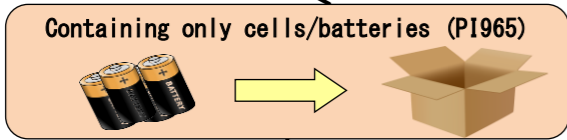


Note: Indicated in blue letters are the revised points in February 2018

How are the lithium ion cells/batteries packed?



Forbidden on Passenger Aircraft

Only cells/batteries with State of Charge (SoC) not exceeding 30% of rated design capacity are allowed

[Watt-hour rating]
• For cells, a Watt-hour rating is exceeding 20 Wh per cell? or
• For batteries, a Watt-hour rating is exceeding 100 Wh per battery?

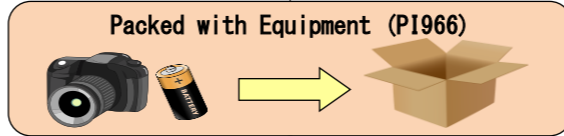
Yes

No

[cells/ batteries in one package]
• For cells, the package containing more than 8 cells?
• For batteries, the package containing more than 2 batteries? or
• For cells and/or batteries with a Watt-hour rating of 2.7 Wh or less per cell or battery, regardless of the number of the cells or batteries, total net quantity of the cells and batteries in one package exceed 2.5 kg?

Yes

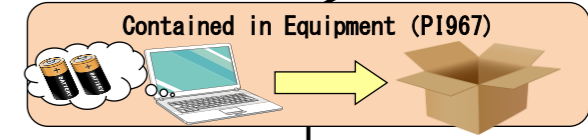
No



[Watt-hour rating]
• For cells, a Watt-hour rating is exceeding 20 Wh per cell? or
• For batteries, a Watt-hour rating is exceeding 100 Wh per battery?

Yes

No



[Watt-hour rating]
• For cells, a Watt-hour rating is exceeding 20 Wh per cell? or
• For batteries, a Watt-hour rating is exceeding 100 Wh per battery?

No

Package contains only button cell batteries installed in equipment.

Yes

No

Packages per 1MAWB or 1HAWB are more than 2

No

Number of cells or batteries contained in one package
• in case of cell: more than 4
• in case of battery: more than 2

Yes

Yes

No

Yes

UN3480 PI965	Section IA	Section IB	Section II
Quantity Limitation	Max net quantity of lithium ion cells or batteries per package must not exceed 35kg	Max net quantity of lithium ion cells or batteries per package must not exceed 10kg	<ul style="list-style-type: none"> Limited to one package per MAWB or per HAWB in case of consolidation Packages and overpacks of this section must be offered separately from non-DG ① For cells and batteries with a watt-hour rating of 2.7Wh or less: <ul style="list-style-type: none"> Max number of cells and/or batteries per package: No limit; Max net quantity of cells and/or batteries per package: 2.5kg ② For cells with a watt-hour rating of more than 2.7Wh but not more than 20Wh: <ul style="list-style-type: none"> Max number of cells per package: 8 cells Max net quantity of cells per package: Not Applicable ③ For batteries with a watt-hour rating of more than 2.7Wh but not more than 100Wh: <ul style="list-style-type: none"> Max number of batteries per package: 2 batteries Max net quantity of batteries per package: Not Applicable <p>[Note] cells and/or batteries specified in above ① to ③ must not be combined in the same package.</p>
Shipper's Declaration	Required	Required	Not Required
AWB	The statement "Dangerous goods as per attached shipper's declaration" or "Dangerous goods as per attached DGD" and "Cargo Aircraft Only" or "CAO" must be shown on the AWB	The statement "Dangerous goods as per attached shipper's declaration" or "Dangerous goods as per attached DGD" and "Cargo Aircraft Only" or "CAO" must be shown on the AWB	The statement "Lithium ion batteries in compliance with Section II of PI965" and "Cargo Aircraft Only" or "CAO" must be shown on the AWB
Labelling, Marking	1. Lithium battery Class 9 label and CAO label shall be attached. [Note1] 2. Marking requirements as DG shall be met in accordance with Section 7 of the DGR.	1. Lithium battery Class 9 label, CAO label, and Lithium battery mark shall be attached. [Note1] 2. Marking requirements as DG shall be met in accordance with Section 7 of the DGR.	1. CAO label and Lithium battery mark shall be attached. [Note1] 2. Marking requirements as Overpack of DG under Section II of PI965 shall be met, if applicable.
UN Specification packaging	UN packaging meeting PG II performance standards.	Not Required (The packaging must be capable of withstand a 1.2m drop test.)	Not Required (The packaging must be capable of withstand a 1.2m drop test.)
Different DGs Packed in one outer package	Cells and batteries must not be packed in the same outer packaging with dangerous goods classified in Class 1 other than Division 1.4S, Division 2.1, Class 3, Division 4.1, or Division 5.1.	Cells and batteries must not be packed in the same outer packaging with dangerous goods classified in Class 1 other than Division 1.4S, Division 2.1, Class 3, Division 4.1, or Division 5.1.	Cells and batteries must not be packed in the same outer packaging with other dangerous goods.
Overpack	Packages containing cells and batteries must not be placed in an overpack with DGs classified in Class 1 other than Division 1.4S, Division 2.1, Class 3, Division 4.1, or Division 5.1.	Packages containing cells and batteries must not be placed in an overpack with DGs classified in Class 1 other than Division 1.4S, Division 2.1, Class 3, Division 4.1, or Division 5.1.	<ul style="list-style-type: none"> No more than one package may be placed in an overpack. Packages containing cells and batteries must not be placed in an overpack with DGs classified in Class 1 other than Division 1.4S, Division 2.1, Class 3, Division 4.1, or Division 5.1.
Shipper Loaded ULD	Not Acceptable	Not Acceptable	Not Acceptable

