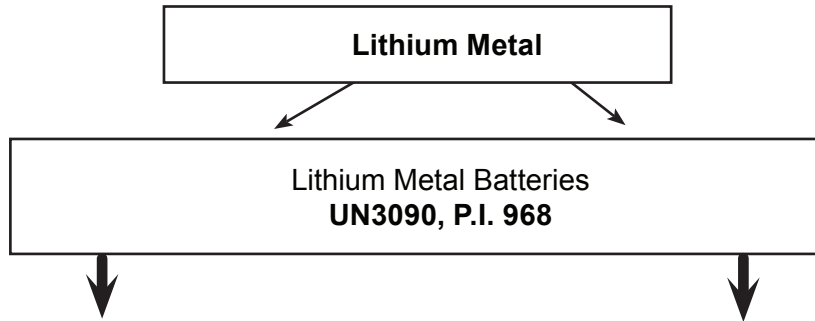


# LITHIUM METAL BATTERIES



**Section IA**  
Acceptable to dangerous goods locations Only.  
Cells greater than 1g and Batteries with an aggregate lithium content in excess of 2g.<sup>1</sup>

- Shipper's Declaration required in net weight KG.
- UN number, proper shipping name and shipper/consignee name and address on the package
- UN specification packaging required (PGII standards)
- Lithium Battery Class 9 Hazard label (See Figure 1)
- Cargo Aircraft Only (CAO) label required (See Figure 3)
- Dangerous goods surcharge

**Limit per package:**  
Must be CAO = 35kg

**Section IB**  
Acceptable to dangerous goods locations Only.  
Cells equal to or less than 1g; and if batteries the aggregate lithium content is not more than 2g.<sup>1</sup>

- Shipper's Declaration required in net weight KG.
- IB on Shipper's Declaration after packing instruction
- UN number, proper shipping name and shipper/consignee name and address on the package
- Strong rigid outer packaging.
- Lithium Battery Class 9 Hazard label (See Figure 1)
- Completed Lithium Battery Mark (See Figure 2)
- Cargo Aircraft Only (CAO) label required (See Figure 3)
- Dangerous goods surcharge

**Limit per package:**  
Must be CAO = 2.5kg

~ or ~

**Section II**

- Must be offered as Section IA or IB.

<sup>1</sup> **AGGREGATE LITHIUM CONTENT** - The sum of the grams of lithium content contained by the cells comprising a battery. [IATA Appendix A]

FedEx Express does not provide these DG Labels. Customers may order these labels from vendors, such as those at [www.iata.org/labels](http://www.iata.org/labels).

Figure 1



Lithium Battery Class 9 Hazard Label

**NOTE:** No text other than the Class "9" must be included in the bottom part of the Lithium Battery Class 9 label. IATA 7.2.2.4

Figure 2



Lithium Battery Mark

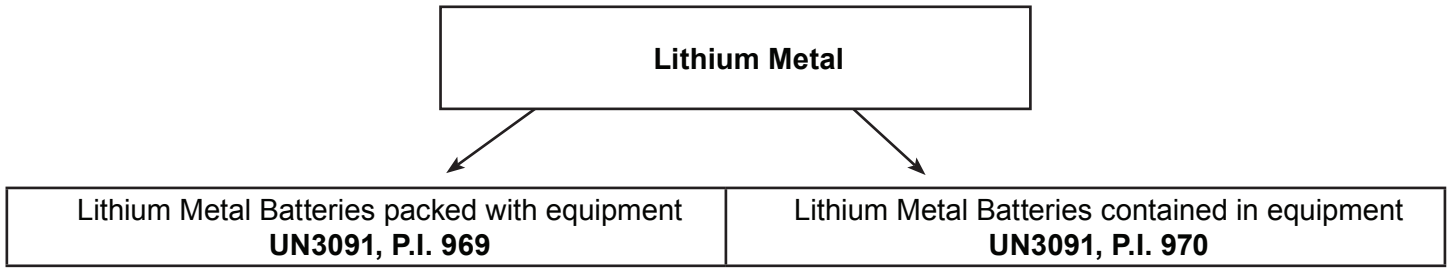
- \* Shipper must add UN number(s). It should be 12 mm high **AND**
- \*\* The phone number is optional.

