

12th December, 2018
Japan Airlines

Dear Valued Customers,

Dangerous Goods Handling in Japan Airlines from January 2019

We thank you for your continued support to JAL CARGO.

Please be advised that the regulations will partly be modified following the IATA Dangerous Goods Regulations (DGR) 60th edition coming into effect from 1st January 2019. On this letter, we inform you of the changes in our handling of dangerous goods, mainly lithium batteries in compliant with these modifications as follows.

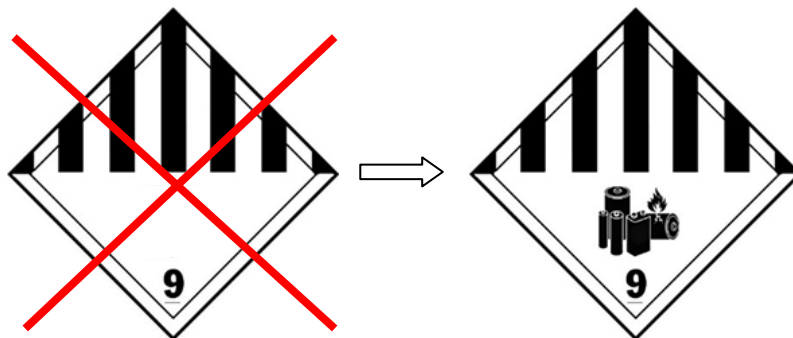
Your understanding and cooperation to safe transport of dangerous goods by air will be highly appreciated.

1. Amendments to the regulations of lithium batteries

A. Hazard label to be used on SectionI lithium batteries (already effective since DGR 58th)

The use of conventional Class 9 hazard label to SectionIA and IB of PI965 and PI968 lithium batteries and to SectionI of PI966, PI967, PI969, and PI970 lithium batteries, which has been allowed as a transitional procedure, can no longer be allowed after January 1st, 2019 for lithium batteries prepared under these Sections and Packing Instructions. It will become mandatory to use **lithium battery class 9 label**, as indicated in Figure A.

Figure A : Lithium Battery Class 9 Label

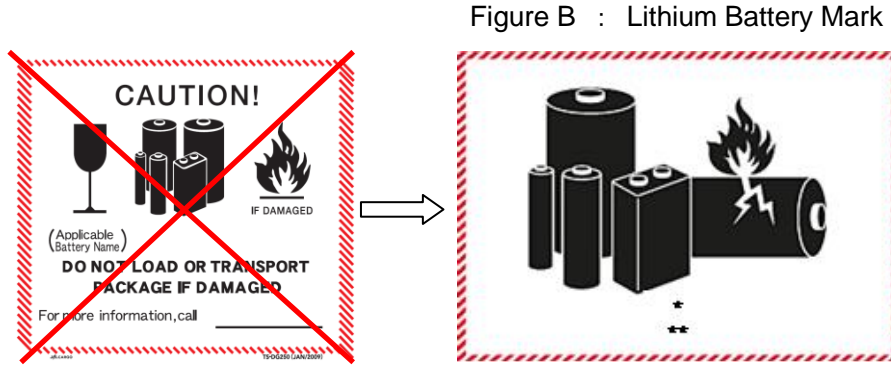


*Conventional Class 9 hazard label is still required for Class 9 dangerous goods other than lithium batteries.



B. Abolishment of lithium battery handling label (already effective since DGR 58th)

The use of lithium battery handling label to Section I B of PI965 and PI968 lithium batteries and to Section II of PI965 ~ PI970 lithium batteries, which has been allowed as a transitional procedure, can no longer be allowed after January 1st, 2019 for lithium batteries prepared under these Sections and Packing Instructions. It will become mandatory to use **lithium battery mark**, as indicated in Figure B.



C. UN Test Summary for lithium batteries (will be effective from DGR 61th)

Manufacturers and subsequent distributors of cells or batteries manufactured after 30 June 2003 must make available the test summary as specified in the UN Manual of Tests and Criteria, Part III, sub-section 38.3, paragraph 38.3.5. This test summary must be made available from 1 January 2020.

2. Amendments to Shipper's Declaration Forms

Some amendments to Shipper's Declaration Forms will be made from the DGR 60th Edition. Please refer IATA DGR 60th Edition, Chapter 8 for the details of amendments and examples of amended forms. Old Shipper's Declaration forms conforming to the examples shown in the DGR 59th edition may continue to be used until 31 December 2024 as a transitional procedure, but please start using new forms as early as possible.

We will update Shipper's Declaration form posted on our JAL CARGO website by early January 2019.

