



U.S. Department of Transportation

Pipeline and Hazardous Materials Safety Administration

CONSUMER SAFETY TIPS FOR
LITHIUM-ION BATTERY-POWERED
**MICROMOBILITY
DEVICES**



LiTHIUM
BATTERY
SAFETY

Did you know that the lithium-ion batteries powering ebikes and scooters are hazardous materials? Lithium batteries are regulated by several agencies, including the U.S. Department of Transportation (DOT) Pipeline and Hazardous Materials Safety Administration (PHMSA), which regulates the transportation of hazardous materials.

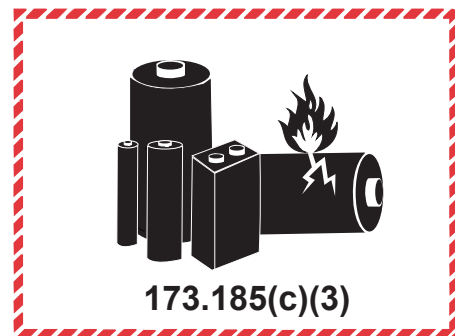
Lithium-ion batteries store substantial amounts of energy. If not properly cared for, they have the potential to cause fires that are difficult to extinguish. Fortunately, there are precautions you can take to prevent lithium-ion battery fires.

USE AND CARE

- Handle your devices with care! Banging, hitting, and otherwise abusing these devices can damage the lithium-ion batteries that power them—dramatically increasing the risk of a fire.
- The National Fire Prevention Association (NFPA) recommends to always use the manufacturer's charging cord and follow manufacturer instructions for charging and handling. Mixing power cords between devices may cause the battery to overheat.
- The New York Fire Department (FDNY) recommends against leaving a battery charging overnight or unattended, on your bed, or near a couch. Be careful not to block your primary way in or out of a room with your device.

SHIPPING

- If you're shipping lithium batteries—including inside of a micromobility device—be sure to follow all U.S. Postal Service (USPS) and DOT requirements, including USPS Publication 52 and the Hazardous Materials Regulations (49 CFR Parts 171 – 180).
- Although not always required when batteries are shipped while installed in equipment, generally packages should be marked with the lithium battery handling marking, including the applicable UN ID number (i.e., UN3171).
- Always declare hazmat shipments, like those containing lithium-ion batteries, to the carrier (see 49 C.F.R. § 171.1 (b)).
- If you need a replacement battery, beware of counterfeits! Counterfeit batteries are often not tested to the required standards and present greater risks of fire. To verify that a product is not counterfeit, contact the manufacturer for the test report.





DISPOSAL

- Never throw lithium batteries into the trash or general recycling. Instead, take them to your local battery recycler or hazardous waste collection center.
- Having trouble finding the right place to dispose of your lithium batteries? Refer to the U.S. Environmental Protection Agency's (EPA) webpage for locating appropriate recycling channels in your area: www.epa.gov/recycle/used-household-batteries.

IN AN EMERGENCY

Damaged or unstable batteries can overheat, leading to an explosive, aggressive fire that spreads rapidly, can reignite, and is challenging to extinguish.

- Signs that your battery may be faulty include:
 - Intense heat that does not dissipate quickly
 - Odor, leaks, changes in color, or noises emanating from the battery.
- In case of fire, remember that fire extinguishers may not work on lithium-ion batteries fires, while water may not prevent a battery from burning and spreading.
- If you observe a lithium-ion battery fire, call 911.

LEARN MORE

Learn more about lithium battery safety by visiting phmsa.dot.gov/lithiumbatteries, or visit our Check the Box page for more on undeclared hazmat: transportation.gov/check-the-box.

Additional safety resources are available from the NFPA (<https://www.nfpa.org/Public-Education>) and FDNY (fdnysmart.org/be-fdnysmart-when-using-any-devices-powered-by-lithium-ion-batteries/).

For USPS requirements, visit Publication 52 here: <https://pe.usps.com/text/pub52/welcome.htm>.

For additional information contact:
The Hazardous Materials Info Center

1-800-HMR-4922

(1-800-467-4922)

Email: infocntr@dot.gov

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