

# THIUM ION BATTERIES

- FedEx Express will not accept any item with an A183 Special Provision, even with a Competent Authority approval. [FX-04E]
- · 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-05C]
- Call FedEx customer service and ask for the International Hotline/ Specialist to check on commodity acceptability for international shipments
- \*\* Check: http://images.fedex.com/us/services/pdf/ LithiumBatteries Limitations.pdf

#### 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)
- · Lithium Battery Class 9 Hazard label or Class 9 Miscellaneous Dangerous Goods label (See Figure 1 or 2)
- Cargo Aircraft Only (CAO) label required (See Figure 5)
- · 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 = 35ka

#### ~ or ~

## Section II

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

### Lithium Ion

Lithium Ion Batteries UN3480, P.I. 965



#### Section IB

Acceptable to dangerous goods locations where 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
- · Lithium Battery Class 9 Hazard label or Class 9 Miscellaneous Dangerous Goods label (See Figure 1 or 2)
- Completed Lithium Battery mark or Lithium Battery label (See Figure 3 or 4)
- Cargo Aircraft Only (CAO) label required (See Figure 5)
- Dangerous goods surcharge
- IB on Shippers Declaration after packing Instruction
- 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 = 10ka

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



**Lithium Battery Class 9** Hazard Label Figure 1



Figure 5



Class 9 Miscellaneous Dangerous Goods Hazard Label Figure 2



Lithium Battery Mark

# Figure 3

Shipper must add UN number(s). AND

Shipper must complete phone number portion of label.



Lithium Battery Label

# Figure 4

Shipper must complete phone number portion of label. AND

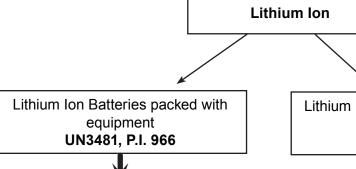
"Lithium ion battery" OR

"Lithium metal battery" AND

Mark the UN number(s) on the package adjacent to the label per FX-05D.

NOTE: FX-05D will have an effective date of July 1, 2017 in order to provide a 6 month transition.

# LITHIUM ION BATTERIES



#### 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 specification packaging required (PGII standards)
- Lithium Battery Class 9 Hazard label or Class 9 Miscellaneous Dangerous Goods label (See Figure 1 or 2)
- · Dangerous goods surcharge
- 2 spare cells or batteries per device maximum

#### Limit per package:

PAX = 5kgCAO = 35kg

## ~ or ~

# Section II

Acceptable to all locations. Cells equal to or less than 20Wh; and Batteries equal to or less than 100Wh

- · Strong rigid outer packaging
- No Shipper's Declaration
- Completed Lithium Battery mark or Lithium Battery label (See Figure 3 or 4)
- · No Dangerous goods surcharge
- 2 spare cells or batteries per device maximum

#### Limit per package:

PAX = 5kgCAO = 5kg 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

- Strong rigid outer packaging
- Shipper's Declaration required in net weight KG.
- Lithium Battery Class 9 Hazard label or Class 9 Miscellaneous Dangerous Goods label (See Figure 1 or 2)
- · Dangerous goods surcharge

#### Limit per package:

PAX = 5kgCAO = 35kq

~ or ~

## Section II

Acceptable to all locations.
Cells equal to or less than 20Wh; and Batteries equal to or less than 100Wh

- · Strong rigid outer packaging
- No Shipper's Declaration
- Completed Lithium Battery mark or Lithium Battery label (See Figure 3 or 4) when more than 4 cells or 2 batteries per package.

#### **Exception**

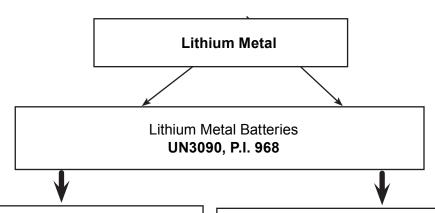
This requirement does not apply to:

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

PAX = 5kg

CAO = 5kg



#### Section IA

Acceptable to dangerous goods locations where 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)
- Lithium Battery Class 9 Hazard label or Class 9 Miscellaneous Dangerous Goods label (See Figure 1 or 2)
- Cargo Aircraft Only (CAO) label required (See Figure 5)
- Dangerous goods surcharge
- Shipper must be on Section I (IA/IB) preapproval list (FX-05B)

#### Limit per package:

Must be on CAO = 35kg

~ or ~

#### Section II

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

#### **Section IB**

Acceptable to dangerous goods locations where 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.
- Lithium Battery Class 9 Hazard label or Class 9
   Miscellaneous Dangerous Goods label (See Figure 1 or 2)
- Completed Lithium Battery mark or Lithium Battery label (See Figure 3 or 4)
- Dangerous goods surcharge
- Shipper must be on Section I (IA/IB) preapproval list (FX-05B)
- · IB on Shipper's Declaration
- Cargo Aircraft Only (CAO) label required (See Figure 5)

#### Limit per package:

Must be CAO = 2.5kg

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



Lithium Battery Class 9
Hazard Label
Figure 1



Class 9 Miscellaneous Dangerous Goods Hazard Label Figure 2



Lithium Battery Mark

Figure 3

Shipper must add UN number(s). **AND** 

Shipper must complete phone number portion of label.



Lithium Battery Label

# Figure 4

Shipper must complete phone number portion of label. **AND** 

- "Lithium ion battery" OR
- "Lithium metal battery" AND

Mark the UN number(s) on the package adjacent to the label per FX-05D.

**NOTE**: FX-05D will have an effective date of July 1, 2017 in order to provide a 6 month transition.



Figure 5

# LITHIUM METAL BATTERIES



Lithium Metal Batteries packed with equipment

UN3091, P.I. 969

Lithium Metal Batteries contained in equipment UN3091, P.I. 970



#### Section I

Acceptable to Dangerous goods locations Only.

Cells greater than 1g; and Batteries greater than 2g

- Shipper's Declaration required in net weight KG
- UN specification packaging required (PGII standards)
- Lithium Battery Class 9 Hazard label or Class 9 Miscellaneous Dangerous Goods label (See Figure 1 or 2)
- · Dangerous goods surcharge
- 2 spare cells or batteries per device maximum

#### Limit per package:

PAX = 5kgCAO = 35kg

## ~ or ~

#### Section II

Acceptable to all locations. Cells equal to or less than 1g; and Batteries equal to or less than 2g

- Strong rigid outer packaging
- No Shipper's Declaration
- Completed Lithium Battery mark or Lithium Battery label (See Figure 3 or 4)
- No Dangerous goods surcharge
- 2 spare cells or batteries per device maximum

#### Limit per package:

PAX = 5kgCAO = 5kg

# Section I

Acceptable to dangerous goods locations Only. Cells greater than 1g; and Batteries greater than 2g

- Strong outer packaging
- Shipper's Declaration required in net weight KG.
- Lithium Battery Class 9 Hazard label or Class 9 Miscellaneous Dangerous Goods label (See Figure 1 or 2)
- Dangerous goods surcharge

## Limit per package:

PAX = 5kgCAO = 35kg

#### ~ or ~

#### Section II

Acceptable to all locations.

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

- Strong rigid outer packaging
- No Shipper's Declaration
- Completed Lithium Battery mark or Lithium Battery label if more than 4 cells and 2 batteries per package (See Figure 3 or 4)

#### Exception

This requirement does not apply to:

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

PAX = 5kq

CAO = 5kg

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 2017 "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.

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