Figure 3



Cargo Aircraft Only Label

# LITHIUM METAL BATTERIES



**Section I**  
Acceptable to Dangerous goods locations Only.  
Cells greater than 1g; and Batteries with an aggregate lithium content greater than 2g.<sup>1</sup>

- Shipper's Declaration required in net weight KG.
- UN number, proper shipping name and shipper/consignee name and address on the package
- UN specification packaging required (PGII standards); may be inner or outer packaging as per PI 969
- Lithium Battery Class 9 Hazard label (See Figure 1)
- Dangerous goods surcharge
- The number of cells or batteries in each package must not exceed the number required for each equipment's operation plus two spare sets.
- A set of cells or batteries is the number of individual cells or batteries that are required to power each piece of equipment

**Limit per package (excludes equipment):**  
PAX = 5kg  
CAO = 35kg

~ Or ~

**Section II**  
Acceptable to most locations.  
Cells equal to or less than 1g; and Batteries equal to or less than 2g

- No Shipper's Declaration
- Strong rigid outer packaging
- Completed Lithium Battery Mark (See Figure 2)
- No Dangerous goods surcharge
- The number of cells or batteries in each package must not exceed the number required for each equipment's operation plus two spare sets.
- A set of cells or batteries is the number of individual cells or batteries that are required to power each piece of equipment
- If Special Provision A213 is applicable, 1.5 g and 10 Wh limits per battery apply.

**Limit per package (excludes equipment):**  
PAX = 5kg  
CAO = 5kg

**Section I**  
Acceptable to dangerous goods locations Only.  
Cells greater than 1g, but less than 12g; and Batteries with an aggregate lithium content greater than 2g but less than 500g. <sup>1</sup>

- Shipper's Declaration required in net weight KG.
- UN number, proper shipping name and shipper/consignee name and address on the package
- Strong rigid outer packaging
- Lithium Battery Class 9 Hazard label (See Figure 1)
- Dangerous goods surcharge

**Limit per package (excludes equipment):**  
PAX = 5kg  
CAO = 35kg

~ Or ~

**Section II**  
Acceptable to most locations.  
Cells of Lithium content equal to or less than 1g; and Batteries of Lithium content equal to or less than 2g

- No Shipper's Declaration
- Strong rigid outer packaging
- Completed Lithium Battery Mark if more than 4 cells and 2 batteries per package (See Figure 2)

**Exception**  
The completed Lithium Battery Mark requirement does not apply to:

- packages containing only button cell batteries installed in equipment (including circuit boards) or
- consignments of two packages or less where each package contains no more than 4 cells or 2 batteries installed in equipment

- If Special Provision A213 is applicable, 1.5 g and 10 Wh limits per battery apply.
- No Dangerous goods surcharge

**Limit per package (excludes equipment):**  
PAX = 5kg  
CAO = 5kg

<sup>1</sup> **AGGREGATE LITHIUM CONTENT** - The sum of the grams of lithium content contained by the cells comprising a battery. [IATA Appendix A]

# LITHIUM ION BATTERIES

Lithium Ion

Lithium Ion Batteries  
UN3480, P.I. 965

## Section IA

Acceptable to dangerous goods locations Only.

Cells greater than 20Wh; and Batteries greater than 100Wh

- Shipper's Declaration required in net weight KG.
- UN number, proper shipping name and shipper/consignee name and address on the package
- UN specification packaging required (PGII standards)
- Lithium Battery Class 9 Hazard label (See Figure 1)
- Cargo Aircraft Only (CAO) label required (See Figure 3)
- Dangerous goods surcharge
- 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 = 35kg

## Section IB

Acceptable to dangerous goods locations Only.

