

# LITHIUM ION BATTERIES

Note:

- There are no Packing Groups for Lithium batteries in the 2016 IATA Manual. A Packing Group must not be listed on the shipper's declaration.
- FedEx Express will not accept any item with an A183 Special Provision, even with a Competent Authority approval. [FX-16]
- Lithium Batteries (Section 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. [FX-07]
- Packages prepared according to Section II of PI 965 and PI 968 must be offered to the operator separately from other cargo and must not be loaded into a unit load device (ULD) before offered to the operator.

\*\* Check: [http://images.fedex.com/us/services/pdf/LithiumBatteries\\_Limitations.pdf](http://images.fedex.com/us/services/pdf/LithiumBatteries_Limitations.pdf)

**SECONDARY  
RECHARGEABLE  
Lithium Ion**

**Lithium Ion Batteries  
UN3480, P.I. 965**

## Section IA

Acceptable to dangerous goods locations where UN3480 is not prohibited.\*\*

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

- Shipper's Declaration required in net weight KG.
- UN specification packaging required (PGII standards)
- Class 9 and CAO label required (See Figure 1 and 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

~ or ~

## Section II

Acceptable to all locations where UN3480 is not prohibited.\*\*

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

- Strong rigid outer packaging
- No Shipper's Declaration
- Completed IATA Lithium Battery Label and required CAO label (See Figure 2 and 3)
- No Dangerous goods surcharge
- Alternate documentation needed
- 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:

- Equal to or less than 2.7Wh = 2.5kg; or Greater than 2.7Wh but equal to or less than 20Wh = 8 cells; or Greater than 2.7 but equal to or less than 100Wh = 2 batteries
- Limit of 8 cells/2 batteries per package or overpack
- Only 1 package containing Section II batteries of UN 3480 may be included in any overpack or consignment

## Section IB

Acceptable to dangerous goods locations if 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
- Class 9 label required (See Figure 1)
- Completed IATA Lithium Battery Label and required CAO Label(See Figure 2 and 3)
- Dangerous goods surcharge
- Dangerous goods markings including net weight when required
- IB on Shippers Declaration after packing Instruction
- 4 new bullets of information required on the shipper's declaration or alternate documentation as per packing instructions.
- 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

