



Getting started

Shipping lithium batteries and cells

This document reflects our 2022 services. Terms and conditions apply. For all latest information and full details of our services, please visit [fedex.com](https://www.fedex.com).



Welcome

This guide will help you find rules and requirements for shipping different types of lithium batteries and cells — including instructions for packaging, documentation and labeling.

However, please note that this guide *does not apply* to lithium battery shipments exceeding 35kg.*

The PDF is interactive. By clicking on your choices, you will automatically be taken to the information you require.

Let's get started!

Information provided herein is based on the United Nations Recommendations on the Transport of Dangerous Goods, the International Civil Aviation Organization (ICAO), the European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR), the International Air Transport Association (IATA), and applicable laws and regulations. Terms and Conditions apply - visit [fedex.com](https://www.fedex.com) and [tnt.com](https://www.tnt.com) for full details on Dangerous Goods shipments.

** Lithium battery shipments exceeding 35kg need special transport arrangements and the shipper must contact FedEx to make arrangements prior to shipping. Please reach out to your Account Executive or our Customer Support team at [fedex.com](https://www.fedex.com) for details.*

IMPORTANT NOTES:

1: Terms and Conditions apply - visit [fedex.com](https://www.fedex.com) and [tnt.com](https://www.tnt.com) for full details on Dangerous Goods shipments.

2: Please note that the content contained herein is presented as a courtesy to be used only for informational purposes. FedEx attempts to ensure that the content is accurate, but not represent it to be error-free. In no event will FedEx be liable for any damages - whether direct, indirect, special, general, consequential, for alleged lost profits, or otherwise - that might result from any use of or reliance on these materials. The information contained herein may be revised from time to time, without any notice.

3: The sender is responsible for identifying, classifying, packaging, marking, labelling and completing documentation for dangerous goods shipments, in compliance with all applicable international treaties, laws and regulations. There are limitations for Dangerous Goods shipments to many destinations. If sender has questions regarding countries served, commodity restrictions by country or service availability, please contact our Customer Support team at [fedex.com](https://www.fedex.com).

How are you shipping? (please click one)



BACK

HOME



BY AIR

Including:
FedEx International Priority®
FedEx International Priority® Freight
FedEx International Priority® Express
FedEx International Economy®
FedEx International Economy® Freight



BY ROAD

Including:
FedEx® Regional Economy
FedEx® Regional Economy Freight
FedEx Priority Overnight®

What are you shipping?



By air

Including:
FedEx International Priority®
FedEx International Priority® Freight
FedEx International Priority® Express
FedEx International Economy®
FedEx International Economy® Freight



Lithium **metal** or **alloy**
batteries or cells

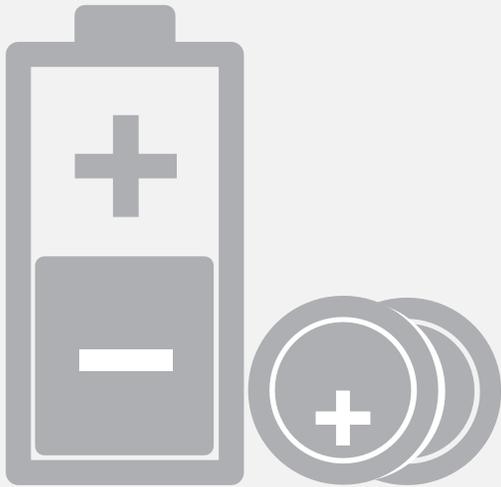


Lithium **ion**
batteries or cells

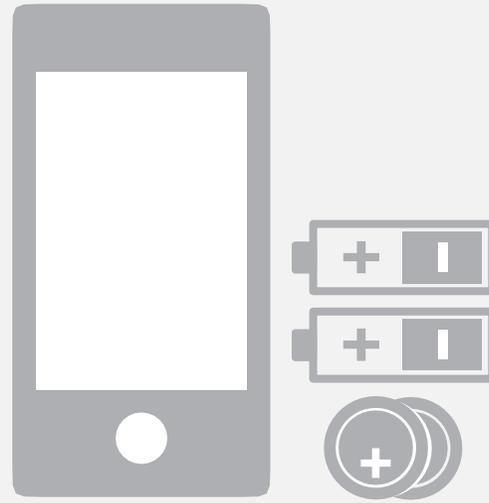
Shipping lithium metal
or **alloy** batteries or cells by air