Cells equal to or less than 20Wh; and Batteries equal to or less than 100Wh

- Shipper's Declaration required in net weight KG.
- IB on Shippers Declaration after packing Instruction
- UN number, proper shipping name and shipper/consignee name and address on the package
- Strong rigid outer packaging
- Lithium Battery Class 9 Hazard label (See Figure 1)
- Completed Lithium Battery Mark (See Figure 2)
- Cargo Aircraft Only (CAO) label required (See Figure 3)
- Dangerous goods surcharge
- 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

~ or ~

## Section II

- Must be offered as Section IA or IB.

# LITHIUM ION BATTERIES

## Lithium Ion

### Lithium Ion Batteries packed with equipment UN3481, P.I. 966

### Lithium Ion Batteries contained in equipment UN3481, P.I. 967

#### Section I

Acceptable to dangerous goods locations Only.

Cells greater than 20Wh; and Batteries greater than 100Wh

- Shipper's Declaration required in net weight KG.
- UN number, proper shipping name and shipper/consignee name and address on the package
- UN specification packaging required (PGII standards); may be inner or outer packaging as per PI 966.
- Lithium Battery Class 9 Hazard label (See Figure 1)
- Dangerous goods surcharge
- The number of cells or batteries in each package must not exceed the number required for each equipment's operation plus two spare sets.
- A set of cells or batteries is the number of individual cells or batteries that are required to power each piece of equipment.

#### Limit per package (excludes equipment):

PAX = 5kg  
CAO = 35kg

~ or ~

#### Section II

Acceptable to most locations.

Cells equal to or less than 20Wh; and Batteries equal to or less than 100Wh

- No Shipper's Declaration
- Strong rigid outer packaging
- Completed Lithium Battery Mark (See Figure 2)
- No Dangerous goods surcharge
- The number of cells or batteries in each package must not exceed the number required for each equipment's operation plus two spare sets.
- A set of cells or batteries is the number of individual cells or batteries that are required to power each piece of equipment.

#### Limit per package (excludes equipment):

PAX = 5kg  
CAO = 5kg

#### Section I

Acceptable to dangerous goods locations Only.

Cells greater than 20Wh; and Batteries greater than 100Wh

- Shipper's Declaration required in net weight KG.
- UN number, proper shipping name and shipper/consignee name and address on the package
- Strong rigid outer packaging
- Lithium Battery Class 9 Hazard label (See Figure 1)
- Dangerous goods surcharge

#### Limit per package (excludes equipment):

PAX = 5kg  
CAO = 35kg

~ or ~

#### Section II

Acceptable to most locations

Cells equal to or less than 20Wh; and Batteries equal to or less than 100Wh

- No Shipper's Declaration
- Strong rigid outer packaging
- Completed Lithium Battery Mark if more than 4 cells and 2 batteries per package (See Figure 2)

#### Exception

The completed Lithium Battery Mark requirement does not apply to:

- packages containing only button cell batteries installed in equipment (including circuit boards) or
- 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 (excludes equipment):

PAX = 5kg  
CAO = 5kg

**Note:**

- FedEx Express will not accept any item with an A183 Special Provision, even with a Competent Authority approval unless specifically preapproved. [FX-04E]
- All Lithium Batteries (Section I/IA/IB and Section II) in all packing instructions must not be shipped in the same package with the following Hazard Classes/Divisions:  
1.4, 2.1, 3, 4.1, 4.2, 4.3, 5.1, 5.2, 8, or 2.2 with a Cargo Aircraft Only label. This includes All Packed in One and Overpacks.  
**Exception:** If the only lithium batteries are Section II and are those in packages that are excepted from having the Lithium Battery Mark then do not select UN 3481 PI 967 or UN 3091 PI 970 in the FedEx automation system (so ELB does not appear on the automation label) for devices such as temperature control devices. [FX-05B]
- Shippers sending any data loggers or data monitors (other than FedEx SenseAware) require pre-approval. Contact your Worldwide Account Manager (WAM) to initiate the process. If you do not have a WAM, you may contact your sales or account manager. Devices are approved by manufacturer and model number, and a shipper may request the approval. You may contact your WAM, Sales or Account Manager to determine if your device is approved. [FX-05C]
- Small battery-powered vehicles will only be accepted from companies when new and in unopened original packaging. Used, refurbished self-balancing vehicle shipments from individuals, resellers, and third-party shipments will not be accepted.  
Examples of small battery-powered vehicles subject to this variation include:
  - Hoverboards
  - Self-balancing scooters
  - Unicycle scooters and one-wheeled personal transport vehicles [FX-04F]
- All batteries transported under IATA Special Provision A88 and A99 must be pre-approved. Customers can email [A88A99approvalrequest@fedex.com](mailto:A88A99approvalrequest@fedex.com) to begin the process. [FX-05A]
- Call FedEx customer service and ask for the International Hotline/ Specialist to check on commodity acceptability for international shipments
- Select ELB in your FedEx automation device, if selection is available for any Section II UN3091 or UN3481 required to be labeled with the Lithium Battery Mark