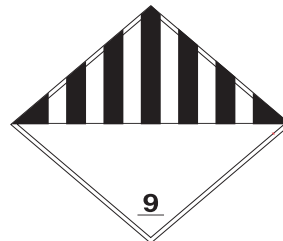


Figure 1

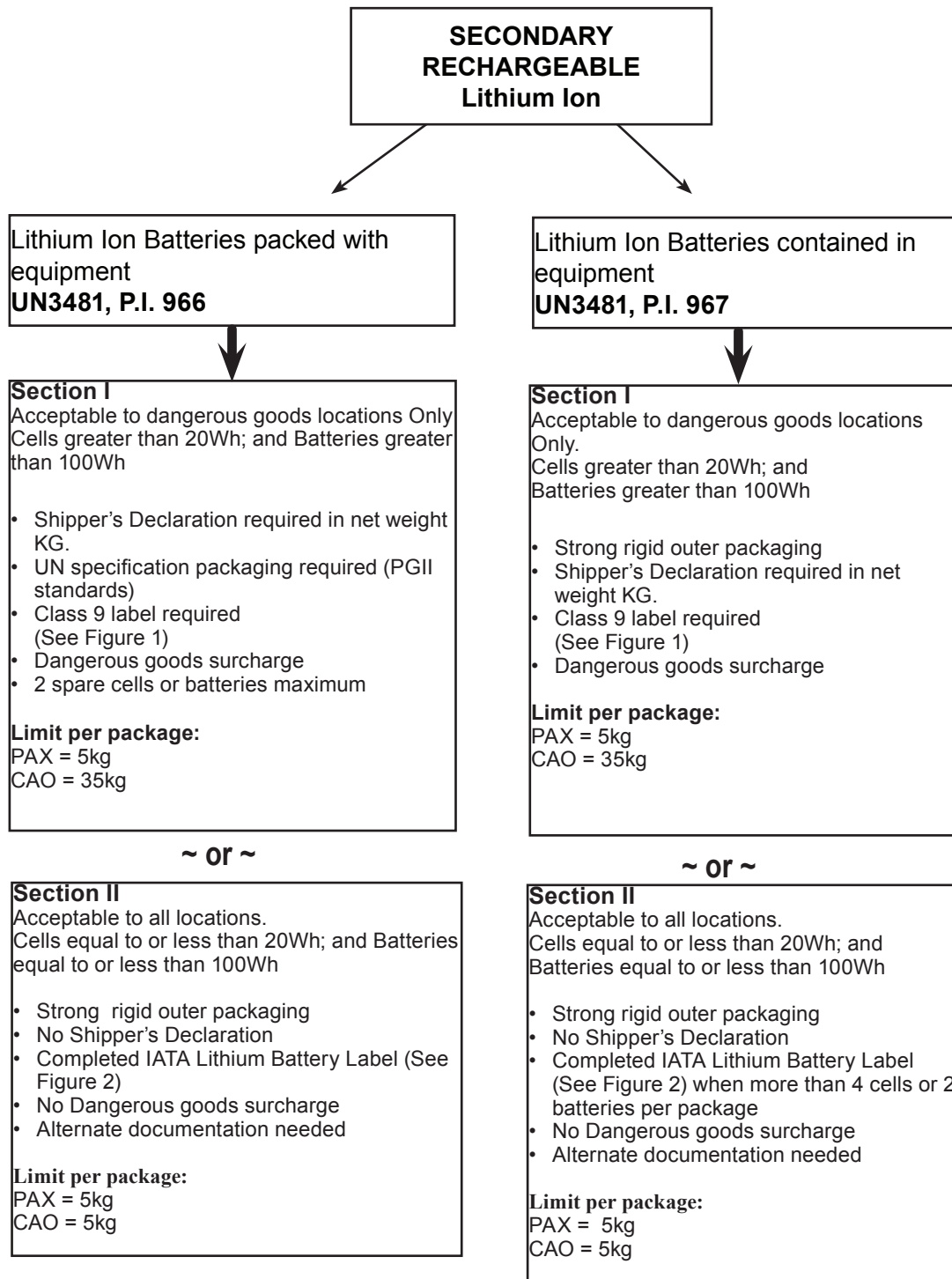


Figure 3



Figure 2 \*

\* Shipper must complete phone number portion of label.



# LITHIUM METAL BATTERIES

Effective April 1, 2016

## PRIMARY NON-RECHARGEABLE Lithium Metal

Lithium Metal Batteries  
UN3090, P.I. 968

### Section IA

Acceptable to dangerous goods locations if UN3090 is not prohibited.\*\*

Cells greater than 1g and Batteries greater than 2g

- Shipper's Declaration required in net weight KG.
- UN specification packaging required (PGII standards)
- Class 9 label required (See Figure 1)
- CAO label required
- Dangerous goods surcharge
- Shipper must be on Section I (IA/IB) preapproval list (FX-07)

#### Limit per package:

Must be on CAO = 35kg

### Section IB

Acceptable to dangerous goods locations if UN3090 is not prohibited.\*\*

Cells equal to or less than 1g; and Batteries equal to or less than 2g

- Shipper's Declaration required in net weight KG.
- Strong rigid outer packaging.
- Class 9 label required (See Figure 1)
- Completed IATA Lithium Battery Label (See Figure 3)
- Dangerous goods surcharge
- Shipper must be on Section I (IA/IB) preapproval list (FX-07)
- IB on Shipper's Declaration
- Dangerous goods markings including net weight when required.
- CAO label required
- 4 new bullets of information required on the shipper's declaration or alternate documentation as per packing instructions.

#### Limit per package:

Must be CAO = 2.5kg

~ or ~

### Section II

Acceptable to dangerous goods locations if UN3090 is not prohibited.\*\*

Cells equal to or less than 1g; and Batteries equal to or less than 2g

- Strong rigid outer packaging
- No Shipper's Declaration
- Completed IATA Lithium Battery Label AND FedEx Section II label (See Figures 3 and 4)
- No Dangerous goods surcharge
- Shipper must be on Section II preapproval list (FX-07)
- Alternate documentation needed

#### Limit per package:

- Equal to or less than 0.3g = 2.5kg; or greater than 0.3g but equal to or less than 1g = 8 cells; or greater than 0.3g but equal to or less than 2g = 2 batteries
- Limit of 8 cells/2 batteries per package or overpack
- Only 1 package containing Section II batteries of UN 3090 may be included in any overpack or consignment

