

Procedure for Packaging Lithium-Ion Batteries

The shipper is required to ensure the safety of lithium-ion batteries being shipped and to comply with applicable ADR regulations. This includes both properly securing the shipment and labeling it correctly.

To ensure safety and compliance with applicable regulations, we have developed this informational brochure. The document outlines the rules for properly packaging lithium-ion batteries.

Here are the key requirements for packaging and labeling such a shipment:

1. Packaging requirements

A device containing a damaged battery cannot be shipped in a standard courier box. It must meet the following safety requirements:

- **UN-certified packaging:** Use certified outer packaging (e.g., a 4D plywood box or a 4G cardboard box) that meets at least Packing Group II (code Y).
- **Short-circuit protection:** All plugs and sockets must be protected against short circuits (e.g., by covering the contacts with electrical tape or placing them in a separate non-conductive bag).
- **Insulating and Absorbent Material:** Any empty space in the packaging must be filled with non-flammable, non-conductive material (e.g., vermiculite, expanded glass granules). This material must absorb any electrolyte leakage and cushion against shocks.
- **Powering Off the Device:** The device must be completely powered off and secured against accidental activation during transport.

Important Note (Severely Damaged Batteries): If a battery shows signs of serious damage (such as swelling, excessive heat, signs of fire, or leakage), it cannot be packed and shipped.

2. Labeling requirements

The following markings must appear on the outside of the prepared package (shipment unit):

- **Warning text:** A clear inscription in the language of the country of origin and in English, French, or German:

(ang. „DAMAGED/DEFECTIVE LITHIUM ION BATTERIES”)

- **Warning label pattern 9A**



and

- **UN Number**



or



UN3480 – Separate lithium-ion batteries and rechargeable batteries. See the example below (column 1).

UN3481: Lithium-ion batteries installed in a device or packed with it in a single carton. See the example below (column 2).

Separately packaged lithium-ion batteries

Batteries > 100 Wh and Batteries ≤ 100 Wh

UN3480

shipment labeling:



Santi batteries

Lithium-ion batteries included with the device

Batteries > 100 Wh and Batteries ≤ 100 Wh

UN3481



Santi batteries plus device

3. Legal Liability

Please note that every shipper (in this case, the customer) is required to familiarize themselves with the current legal requirements and the carrier's current terms and conditions of transport. The shipper is legally responsible for the proper classification, packaging, and labeling of dangerous goods.