



A helpful guide to international transportation of

Lithium Ion Batteries

IN ACCORDANCE WITH THE IATA DANGEROUS GOODS REGULATIONS

This presentation is a **guide only** and is not a true representation
of every destination and every carrier

You must first check with FLG before every booking

2017 Lithium Ion Battery Guide

Defective / Damaged Batteries:

FLG Ltd will NOT accept any shipments with lithium batteries that are confirmed or suspected to be defective* and/or damaged (regardless of how the condition is and in whichever quantities).

FLG Ltd will NOT accept any batteries that have been recalled by the battery supplier/manufacturer nor any waste batteries meant for recycling or disposal purposes (regardless of condition).

→ *A defective battery may not exhibit any damage at all!

Any equipment packed with or containing lithium batteries (in particular equipment returned for repair purposes as part of reverse logistics/service parts program) exhibiting above mentioned condition, must have the batteries removed from the equipment in order to be accepted for carriage with the carrier.

Important Disclaimer: Please note that the information contained in this Guide is purely illustrative and does not replace the study of the Dangerous Goods Regulations to perform any tasks related to the preparation of shipments containing Lithium Batteries. This guide is based upon the 2017 “IATA Dangerous Goods Regulations” and provides a general overview of lithium battery shipping requirements. It does not provide complete shipping information. Consult packing instructions and all applicable Special Provisions for the product being shipped.

FLG Ltd will not be held responsible for any inaccuracy, error or omission, regardless of cause.

2017 Lithium Ion Battery Guide

Paperwork:

- Please supply the correct paperwork for each shipment as outlined in this presentation.
- Failure to present the correct paperwork may cause a delay in shipments.
- In all cases FLG Ltd works in the best interest of their clients, if the paperwork does not correspond with the consignment, FLG Ltd will deem it unwise to proceed further and will keep the consignment until clarification has been sourced from the client. We would take this action on behalf of the client due to Customs' stringent checks where lithium batteries are involved. We do not want to see consignments sitting in Customs for avoidable reasons.

2017 Lithium Ion Battery Guide

Guidelines for Ion batteries that are less than/equal to 100 Wh

Click on the appropriate link for shipping information

[Lithium Ion Batteries packed without equipment](#) - UN3480, P.I. 965 - Section IB

[Lithium Ion Batteries packed with equipment](#) - UN3481, P.I. 966 - Section II

[Lithium Ion Batteries contained in equipment](#) - UN3481, P.I. 967 - Section II

[Dangerous Goods Labels](#)

2017 Lithium Ion Battery Guide

Lithium Ion Batteries packed without equipment

- UN3480, P.I. 965

- Section IB

Acceptable to dangerous goods locations where UN3480 is not prohibited. Cells equal to or less than 20Wh; and Batteries equal to or less than 100Wh

Shipper's Declaration required in net weight KG.

- Strong rigid outer packaging
- Lithium Battery Class 9 Hazard label or Class 9 Miscellaneous Dangerous Goods label [\(See Figure 1 or 2\)](#)
- Completed Lithium Battery mark or Lithium Battery label [\(See Figure 3 or 4\)](#)
- Cargo Aircraft Only (CAO) label required [\(See Figure 5\)](#)
- Dangerous goods surcharge
- IB on Shippers Declaration after packing Instruction
- State of charge (SoC) not exceeding 30% of their rated design capacity for cells and batteries without competent authority approval of both the state of origin and state of the operator

Limit per package:

CAO = 10kg

2017 Lithium Ion Battery Guide

Lithium Ion Batteries packed with equipment

- UN3481, P.I. 966

- Section II

Acceptable to some locations. Cells equal to or less than 20Wh; and Batteries equal to or less than 100Wh

Shipper's Declaration required in net weight KG.

- Strong rigid outer packaging
- No Shipper's Declaration
- Completed Lithium Battery mark or Lithium Battery label ([See Figure 3 or 4](#))
- No Dangerous goods surcharge
- 2 spare cells or batteries per device maximum

Limit per package:

PAX = 5kg

CAO = 5kg

2017 Lithium Ion Battery Guide

Lithium Ion Batteries contained in equipment

- UN3481, P.I. 967

- Section II

Acceptable to most locations. Cells equal to or less than 20Wh; and Batteries equal to or less than 100Wh

Shipper's Declaration required in net weight KG.

- Strong rigid outer packaging
- No Shipper's Declaration
- Completed Lithium Battery mark or Lithium Battery label ([See Figure 3 or 4](#)) when more than 4 cells or 2 batteries per package.
 - Exception - This requirement does not apply to consignments of two packages or less where each package contains no more than 4 cells or 2 batteries installed in equipment
- No Dangerous goods surcharge

Limit per package:

PAX = 5kg

CAO = 5kg

2017 Lithium Ion Battery Guide

DG Labels



Lithium Battery Class 9
Hazard Label
Figure 1



Class 9 Miscellaneous Dangerous
Goods Hazard Label
Figure 2



Figure 5



Lithium Battery Mark
Figure 3

Shipper must add UN
number(s). AND

Shipper must complete
phone number portion
of label.



Lithium Battery Label
Figure 4

Shipper must complete phone number
portion of label. AND

"Lithium ion battery" OR
"Lithium metal battery" AND

Mark the UN number(s) on the package
adjacent to the label per FX-05D.

NOTE: FX-05D will have an effective
date of July 1, 2017 in order to provide
a 6 month transition.