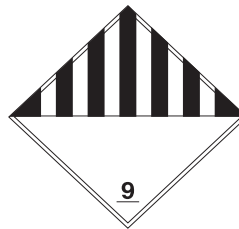


Figure 1



Figure 3\*

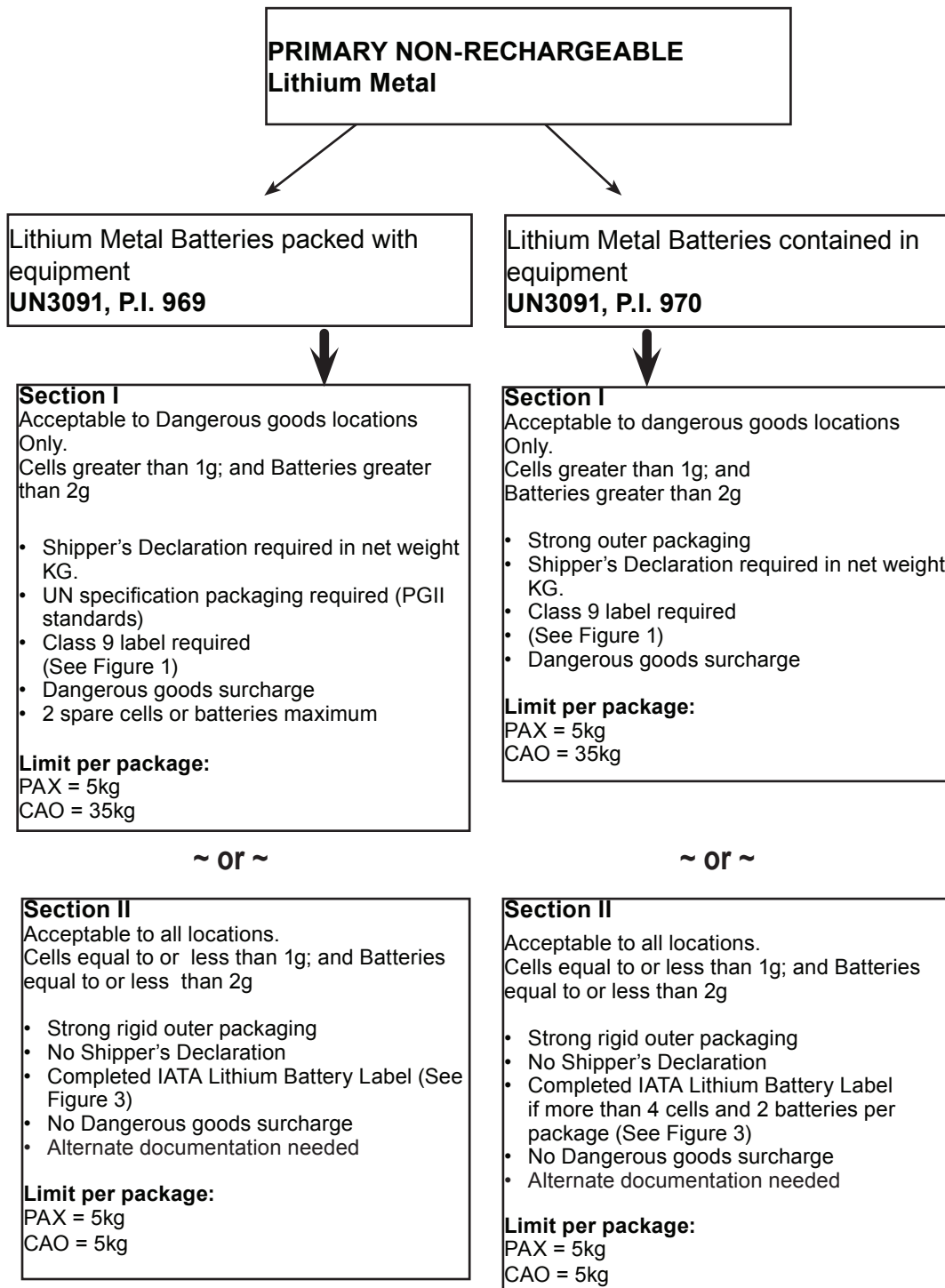
- \* Shipper must complete phone number portion of label.



Figure 4

# LITHIUM METAL BATTERIES

Effective April 1, 2016



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 2016 "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 federal or state 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.