

Calculate Lithium Content (grams) for Lithium Metal Batteries

The calculation used to determine lithium content is:

Ah per cell x 0.3 grams x number of cells

- Many batteries are not rated in Ampere hours (Ah), they are rated in milliamperes hours (mAh). Milliamperes hours are one thousandth of an ampere hour.
- To determine the Ah, divide the mAh by 1,000.

Example: *The battery you wish to ship is rated at 2,500 mAh per cell and contains 6 cells:*

- Divide 2,500 mAh by 1,000 to get the rating in Ah:

$$2,500 \text{ mAh} \div 1,000 = 2.5 \text{ Ah}$$

- Multiply the Ah by 0.3 gm to determine the amount of Lithium in each cell:

$$2.5 \times 0.3 \text{ gm} = 0.75 \text{ grams of lithium in each cell}$$

- Multiply the amount of lithium in each cell by the number of cells in each battery:

$$0.75 \text{ grams/cell} \times 6 = 4.5 \text{ grams of lithium in the battery}$$

Conclusion: *4.5 g is below the maximum allowable lithium content of 25 g for battery packs; therefore the battery may be shipped in the Big Green Box.*
