Lithium Battery Safety Fact Sheet

Identifying lithium from other batteries

The information below can assist in distinguishing various types of lithium batteries from other types of batteries.

Single-use non-rechargeable lithium batteries

Lithium metal

Labelled: Lithium

Typical use: Replacement for alkaline AA, AAA, C, D, button and 9V batteries.

Hazard: Contains lithium metal which reacts instantly with water, and moisture in the air. More dangerous than lithium-ion batteries.

Other types of single-use non-rechargeable batteries

Alkaline

Labelled: Alkaline

Typical use: Toys, remote controls, portable radios.

Hazard: Skin irritation if leaking or open

Rechargeable lithium batteries

Lithium-ion

Labelled: Lithium-ion, Li-ion

Typical use: Laptops, power tools, cameras, portable devices.

Hazard: Overheating and fire from impact, damage, exposure to water, heat or electrical overload.

Lithium-polymer

(A type of lithium-ion battery)

Labelled: Lithium-ion, Li-po

Typical use: Mobile phones, handheld electronics and other applications where low weight is important.

Hazard: fire, explosion, toxic chemical exposure and pollution if ruptured.

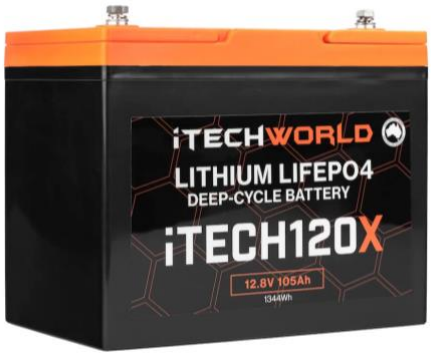
Rechargeable lithium batteries

Lithium iron phosphate

Labelled: LiFePO4

Typical use: Electric vehicles and large-scale energy storage and back-up power applications.

Hazard: Fire, exposure to toxic fumes and chemical burns if damaged or handled incorrectly.



Other types of rechargeable batteries

Lead-acid

Labelled: Lead-acid or Pb

Typical use: Automotive and marine ignition, portable storage, and small-scale backup power supply.

Hazard: Acid burns when handled incorrectly.

Nickel metal hydride

Labelled: NiMH

Typical use: Cordless phones, handheld radios, digital cameras, GPS, MP3 players.

Hazard: Respiratory, skin and eye irritation if opened or burned.

Nickel cadmium

Labelled: Ni-Cd

Typical use: Large scale energy storage, power tools, small-scale cordless devices

Hazard: Cadmium oxide is a toxic substance and harmful if swallowed or inhaled. Potassium hydroxide is corrosive and can cause skin and eye irritation and burns.

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