Lithium-Ion Battery Safety



Lithium-ion batteries supply power to many kinds of devices including smart phones, laptops, e-scooters and e-bikes, e-cigarettes, smoke alarms, toys, and even cars. If not used correctly, or if damaged, these batteries can catch on fire or explode.

The Problem

- These batteries store a large amount of energy in a small amount of space.
- Sometimes batteries are not used the right way; batteries not designed for a specific use can be dangerous.
- Like any product, a small number of these batteries are defective. They can overheat, catch fire, or explode.

Safety Tips

- Purchase and use devices that are listed by a nationally recognized testing laboratory.
- Always follow the manufacturer's instructions.
- Only use the battery that is designed for the device.
- Only use the charging cord that came with the device.
- Do not charge a device under your pillow, on your bed, or on a couch.
- Do not keep charging the device or device battery after it is fully charged.
- Keep batteries at room temperature when possible. Do not charge them at temperatures below 32°F (0°C) or above 105°F (40°C).
- Store batteries away from anything that can catch fire.

Signs of a Problem

Stop using the battery if you notice these problems: odor, change in color, too much heat, change in shape, leaking, or odd noises. If it is safe to do so, move the device away from anything that can catch fire. Call **9-1-1**.

Recycle Batteries Responsibly

Don't throw lithium-ion batteries in the trash or regular recycling bins because they could start a fire. Recycle your device or battery at a safe battery recycling location. Visit **call2recycle.org** to find a recycling spot near you.

Charging an E-bike

Charge your battery in a flat, dry area away from children, direct sunlight, liquids, tripping hazards, and in a location where the e-bike is not at risk of falling.



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CHARGE into Fire Safety™

Lithium-Ion Batteries in Your Home



Most of the electronics we use in our homes every day are powered by lithium-ion batteries. In fact, most everything that's rechargeable uses this kind of battery.

- e-bikes
- e-vehicles
- e-scooters
- golf carts
- hoverboards
- power tools
- laptops
- smart watches
- tablets
- mobile phones
- e-cigarettes/ vapes
- headphones
- cordless vacuum cleaners
- remote control cars
- drones
- toys

LITHIUM-ION BATTERIES store a lot of energy in a small place. These batteries can overheat, start a fire, or explode if overcharged or damaged. By learning how to **BUY**, **CHARGE**, and **RECYCLE** these batteries safely, you can help prevent a fire in your home.



BUY only listed products. When buying a product that uses a lithium-ion battery look for a safety certification mark such as UL, ETL, or CSA. This means it meets important safety standards.



CHARGE devices safely. Always use the cables that came with the product to charge. Follow the instructions from the manufacturer. Buy new chargers from the manufacturer or one that the manufacturer has approved.



CHARGE your device on a hard surface. Don't overcharge your device. Unplug it or remove the battery when it's fully charged.



STOP using your device right away if the battery smells weird, gets too hot, makes popping noises, changes in shape or color. If it is safe, move the device away from anything that can catch fire. Call **9-1-1**.



RECYCLE batteries responsibly. Don't throw lithium-ion batteries in the trash or regular recycling bins because they could start a fire.



RECYCLE your device or battery at a safe battery recycling location. Visit **call2recycle.org** to find a recycling spot near you.

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