

## Lithium Batteries in Your Personal Property Shipment

Defense Personal Property Management Office Publication Date: Mar 2023

We all have lithium batteries in our residence that power countless items, including personal electronics, power tools, vacuums, medical equipment and motor vehicles. But not all lithium batteries can be moved in your personal property due to chemical, flammable, and electrical hazards. To ensure your property arrives safely during your next move, please read and comply with this important update, that takes effect 15 May 2023. Note: All lithium batteries are prohibited from being stored in Non-Temporary Storage shipments.

Why do lithium batteries need to be identified to my mover during the pre-move survey and pack-out?

Not all lithium batteries can be shipped. Due to the hazards stated above, the size and quantity of lithium batteries may be limited to ensure safe movement of your personal property. In addition to making sure the lithium batteries meet the size and quantity for shipping, it is important to identify that they are in working condition without damage (i.e., major dents, cracks, etc.).

Are there different types of lithium batteries?

Yes, there are two types of batteries commonly found in most households.

- 1. Lithium metal batteries These are usually found in cameras, watches, remote controls, handheld games, and smoke detectors. Lithium metal batteries are single use, non-rechargeable, and come in various forms including cylindrical, button cells, or coin cells.
- 2. Lithium-ion batteries These are commonly found in cellphones, power tools, digital cameras, laptops, children's toys, e-cigarettes, robot vacuums, small and large appliances, tablets, e-readers, lawn care equipment, and e-bikes. Lithium-ion batteries are rechargeable and intended for multiple use.

What lithium batteries can I ship?

Personal property items that contain lithium-ion batteries at 100 watt-hours or less (20 watt-hours or less per lithium-ion cell) and lithium metal batteries containing 2 grams or less of lithium content (1 gram or less per lithium metal cell). The stated limits are not aggregate of all lithium batteries in your personal property. For example, shipping two lithium-ion batteries at 50 watt-hours does not mean you have met your lithium battery limit. You could have three, four, etc. lithium-ion batteries each at 75 watt-hours. They would all be allowed because they are under the lithium-ion battery limit of 100 watt-hours, given they are all in a working condition and properly packaged, labeled and/ or certified (if required). Note: If airline accepts shipment of lithium batteries, the shipment limitations are two lithium batteries per shipment at limited sizes previously stated.

Who is responsible for certifying the lithium batteries are properly packaged prior to shipment?

Your mover is responsible for the packaging of lithium batteries according to the applicable written laws and preparing the certification documentation for the applicable mode(s) of transportation. The Department of Transportation has developed a publication called the "Lithium Battery Guide for Shippers," available online at <a href="https://www.phmsa.dot.gov/sites/phmsa.dot.gov/files/2022-09/Lithium-Battery-Guide-FN.pdf">https://www.phmsa.dot.gov/sites/phmsa.dot.gov/files/2022-09/Lithium-Battery-Guide-FN.pdf</a>, to assist in the preparation of lithium batteries.









How can I identify a lithium battery?

The manufacturer of the battery will usually identify on the battery that it's lithium with the words "lithium battery" or you may see the symbol "Li". If the battery isn't identified with the words "lithium battery" on it then you can refer to your owner's manual for that particular item (i.e., power tool, digital camera, laptop, robot vacuum, etc.) to try to identify if the battery is lithium or not.

What if I can't identify if a battery is lithium?

If a battery can't be identified as lithium then the mover is not required to pack the battery. This is due to not being able to properly pack a potentially hazardous item based on its specifications.

How can I determine the watt-hours (lithium-ion battery) or grams (lithium metal) of a lithium battery?

The watt-hour rating is sometimes printed on the battery. Also, an Internet search of the make and model of your battery may provide the size of each battery. If not, you can take the volts and multiply by ampere-hours to determine watt-hours. If the battery has milliampere, often written as mAh, divide the mAh by 1000. For example, a lithium-ion battery with 3500 mAh would be equal to 3.5 ampere-hours (Ah). For lithium metal, you would take the ampere-hours and multiply by .3 to get the lithium content.

What if my battery is over the sizes allowed to be shipped?

Lithium batteries over the size limit are prohibited from being shipped in personal property. You will have to find alternative methods at your expense of getting them to your destination or properly dispose of them. Per the Environmental Protection Agency, lithium batteries should not be put in the trash or municipal recycling bins. Note: If a lithium battery is prohibited and removable from an item, then it should be removed, and item shipped without the battery.

Your Responsibilities

- Prior to your pre-move survey with your mover, gather and identify all lithium batteries and devices containing lithium batteries you would like to ship with your personal property.
- On packing day, have all lithium batteries and devices, allowed in your personal property shipment, readily accessible, and identified for your packers.

Mover's Responsibilities

- Determine if lithium batteries identified by customer during pre-move survey are allowed based on the 100 watt-hour or less (20 watt-hours or less per lithium-ion cell) for lithiumion or 2 grams or less (1 gram or less per lithium metal cell) for lithium metal.
- Properly package and mark all allowed lithium batteries, including battery powered devices, and identify them on the inventory.

Note: After reviewing this fact sheet, if you have questions about which lithium batteries can and cannot be moved in your personal property shipment, contact your local Transportation Office (TO).

## WHO TO CALL FOR HELP

- 1. Local Transportation Office (TO): https://installations.militaryonesource.mil
- 2. Branch of Service Customer Service:

  Army Marine Corps & Navy
  (800) 521-9959 (855) 444-6683
  (253) 967-5093

Air Force (210) 652-3357 Coast Guard Contact your local Transportation Office

3. USTRANSCOM Customer Support Center Toll Free: (833) MIL-MOVE (645-6683)