**Class 9 Miscellaneous Dangerous Goods Hazard Label**

The Class 9 label **cannot** be used as the hazard label for Section I/IA/IB shipments effective 01/01/19.

The Lithium Battery Class 9 hazard label must be used instead.



**Lithium Battery Label**

**Obsolete effective 01/01/19**

If you have questions please contact the Dangerous Goods/Hazardous Materials Hotline at (800) GOFEDEx and press “81” or say dangerous goods. Press “4” to reach next available agent. If calling from outside the U.S. call (901) 375-6806 and press “4”

**DISCLAIMER:**

This guide is based upon the 2024 IATA Dangerous Goods Regulations and provides a general overview of lithium battery shipping requirements. It does not provide complete shipping information. Consult the packing instruction and all applicable Special Provisions for the product being shipped.

These materials are provided as a courtesy, to be used as guidelines to assist properly trained shippers. These materials do not alter, satisfy, or influence any governmental requirements. The contents of these materials are subject to change due to constant changes in government regulations. FedEx Express accepts no liability for loss or damage resulting from changes, errors, omissions, or misinterpretations of these materials.

# Lithium Battery Mark

Figure 2



This mark can be printed in color, completed as shown in the example on the right, and affixed to the package. When printing, be sure to select "No" for "Expand/reduce page."

Please understand that FedEx Express accepts no liability for loss or damage caused by using this data.

## 【Minimum size】

The mark must be in the form of a rectangle with hatched edging.

The mark must be a minimum dimension of 100 mm wide × 100 mm high, and the minimum width of the hatching must be 5 mm. If the size of the package so requires, the dimensions/line thickness may be reduced to not less than 100 mm wide × 70 mm high.

## 【Color】

The hatching must be red.

The symbol must be black on white or suitable contrasting background.

## 【Markings on the lithium battery mark】

The mark must indicate as below:

- **The appropriate UN number preceded by the letters "UN", and it should be at least 12mm high**
  - "UN3090" for lithium metal cells or batteries;
  - "UN3480" for lithium ion cells or batteries;
  - "UN3091" for lithium metal cells or batteries contained in, or packed with, equipment; or
  - "UN3481" for lithium ion cells or batteries contained in, or packed with, equipment.
  - Where a package contains lithium cells or batteries assigned to different UN numbers, all applicable UN numbers must be indicated on one or more marks.
- **A telephone number for additional information (Optional)**

The telephone number required on the lithium battery mark can be a 24-hour monitored number, or other normal office hour number provided a person knowledgeable of the lithium batteries being shipped is readily available. The telephone number must start with the country code.

## 【On your Air Waybill】

Where a consignment includes packages bearing the lithium battery mark for Section II, the words must be included on the air waybill as below:

- "Lithium metal batteries in compliance with Section II of PI969" for UN3091 lithium metal cells or batteries packed with equipment;
- "Lithium metal batteries in compliance with Section II of PI970" for UN3091 lithium metal cells or batteries contained in equipment;
- "Lithium ion batteries in compliance with Section II of PI966" for UN3481 lithium ion cells or batteries packed with equipment;
- "Lithium ion batteries in compliance with Section II of PI967" for UN3481 lithium ion cells or batteries contained in equipment.

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## Example

