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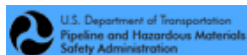
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Basics

Definitions

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(FAA)

These definitions are provided for use with the SafeTravel website.

Carry-on baggage. Baggage carried onboard the plane, typically stowed in the overhead bin or beneath the seat.

Checked baggage. Large baggage given to the airline prior to boarding the plane, to be checked as stowage.

Equivalent Lithium Content (ELC). ELC is a measure by which lithium ion batteries are classified.

- 8 grams of equivalent lithium content are equal to about 100 watt-hours.
- 25 grams of equivalent lithium content are equal to about 300 watt-hours.

You can arrive at the number of watt-hours your battery provides if you know how many milliamp hours and volts your battery provides:

$$\text{mAh}/1000 \times V = \text{wh}$$

Most lithium ion batteries marketed to consumers are below 100 watt-hours (8 grams ELC). If you are unsure of the watt-hour rating of your lithium ion battery, contact the manufacturer.

Lithium Batteries. When you see this term alone on SafeTravel pages, it refers to both lithium ion batteries and lithium metal batteries. Lithium polymer batteries are a type of lithium ion battery, and are included in this term.

Lithium Ion Batteries. These are rechargeable lithium batteries, similar to those found in cameras, cell phones, laptop computers, and radio-controlled toys. Lithium polymer batteries are those types of lithium ion batteries.

Larger Lithium Ion Batteries contain between 8 and 25 grams **Equivalent Lithium Content (ELC)**. Some very large after-market laptop computer batteries, and some batteries used for professional audio-visual application, fall within this definition.

Smaller Lithium Ion Batteries contain up to 8 grams **Equivalent Lithium Content**. Cell phone batteries and most laptop computer batteries fall below the 8 gram threshold.

Lithium Ion Batteries with **more than 25 grams ELC** are **forbidden** in air travel.

Lithium Metal Batteries. These cannot be recharged and are designed to be discarded once their initial charge is used up.

Larger Lithium Metal Batteries contain more than two grams of lithium, and are **forbidden** in air travel. (No common consumer lithium metal batteries are in the "larger" category.)

Spare Batteries. Spare batteries, also called "loose" batteries, are those not installed in equipment. A lithium ion battery inside your laptop computer is an installed battery. A battery carried separately, in case that installed battery runs low, is a spare battery.

Watt-hour. For the purposes of this page, the watt-hour serves as an indirect measure of **Equivalent Lithium Content (ELC)**. 8 grams ELC are about equal to 100 watt-hours.

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