3. Others

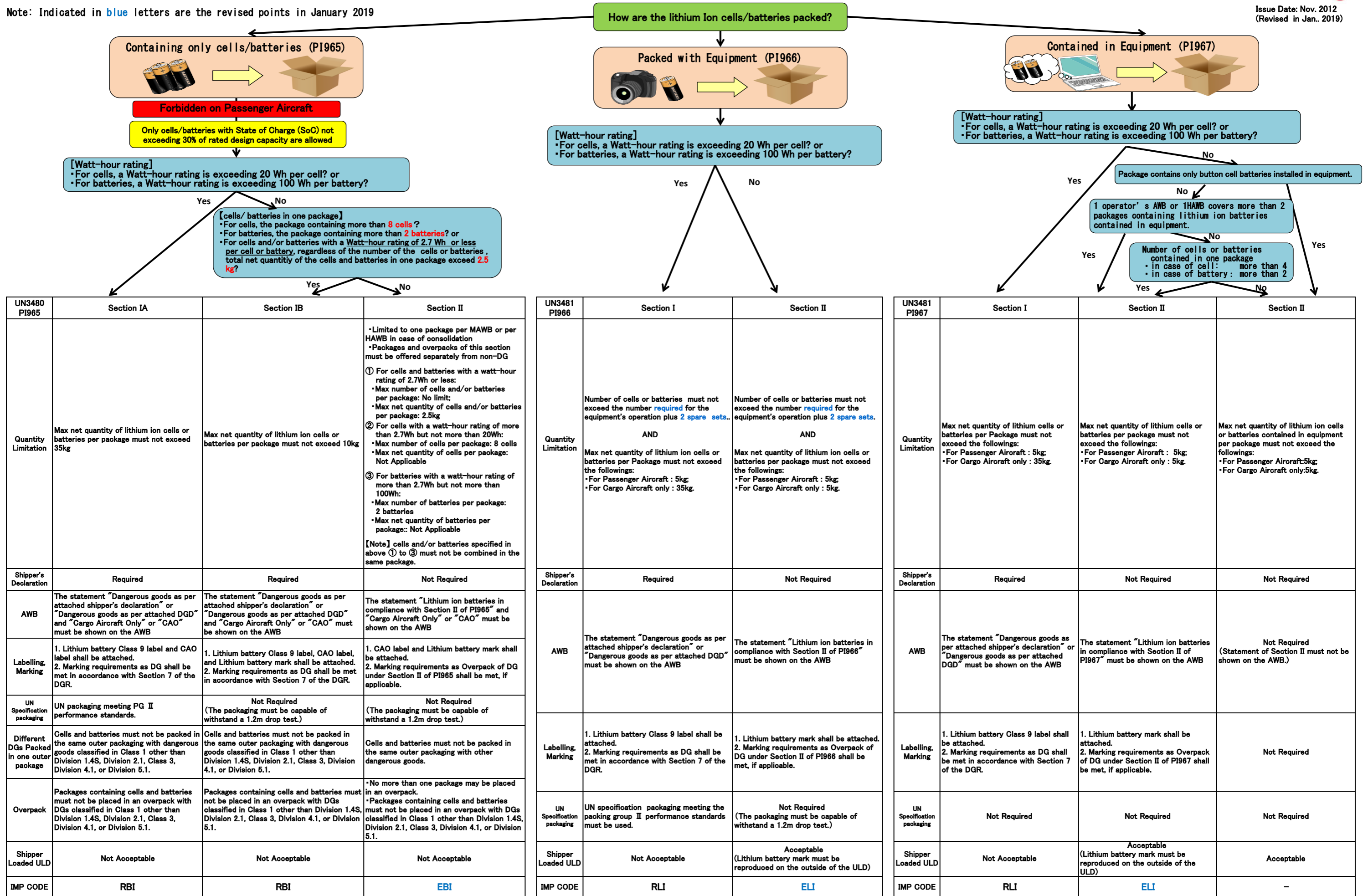
Please see the attachments where we provide flowcharts for the handling of lithium batteries that reflect the amendments stated in above paragraph 1.

[Attachments]

- 1.Attachment-1:Lithium Ion or Lithium Polymer Cells and Batteries (UN3480,UN3481)
- 2.Attachment-2:Lithium Metal or Lithium Alloy Cell and Batteries (UN3090, UN3091)

End

Note: Indicated in blue letters are the revised points in January 2019



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. 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. 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. 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
IMP CODE	RBI	RBI	EBI

UN3481 PI966	Section I	Section II
Quantity Limitation	Number of cells or batteries must not exceed the number required for the equipment's operation plus 2 spare sets. AND Max net quantity of lithium ion cells or batteries per Package must not exceed the following: •For Passenger Aircraft : 5kg; •For Cargo Aircraft only : 35kg.	Number of cells or batteries must not exceed the number required for the equipment's operation plus 2 spare sets. AND Max net quantity of lithium ion cells or batteries per package must not exceed the following: •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. 2. Marking requirements as DG shall be met in accordance with Section 7 of the DGR.	1. Lithium battery mark shall be attached. 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)
IMP CODE	RLI	ELI

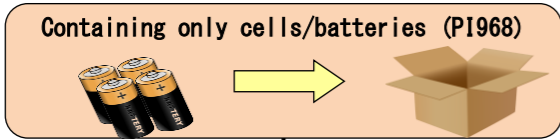
UN3481 PI967	Section I	Section II	Section II
Quantity Limitation	Max net quantity of lithium cells or batteries per Package must not exceed the following: •For Passenger Aircraft : 5kg; •For Cargo Aircraft only : 35kg.	Max net quantity of lithium cells or batteries per package must not exceed the following: •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 following: •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. 2. Marking requirements as DG shall be met in accordance with Section 7 of the DGR.	1. Lithium battery mark shall be attached. 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
IMP CODE	RLI	ELI	-

