US Operations, Inc. assumed no responsibility for injury to the recipient or third parties, or any damage to any property resulting from the misuse of the product.

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