Lithium metal or alloy batteries or cells



Batteries/cells only

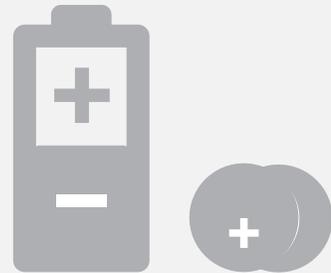


Packed with equipment
(separate in same package)



Contained
in equipment

Select capacity



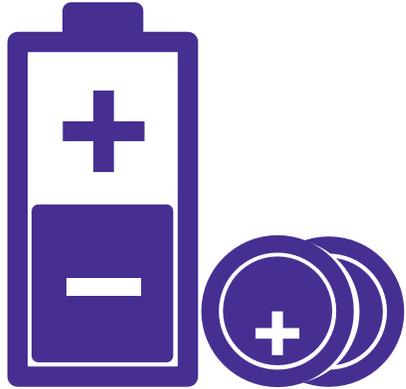
Cells up to 1g
Batteries up to 2g

UN 3090, Lithium Metal Batteries —
PI968 Section IB



Cells over 1g
Batteries over 2g

UN 3090, Lithium Metal Batteries —
PI968 Section IA



Cells up to 1g
Batteries up to 2g

UN 3090, Lithium Metal
Batteries — PI968 Section IB

Packaging

- Cells and batteries must be protected to prevent short circuits. This includes protection against contact with electrically conductive materials within the same packaging that could lead to a short circuit.
- Cells and batteries must be packed in inner packaging that completely enclose the cell or battery.
- To provide protection from damage or compression to the batteries, the inner packaging must be placed in a strong rigid outer packaging.
- Each package must be capable of withstanding a 1.2m drop test.
- All lithium batteries (Section I, IA, IB and II) in all packing instructions must not be shipped in the same package as the following dangerous goods (DG) classes/divisions: 1.4, 2.1, 3, 4.1, 4.2, 4.3, 5.1, 5.2 and 8 and 2.2 with a Cargo Aircraft Only label.
- All UN 3090 lithium metal batteries under Packing Instruction 968 (Section IA, IB) require pre-approval. See [fedex.com/dangerousgoods](https://www.fedex.com/dangerousgoods) . Select Get Started then select Lithium Batteries. (FX-05 a).
- Maximum net weight per package is 2.5 kg.
- Each cell or battery must meet the provisions of IATA DGR 3.9.2.6.1 (a), (e), (f) and if applicable (g).
- UN specification packaging is not required.

Restrictions

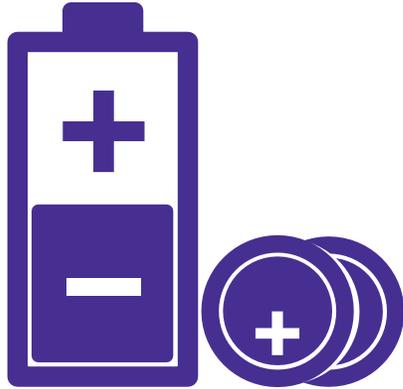
- Cargo aircraft only
- Acceptable to Dangerous Goods locations only ([see list](#))
- Batteries/cells known to be damaged or defective are prohibited from transport.
- Waste batteries and batteries being shipped for recycling/disposal are prohibited from air transport.

Documentation

- Shipper's Declaration for Dangerous Goods (with IB noted in the authorization column for the declaration)
- Waybill should have the statement "Dangerous goods as per associated Shipper's declaration," and "CAO" or "Cargo Aircraft Only"

Required labels





Cells over 1g Batteries over 2g

UN 3090, Lithium Metal
Batteries — PI968 Section IA

Packaging

- Cells and batteries must be protected so as to prevent short circuits. This includes protection against contact with electrically conductive materials within the same packaging that could lead to a short circuit.
- Each cell or battery must meet the provisions of IATA DGR 3.9.2.6.1.
- Cells and batteries must be placed in inner packaging that completely encloses the cell or battery then placed in an outer packaging. The completed package for the cells or batteries must meet the Packing Group II performance standards.
- All lithium batteries (Section I, IA, IB and II) in all packing instructions must not be shipped in the same package as the following dangerous goods classes/divisions: 1.4, 2.1, 3, 4.1, 4.2, 4.3, 5.1, 5.2 and 8 and 2.2 with a Cargo Aircraft Only label.
- Batteries with a weight of 12 kg or greater and having a strong, impact-resistant outer casing, or assemblies of such batteries, may be transported when packed in strong outer

packaging or protective enclosures (e.g. in fully enclosed or wooden slatted crates) not subject to the requirements of Section 6 of IATA DGR, if approved by the appropriate national authority of the State of origin. A copy of the document of approval must accompany the consignment.

