

## Shipping Damaged, Defective, or Recalled (DDR) Lithium Batteries DOT Special Permit 21193

### “Low Energy” Lithium Ion and Lithium Metal Batteries

This guide is applicable only to lithium cells and batteries below the energy content threshold listed below:

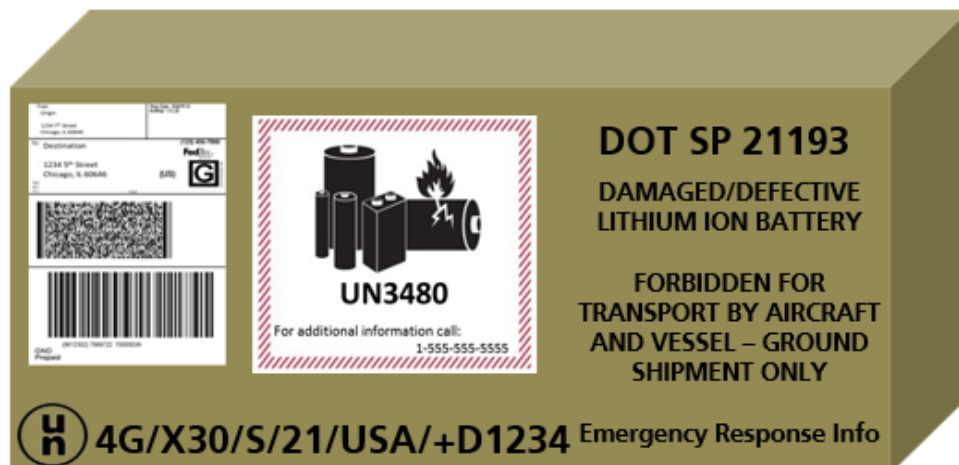
- Lithium ion cells  $\leq 60$  Wh
- Lithium ion batteries  $\leq 300$  Wh
- Lithium metal cells  $\leq 5.0$  g lithium content
- Lithium metal batteries  $\leq 25.0$  g lithium content

If your lithium battery(ies) exceeds these limits, please view the applicable guide for “high energy” batteries

For low energy DDR lithium battery shipments per DOT SP 21193, the following applies:

- Cells/batteries must have originally met UN 38.3 test requirements (i.e., no prototype batteries allowed)
- Cells/batteries must be secured and protected against short circuit
- If cells/batteries are contained in equipment, unintentional activation must be prevented
- Cells/batteries must be placed in KULR TRS bag
- The KULR TRS bag must then be placed in the UN 4G fiberboard box provided
- Aggregate energy content in a single package cannot exceed 2.1 kWh or equivalent lithium content
- Total package weight cannot exceed 66 pounds
- Package must be closed per provided closure instructions
- Ensure that the outer fiberboard package has the following marks/labels:
  - “DOT SP 21193”
  - “Damaged/Defective lithium ion battery” or “Damaged/defective lithium metal battery” as applicable
  - “FORBIDDEN FOR TRANSPORT BY AIRCRAFT AND VESSEL – GROUND SHIPMENT ONLY”
  - Package must display the correct lithium battery mark:
    - If standalone lithium ion cells/batteries: Use **UN3480**
    - If standalone lithium metal cells/batteries: Use **UN3090**
    - If lithium ion cells/batteries packed with or contained in equipment: Use **UN3481**
    - If lithium metal cells/batteries packed with or contained in equipment: Use **UN3091**

When following these rules, no Class 9 label or shipping paper is needed and employee training is not required.



*Lithium ion batteries (UN3480) example*