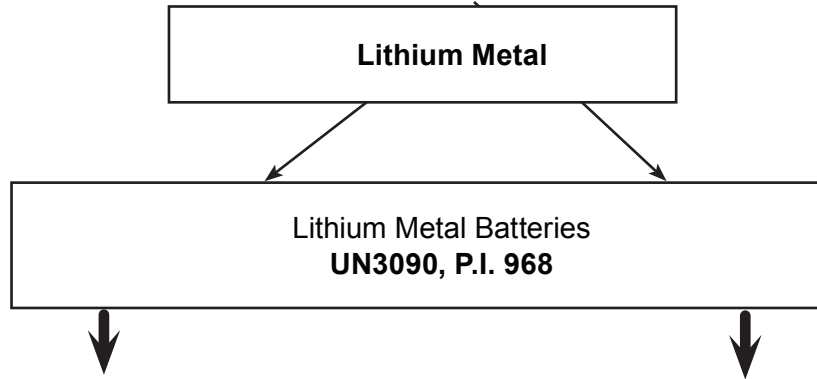


# LITHIUM METAL BATTERIES



**Section IA**  
 Acceptable to dangerous goods locations where UN3090 is not prohibited. <sup>1</sup>  
 Cells greater than 1g and Batteries with an aggregate lithium content in excess of 2g. <sup>2</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
- Shipper must be on Section I (IA/IB) preapproval list (FX-05B)

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

**Section IB**  
 Acceptable to dangerous goods locations where UN3090 is not prohibited. <sup>1</sup>  
 Cells equal to or less than 1g; and Batteries the aggregate lithium content is not more than 2g. <sup>2</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)
- Shipper must be on Section I (IA/IB) preapproval list (FX-05B)
- Dangerous goods surcharge

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

~ Or ~

**Section II**

- Not accepted per IATA operator variation FX-05A; must be offered as Section IA or IB.

<sup>1</sup> In addition, check: [http://images.fedex.com/us/services/pdf/LithiumBatteries\\_Limitations.pdf](http://images.fedex.com/us/services/pdf/LithiumBatteries_Limitations.pdf)  
<sup>2</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

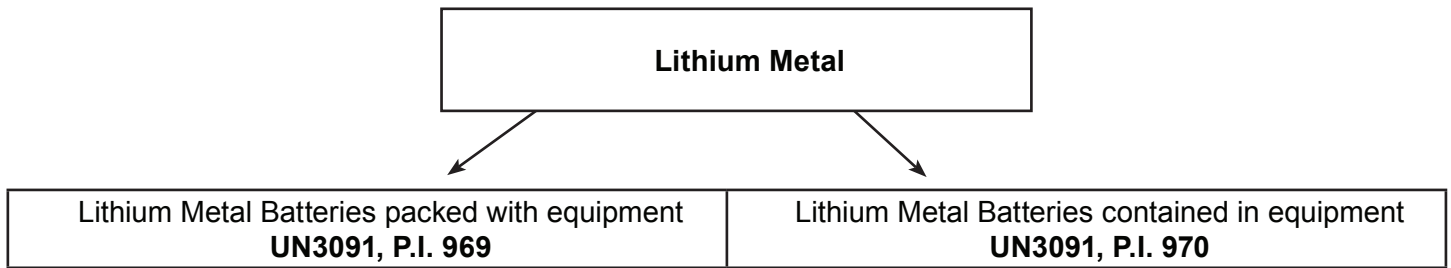
- \* Shipper must add UN number(s). It should be 12 mm high **AND**
- \*\* Shipper must complete phone number portion of label.

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>2</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)
- 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; and Batteries with an aggregate lithium content greater than 2g.<sup>2</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 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 if more than 4 cells and 2 batteries per package (See Figure 2)