- Packages containing cells or batteries must not be placed in an overpack with packages containing dangerous goods classified in Class 1 other than Division 1.4S, Division 2.1, Class 3, Division 4.1 or Division 5.1.
- All UN 3090 lithium metal batteries under Packing Instruction 968 (Section IA, IB) require pre-approval. See [fedex.com/dangerousgoods](https://www.fedex.com/dangerousgoods). Select Get Started then select Lithium Batteries. (FX-05 a)
- Maximum net weight per package is 35 kg. (Shipments exceeding 35 kg require pre-approval. Contact Customer Support at [fedex.com](https://www.fedex.com) for details).
- UN specification packaging is required.

Restrictions

- Cargo aircraft only
- Acceptable to Dangerous Goods locations only ([see list](#))
- Batteries/cells known to be damaged or defective are prohibited from transport.
- Waste batteries and batteries being shipped for recycling/disposal are prohibited from air transport.

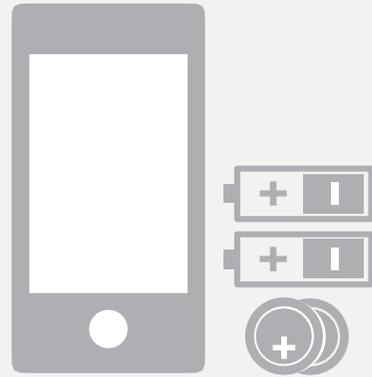
Documentation

- Shipper's Declaration for Dangerous Goods
- Waybill should have the statement "Dangerous goods as per associated Shipper's declaration," and "CAO" or "Cargo Aircraft Only"

Required labels

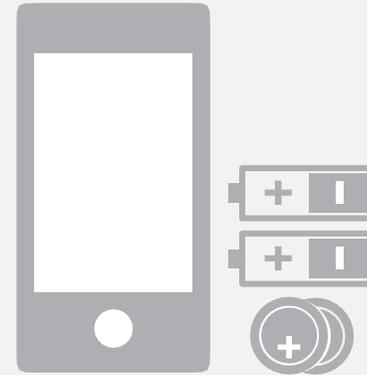


Select capacity



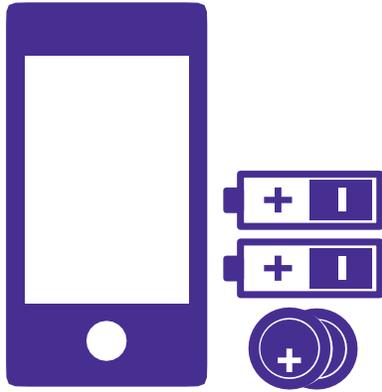
Cells **up to 1g**
Batteries **up to 2g**

UN 3091, Lithium Metal Batteries
Packed with Equipment
PI969 Section II



Cells **over 1g**
Batteries **over 2g**

UN 3091, Lithium Metal Batteries
Packed with Equipment
PI969 Section I



Cells up to 1g
Batteries up to 2g

UN 3091, Lithium Metal Batteries
Packed with Equipment
PI969 Section II

Packaging

- Cells and batteries must be protected so as to prevent short circuits. This includes protection against contact with electrically conductive materials within the same packaging that could lead to a short circuit.
- Cells and/or batteries must be completely enclosed in inner packaging then placed with equipment in a strong rigid outer packaging.
- The equipment must be secured against movement within the outer packaging and must be equipped with an effective means of preventing accidental activation.
- The number of cells or batteries in each package must not exceed the number required for the 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.
- All lithium batteries (Section I, IA, IB and II) in all packing instructions must not be shipped in the same package as the following dangerous goods classes/divisions: 1.4, 2.1, 3, 4.1, 4.2, 4.3, 5.1, 5.2 and 8 and 2.2 with a Cargo Aircraft Only label.
- Each package must be capable of withstanding a 1.2 m drop test in any orientation.
- Maximum net weight of lithium metal cells or batteries per package (exclusive of equipment): 5 kg
- Each cell or battery must meet the provisions of IATA DGR 3.9.2.6.1 (a), (e), (f) and if applicable (g).
- See Appendix for packaging guidelines