[Note1] Manufacturers and subsequent distributors of cells or batteries manufactured after 30 June 2003 must make available the test summary as specified in the UN Manual of Tests and Criteria, Part III, sub-section 38.3, paragraph 38.3.5. This test summary must be made available from 1 January 2020. (Prior notice)

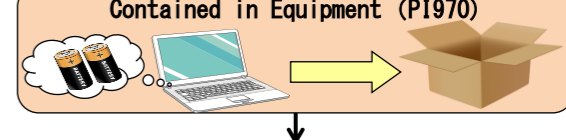
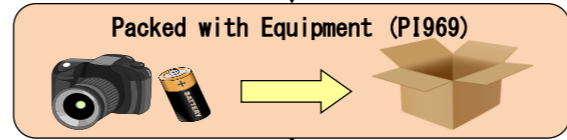
[Note2] "Powerbank" and "Smart Luggage" are not an operational electronic device, having strong characteristics as "battery," the main purpose of which is to charge or supply power to another electronic device. For this reason, JAL will NOT handle these products as UN3481 Lithium ion batteries packed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

Note: Indicated in blue letters are the revised points in January 2019

How are the lithium metal cells/batteries packed?



Forbidden on Passenger Aircraft



[Lithium metal content]
• For cells, the lithium metal content is exceeding 1g per cell? or
• For batteries, the lithium metal content is exceeding 2g per battery?

[Lithium metal content]
• For cells, the lithium metal content is exceeding 1g per cell? or
• For batteries, the lithium metal content is exceeding 2g per battery?

[Lithium metal content]
• For cells, the lithium metal content is exceeding 1g per cell? or
• For batteries, the lithium metal content is exceeding 2g 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
(Choose "No" for the cells and batteries with a lithium content of 0.3g or less per cell or per battery, regardless of the number of the cells and batteries in the package.)

Yes No

Yes No
Package contains only button cell batteries installed in equipment.

Yes No
1 operator's AWB or 1HAWB covers more than 2 packages containing lithium metal batteries contained in equipment.

Yes No
Number of cells or batteries contained in one package
• in case of cell: more than 4
• in case of battery: more than 2

UN3090 PI968	Section IA	Section IB	Section II
Quantity Limitation	Max net quantity of lithium metal cells or batteries per package must not exceed 35kg	Max net quantity of lithium metal cells or batteries per package must not exceed 2.5kg	<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 lithium content of 0.3g 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 lithium content of more than 0.3g but not more than 1g: <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 lithium content of more than 0.3g but not more than 2g: <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 metal batteries in compliance with Section II of PI968" 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. 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. 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. 2. Marking requirements as Overpack of DG under Section II of PI968 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
IMP CODE	RBM	RBM	EBM

UN3091 PI969	Section I	Section II
Quantity Limitation	Number of cells or batteries must not exceed the number required for the equipment's operation plus 2 spare sets. AND Max net quantity of lithium metal 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 the number required for the equipment's operation plus 2 spare sets. AND Max net quantity of lithium metal 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 metal batteries in compliance with Section II of PI969" must be shown on the AWB
Labelling, Marking	1. Lithium battery Class 9 label shall be attached. 2. Marking requirements as DG shall be met in accordance with Section 7 of the DGR.	1. Lithium battery mark shall be attached. 2. Marking requirements as Overpack of DG under Section II of PI969 shall be met, if applicable.
UN Specification packaging	UN packaging meeting PG II performance standards. [Note] For PAX flight, additional packaging requirements apply.	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)
IMP CODE	RLM	ELM

UN3091 PI970	Section I	Section II	Section II
Quantity Limitation	Max quantity of lithium content per cell and per batteries : • For cells, a lithium content of 12g; and • For batteries, a lithium content of 500g AND Max net quantity of lithium metal cells or batteries per Package must not exceed the followings: • For Passenger Aircraft : 5kg; • For Cargo Aircraft only : 35kg.	Max net quantity of lithium metal cells or batteries per package must not exceed the followings: • For Passenger Aircraft : 5kg; • For Cargo Aircraft only : 5kg	Max net quantity of lithium metal 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	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 metal batteries in compliance with Section II of PI970" 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. 2. Marking requirements as DG shall be met in accordance with Section 7 of the DGR.	1. Lithium battery mark shall be attached. 2. Marking requirements as Overpack of DG under Section II of PI970 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
IMP CODE	RLM	ELM	-

[Note]Manufacturers and subsequent distributors of cells or batteries manufactured after 30 June 2003 must make available the test summary as specified in the UN Manual of Tests and Criteria, Part III, sub-section 38.3, paragraph 38.3.5. This test summary must be made available from 1 January 2020. (Prior notice)