

# CHECK THE BOX FOR LITHIUM BATTERIES



## LITHIUM BATTERIES ARE CONSIDERED A HAZARDOUS MATERIAL.

Do you need to ship lithium batteries or devices containing them—like a laptop, cell phone, even a vape or e-cigarette?

Most consumer electronics contain smaller batteries—batteries that do not exceed 100 Wh for lithium ion batteries or 2g of lithium content for lithium metal batteries. If this information isn't marked on the battery itself, check the manufacturer's documentation to confirm the size!



Fortunately, smaller batteries are easy to ship if you follow the packaging and communication guidelines below. Just remember that larger batteries (that exceed the amounts listed above) have different requirements not covered in this guide.

See [49 CFR 173.185](#) for specifics!

## PACKAGING

- ✓ Always package batteries and devices to protect against short circuiting, shifting within the package/box, and accidental activation.
- ✓ Keep batteries and devices in the original, manufacturer-sealed packaging. If that is not possible, use a non-metallic inner packaging that completely encloses the batteries and keeps them separate from other devices or conductive material.
- ✓ Devices with batteries installed must be secured inside the packaging to prevent shifting or accidental activation.
- ✓ The outer packaging should be rigid and strong, to keep the batteries and devices contained and protected from damage.
- ✓ Avoid using padded envelopes and paper mailers as an outside packaging because they do not offer sufficient protection.



## MARKING

Generally, the package should be marked with the lithium battery handling marking, although it is not always required when batteries are shipped while installed in the devices they power. The marking must include all applicable UN ID numbers (i.e., UN3480, UN3481, UN3090, UN3091).



# IS YOUR BATTERY DAMAGED?

Damaged, defective, or recalled lithium batteries pose a much greater risk of fire. If you suspect that a battery or device is damaged, do *not* ship it.

## LOOK FOR THE SIGNS:

- ☑ Swelling
- ☑ Heat that does not dissipate quickly
- ☑ Smell or leaking gases



- ☑ Corrosion
- ☑ Leaking electrolyte
- ☑ Discoloration



- ☑ Cracks or other physical damage
- ☑ Loose wires
- ☑ Previous fire damage



*The contents of this guide do not have the force and effect of law and are not meant to bind the public in any way. It is intended only to provide information to the public regarding existing requirements under the Hazardous Materials Regulations. Contact the Hazardous Materials Information Center by telephone at 1-800-467-4922 or by email at [infocntr@dot.gov](mailto:infocntr@dot.gov) for additional compliance assistance.*

## SHIPPING

If you need to ship damaged batteries, they are **not** considered small batteries.

Instead, there are much stricter requirements for packaging, hazard communication, and modes of transportation.

Use PHMSA's **Understanding the Risks of Damaged, Defective or Recalled (DDR) Batteries** brochure to learn more by scanning the QR code below.