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

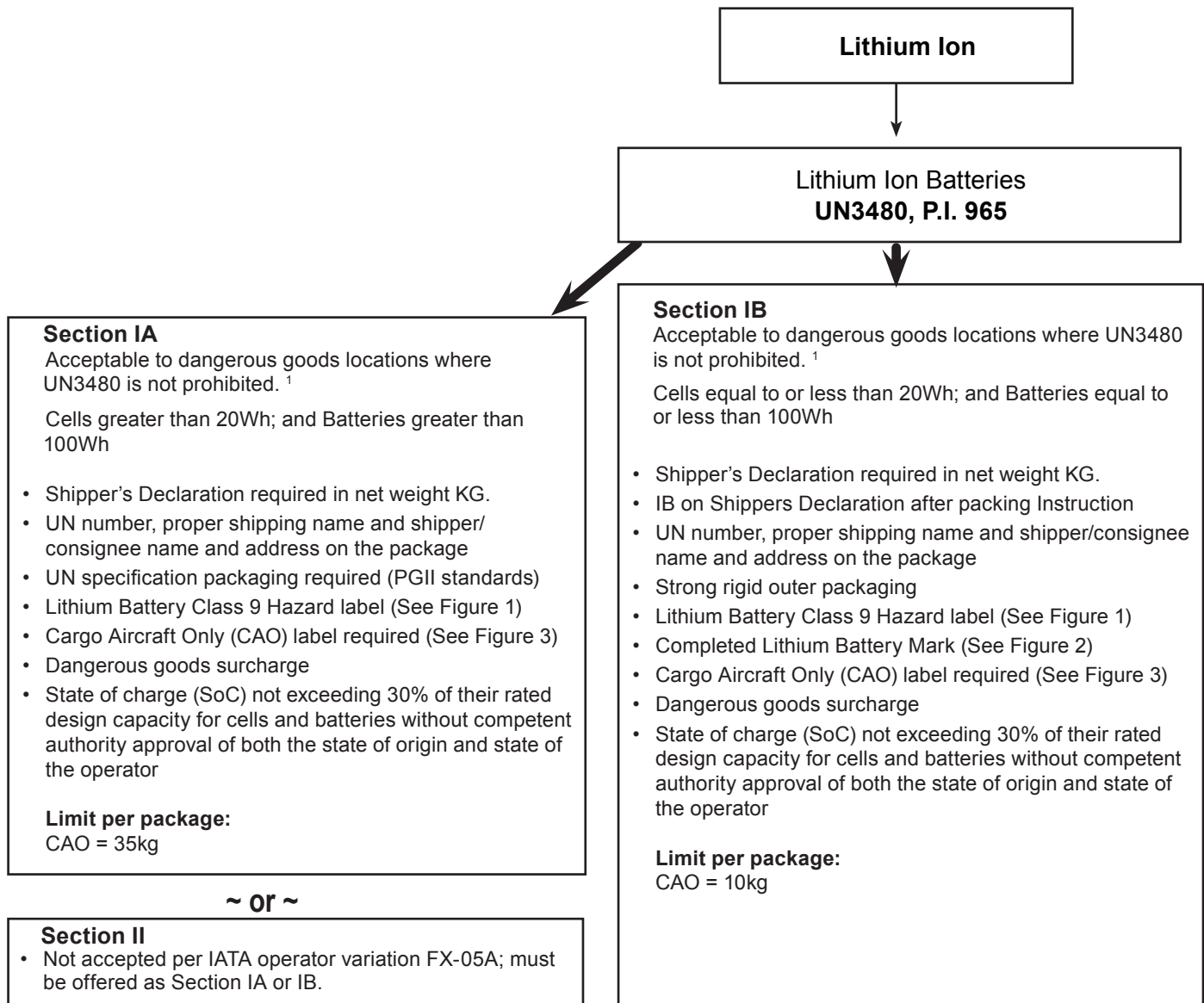
- packages containing only button cell batteries installed in equipment (including circuit boards) or
- consignments of two packages or less where each package contains no more than 4 cells or 2 batteries installed in equipment

- 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>2</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



<sup>1</sup> In addition, check: [http://images.fedex.com/us/services/pdf/LithiumBatteries\\_Limitations.pdf](http://images.fedex.com/us/services/pdf/LithiumBatteries_Limitations.pdf)

# 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)
- 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. Any battery powered device subject to a recall will only be accepted if the recall is not safety related and the battery does not have the potential to cause a fire or dangerous evolution of heat. [FX-04E]
  - Lithium Batteries (Section I/IA/IB and Section II) 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 those contained in temperature control devices and the lithium batteries are Section II. The package must also not require the Lithium Battery Mark and ELB (FedEx Express DG handling code for Section II batteries) must not be selected in the automation device. [FX-05C]
  - Shippers sending any data loggers which remain active in flight (other than FedEx SenseAware) must be pre-approved. Contact the FedEx Dangerous Goods/Hazardous Materials hotline at (901)375-6806 or email: [dghotline@fedex.com](mailto:dghotline@fedex.com) to begin the approval process. [FX-05D]
  - Hoverboards or similar self-balancing vehicles will only be accepted from companies if new, in unopened original packaging. Used, refurbished balancing vehicles shipments from individuals, resellers or third party shipments will not be accepted. [FX-04F]
  - Call FedEx customer service and ask for the International Hotline/ Specialist to check on commodity acceptability for international shipments
- <sup>1</sup> In addition, check: [http://images.fedex.com/us/services/pdf/LithiumBatteries\\_Limitations.pdf](http://images.fedex.com/us/services/pdf/LithiumBatteries_Limitations.pdf)
- 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.

**DISCLAIMER:**

This guide is based upon the 2020 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.