

Lithium Primary Battery

Material Safety Data Sheet



Issue date: 2019.01.10

The batteries are exempt articles and are not subject to the OSHA Hazard Communication Standard Requirement. This sheet is only provided as technical information and is referred normal use of the product in question. RND makes no warranty expressed or implied.

Product and Company Identification

<ul style="list-style-type: none"> ● Product Name Coin type Lithium Manganese-Dioxide Batteries(CR) 	Sizes All	Date of preparation Jan.10, 2019
<ul style="list-style-type: none"> ● Company: Distrelec Group AG, c/o TeCo CDC BV 	Telephone Numbers: +41 44 944 99 11 +41 44 944 99 88	
<ul style="list-style-type: none"> ● Address: De Tweeling 28 NL-5215 MC's- Hertogerbosch The Netherlands 		

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Hazards Identification

This contains lithium, organic solvent, and other combustible materials. For this reason, improper handling of the battery could lead to distortion, leakage*, overheating, explosion, or fire and cause human injury or equipment trouble. Please strictly observe safety instructions.

* - leakage is defined as an unintended escape of liquid from a battery

First-Aid Measures

None unless internal materials exposure. If contents are leaked out, observe following instructions

- **Inhalation** - Fumes can cause respiratory irritation. Remove to fresh air and consult a physician
- **Skin** - Immediately flush skin with plenty of water. If itch or irritation by chemical burn persists, consult a physician
- **Eyes** - Immediately flush eye with plenty of water for at least 15 minutes. Consult a physician immediately
- **Ingestion** - If swallowing a battery, consult a physician immediately. If contents come into mouth, immediately rinse by plenty of water and consult a physician

Fire Fighting Measures

- **Extinguishing media** - Extinguisher of alkaline metal fire is effective. Plenty of cold water is also effective to cool the surrounding area and control the spread fire. But hydrogen gas may be evolved by the reaction of water and lithium and it can form an explosive mixture. Therefore in the case that lots of lithium batteries are burning in a confined space, use a smothering agent
- **Fire fighting procedure** - Use self-contained breathing apparatus and full protective gear not to inhale harmful gas

Accidental Release Measures

N/A

Handling and Storage

- **Handling** - Never swallow. Never charge. Never heat. Never expose to open flame. Never disassemble. Never reverse the positive and negative terminals when mounting. Never short-circuit the battery. Never weld the terminal or wire to the body of the battery directly. Never use different batteries together. Never touch the liquid leaked out of battery. Never bring fire close to battery liquid. Never keep in touch with battery
- **Storage** - Never let the battery contact with water. Never store the battery in hot and high humid place

Exposure Controls, Personal Protection

Respiratory Protection		N/A
Ventilation	Local Exhaust	N/A
	Mechanical	N/A
	Special	N/A
	Other	N/A
Eye Protection		N/A
Protective Glove		N/A
Other protective clothing		N/A

Stability and Reactivity

- **Stability** - Stable
- **Incompatibility** - Water
- **Hazardous polymerization** - Will not occur
- **Condition to avoid** - See Handling and Storage section
- **Hazardous decomposition or byproducts** - Hydrogen

Toxicological Information

N/A

N/A = Not Applicable

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Ecological Information

N/A

Disposal condition

The battery may be regulated by national or local regulation. Please follow the instructions of proper regulation. As electric capacity is left in a discarded battery and it comes into contact with other metals, it could lead to distortion, leakage, overheating, or explosion, so make sure to cover the (+) and (-) terminals with friction tape or some other insulator before disposal.

Transportation Information

- **Shipping name (UN Number)** - lithium metal batteries(UN3090)
lithium metal batteries packed with equipment(UN3091)
lithium metal batteries contained in equipment(UN3091)
- **Hazard classification** - class 9 (Miscellaneous)

Organizations governing the transport of lithium batteries

Area	Method	Organization	Special Provision
International	Air	IATA, ICAO	Packing instruction 968 section II
International	Marine	IMO	SP188
U.S.A	Air, Rail, Road, Marine	DOT	49 CFR Section 173.185

Their regulations are based on the UN Recommendations. Each special provision provides specifications on exceptions and packaging for lithium metal batteries shipping. The products can be transported as "Non Dangerous Goods" when they meet the requirements of packing instruction 968 Section II of IATA-DGR(59th Edition) or SP188 of IMDG Code (Amdt. 38-16) 2016 Edition.

Regulatory Information

Major applicable regulations for the transportation of lithium metal cells and batteries are as follows

- UN Model Regulations: United Nations ST/SG/AC.10/11/Rev.6/Section 38.3, Recommendations on the Transport of Dangerous Goods
- International Civil Aviation Organization(ICAO): Technical instructions for the Safe Transport of Dangerous Goods by Air, 2016 edition
- International Air Transport Association(IATA): Dangerous Goods Regulations, 59th Edition
- International Maritime Organization(IMO): International Maritime Dangerous Goods(IMDG) Code,(Amdt. 38-16) 2016 edition

Other Information

If you want further information, please contact RND - rnd@distrelec.com

N/A = Not Applicable