UN3481 PI966	Section I	Section II
Quantity Limitation	Number of cells or batteries must not exceed appropriate number for the equipment's operation plus 2 spares. AND Max net quantity of lithium ion cells or batteries per Package must not exceed the followings: • For Passenger Aircraft: 5kg; • For Cargo Aircraft only: 35kg.	Number of cells or batteries must not exceed appropriate number for the equipment's operation plus 2 spares. AND Max net quantity of lithium ion cells or batteries per package must not exceed the followings: • For Passenger Aircraft: 5kg; • For Cargo Aircraft only: 5kg.
Shipper's Declaration	Required	Not Required
AWB	The statement "Dangerous goods as per attached shipper's declaration" or "Dangerous goods as per attached DGD" must be shown on the AWB	The statement "Lithium ion batteries in compliance with Section II of PI966" must be shown on the AWB
Labelling, Marking	1. Lithium battery Class 9 label shall be attached. [Note1] 2. Marking requirements as DG shall be met in accordance with Section 7 of the DGR.	1. Lithium battery mark shall be attached. [Note1] 2. Marking requirements as Overpack of DG under Section II of PI966 shall be met, if applicable.
UN Specification packaging	UN specification packaging meeting the packing group II performance standards must be used.	Not Required (The packaging must be capable of withstand a 1.2m drop test.)
Shipper Loaded ULD	Not Acceptable	Acceptable (Lithium battery mark must be reproduced on the outside of the ULD)

UN3481 PI967	Section I	Section II	Section II
Quantity Limitation	Max net quantity of lithium cells or batteries per Package must not exceed the followings: • For Passenger Aircraft: 5kg; • For Cargo Aircraft only: 35kg.	Max net quantity of lithium cells or batteries per package must not exceed the followings: • For Passenger Aircraft: 5kg; • For Cargo Aircraft only: 5kg.	Max net quantity of lithium ion cells or batteries contained in equipment per package must not exceed the followings: • For Passenger Aircraft: 5kg; • For Cargo Aircraft only: 5kg.
Shipper's Declaration	Required	Not Required	Not Required
AWB	The statement "Dangerous goods as per attached shipper's declaration" or "Dangerous goods as per attached DGD" must be shown on the AWB	The statement "Lithium ion batteries in compliance with Section II of PI967" must be shown on the AWB	Not Required (Statement of Section II must not be shown on the AWB.)
Labelling, Marking	1. Lithium battery Class 9 label shall be attached. [Note1] 2. Marking requirements as DG shall be met in accordance with Section 7 of the DGR.	1. Lithium battery mark shall be attached. [Note1] 2. Marking requirements as Overpack of DG under Section II of PI967 shall be met, if applicable.	Not Required
UN Specification packaging	Not Required	Not Required	Not Required
Shipper Loaded ULD	Not Acceptable	Acceptable (Lithium battery mark must be reproduced on the outside of the ULD)	Acceptable

[Note1] Following labelling is permitted until 31st December 2018 as a transitional procedure;
1. Attach conventional Class 9 label instead of lithium battery Class 9 label.
2. Attach lithium battery handling label set out in 57th edition of DGR (2016 version) instead of lithium battery mark.

[Note2] "Powerbank" and "Smart Luggage" are not an operational electronic device, having strong characteristics as "battery," the main purpose of which is to charge or supply power to another electronic device. For this reason, JAL will NOT handle these products as UN3481 Lithium ion batteries packed with equipment, PI966 or UN3481 Lithium ion batteries contained in equipment, PI967.