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SAFETY DATA SHEET

The Safety Data Sheet is supplied as a service to you. For other related information, please visit:
http://www.rayovac.com

1. IDENTIFICATION

PRODUCT NAME:	Lithium Ion Battery
SIZES:	All rechargeable sizes
EMERGENCY HOTLINE:	800-424-9300 (24 hr, Chemtrec)
EDITION DATE:	04/18/2016

2. HAZARD IDENTIFICATION

We would like to inform our customers that these batteries are exempt articles and are not subject to the 29 CFR 1910.1200 OSHA requirements, Canadian WHMIS requirements or GHS requirements.

Emergency Overview

OSHA Hazards-not applicable
Target Organs-not applicable
GHS Classification-not applicable
GHS Label Elements, including precautionary Statement-not applicable
Pictogram-not applicable
Signal words-not applicable
Hazard statements-not applicable
Precautionary statements-not applicable

3. COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT NAME	CAS #	%	TLV*/**TWA
Lithium Cobalt Nickel Dioxide	12031-55-1; 12031-65-1	<25	None Established
Steel	---	15-30	None Established
Lithiated Manganese Dioxide	12057-17-9	<25	5.0 mg/m3 (Mn)
Graphite	7782-42-5	3-5	15 mppcf
Copper	7440-50-8	5-15	0.1 mg/m3 (Fume)
Nickel	7440-02-0	2-5	1.0 mg/m3 (elemental)
Aluminum	7429-90-5	2-8	15 mg/m3 (Dust)
Lithium Hexafluorophosphate	21324-40-3	1-5	None Established
Ethlyene Carbonate	96-49-1	<15	None Established
Methyl Ethyl Carbonate	623-53-0	<15	None Established
Dimethyl Carbonate	616-38-6	<15	None Established

Diethyl Carbonate	105-58-8	<15	None Established
Methyl Acetate	79-20-9	<15	200 ppm
Plastic-ceramic	---	<20	None Established

**Source: OSHA 29 CFR 1910.1000 Table Z-1, 2 or 3 11-01-2012*

4. First Aid Information

THRESHOLD LIMIT VALUE (TLV) AND SOURCE: NA

EFFECTS OF OVEREXPOSURE: None in normal use

EMERGENCY FIRST AID PROCEDURES:

Skin and Eyes:

In the event that battery ruptures, flush exposed skin with flowing lukewarm water for a minimum of 15 minutes. Get immediate medical attention when eyes may have been exposed to battery contents from a ruptured battery

5. Fire Fighting Measures

FLASH POINT: NA

LOWER (LEL): NA

FLAMMABLE LIMITS IN AIR (%): NA

UPPER (UEL): NA

EXTINGUISHING MEDIA: Use foam, dry powder, Lithex™, or water* as appropriate.

AUTO-IGNITION: NA

SPECIAL FIRE FIGHTING PROCEDURES: As with any fire, wear self-contained breathing apparatus to avoid inhalation of hazardous decomposition products (See section 2). Water will cool the fire but may react with available lithium in the batteries producing flammable hydrogen.

SPECIAL FIRE OR EXPLOSION HAZARDS: DO NOT RECHARGE. As a typical sealed battery they may rupture when exposed to excessive heat. Rupture may expose lithium to moisture causing it to react or release flammable or corrosive materials. Do not accumulate undischarged batteries together.

****Do not use water on these batteries if fighting fire within an enclosed area. Evolving hydrogen may build up and auto-ignite.***

6. Accidental Release Measures

TO CONTAIN AND CLEAN UP LEAKS OR SPILLS: In the event of a battery rupture, prevent skin contact and contact with moisture or flammable/combustible materials. If possible, collect all released material in a metal container. Place damaged cells in mineral oil or graphite if available.

REPORTING PROCEDURE: Report all spills in accordance with Federal, State and Local reporting requirements.

7. HANDLING AND STORAGE

Store batteries in a dry place. Storing unpackaged cells together with other combustible materials could result in cell shorting and fire. Do not recharge. Do not puncture or abuse.

8. EXPOSURE CONTROL/PERSONAL PROTECTION

RESPIRATORY PROTECTION (SPECIFY TYPE):		NA
VENTILATION:	Local Exhaust:	NA
	Mechanical (General):	NA
	Special:	NA
	Other:	NA
PROTECTIVE GLOVES:		NA
EYE PROTECTION:		NA
OTHER PROTECTIVE CLOTHING:		NA

9. PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point @ 760 mm Hg (°C):	NA	Percent Volatile by Volume (%):	NA
Vapor Pressure (mm Hg @ 25°C):	NA	Evaporation Rate (Butyl Acetate = 1):	NA
Vapor Density (Air = 1):	NA	Physical State:	NA
Density (grams/cc):	NA	Solubility in Water (% by Weight):	NA
pH:	NA	Appearance and Odor:	Geometric solid object

10. STABILITY AND REACTIVITY

STABLE OR UNSTABLE:	Stable
INCOMPATIBILITY (MATERIALS TO AVOID):	NA
HAZARDOUS DECOMPOSITION PRODUCTS:	NA
DECOMPOSITION TEMPERATURE (0°F):	NA
HAZARDOUS POLYMERIZATION:	Will Not Occur
CONDITIONS TO AVOID:	Avoid electrical shorting, puncturing or deforming

11. TOXICOLOGICAL INFORMATION

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12. ECOLOGICAL INFORMATION

Consumers should dispose of discharged batteries through waste disposal services or legitimate collection outlets. Those collecting batteries should follow state and federal regulations. Partially discharged damaged batteries can overheat and cause fires in the presence of other combustible materials.

13. DISPOSAL CONSIDERATIONS

Always comply with Federal, state or local requirements. Hazardous waste generators should check with the USEPA or their state authorized agency for guidance.
http://www.nema.org/Policy/Environmental-Stewardship/Documents/Companies%20Claiming%20to%20Recycle.MARCH2005.pdf

14. TRANSPORTATION INFORMATION

TRANSPORTATION-SHIPPING: These are Lithium Ion (Li-ion) batteries, also known as secondary or rechargeable lithium. These Li-ion, unless exempted, are regulated as Class 9, see UN3480. Our Li-ion meet the general regulatory requirements for shipping Li-ion batteries and, when in our original packaging, meet the requirements listed in the Special Instructions or Packing Instructions noted below and may be classified as non-dangerous goods for transportation.
USDOT – See 49 CFR 173.185.
IMO/Ocean – See Special Provisions 188 and 230.
ICAO/IATA – These Rayovac Li-ion batteries can be shipped by air in accordance with International Air Transport Association (IATA) 57th edition. These Li-ion batteries are under 20WH and can ship as Section II or 1B pending count or gross weight limitations per package. See Packing Instructions: PI 965 (Batteries), PI 966 (Batteries, packed with equipment) and PI 967 (Batteries, contained in equipment) as applicable. Note Li-ion must be offered for transport at a state of charge (SoC) not exceeding 30% of their rated design capacity.

15. REGULATORY INFORMATION

SARA 313: Notification is not required because these products are article(s) that do not release a covered toxic chemical under the normal conditions of storage, use, or handling.

NOTICE: The information and recommendations set forth are made in good faith and are believed to be accurate at the date of preparation. Spectrum Brands Inc. (Rayovac) makes no warranty expressed or implied.