Restrictions

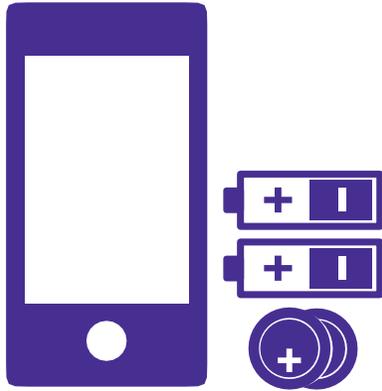
- Batteries/cells known to be damaged or defective are prohibited from transport.
- Waste batteries and batteries being shipped for recycling/disposal are prohibited from air transport.

Documentation

- When waybill is used, the following statement is required on the waybill: "Lithium Metal Batteries in compliance with Section II of PI969".

Required labels





Cells over 1g Batteries over 2g

UN 3091, Lithium Metal Batteries
Packed with Equipment
PI969 Section I

Packaging

- Cells and batteries must be protected so as to prevent short circuits. This includes protection against contact with electrically conductive materials within the same packaging that could lead to a short circuit.
- The number of cells or batteries in each package must not exceed the number required for the 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.
- Cells and/or batteries must either:
 - Be completely enclosed in inner packaging, then placed in packaging of the type described below that meets Packing Group II performance standards, then placed with the equipment in a strong, rigid outer packaging; or
 - Be completely enclosed in inner packaging then placed with equipment in a packaging of a type described below that meets Packing Group II performance standards.
- The equipment must be secured against movement within the outer packaging and must be equipped with an effective means of preventing accidental activation.
- If prepared for transport on passenger aircraft:
 - Cells and batteries must be packed in either a rigid metal intermediate or a metal outer packaging.
 - Cells and batteries must be surrounded by non-combustible, non-conductive cushioning material placed in either the metal intermediate or metal outer packaging.
- Each cell or battery must meet the provisions of IATA DGR 3.9.2.6.1 (a), (e), (f) and if applicable (g).
- Maximum net weight per package (exclusive of equipment):
 - 5 kg for passenger-and-cargo aircraft
 - 35 kg for cargo-only aircraft (Shipments exceeding 35 kg require pre-approval. Contact Customer Support at fedex.com for details).

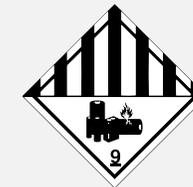
Restrictions

- Acceptable to Dangerous Goods locations only ([see list](#))
- Batteries/cells known to be damaged or defective are prohibited from transport.
- Waste batteries and batteries being shipped for recycling/disposal are prohibited from air transport.

Documentation

- Shipper's Declaration for Dangerous Goods
- Waybill should have the statement "Dangerous goods as per associated Shipper's declaration," and if applicable, "CAO" or "Cargo Aircraft Only"

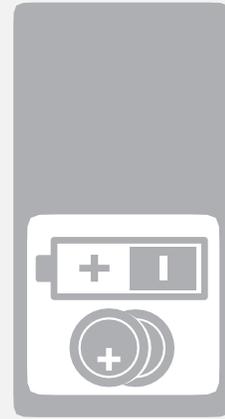
Required labels



when applicable:

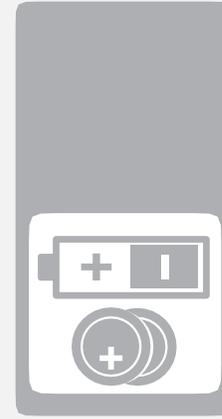


Select capacity



Cells up to 1g
Batteries up to 2g

UN 3091, Lithium Metal Batteries
Contained in Equipment —
PI970 Section II



Cells over 1g
Batteries over 2g

UN 3091, Lithium Metal Batteries
Contained in Equipment —
PI970 Section I

Select quantity



Cells up to 1g
Batteries up to 2g



Up to 4 cells
or 2 batteries



More than 4 cells
or 2 batteries

UN 3091, Lithium Metal Batteries Contained in Equipment — PI970 Section II



Cells up to 1g
Batteries up to 2g
Up to **4 cells** or **2 batteries**

UN 3091, Lithium Metal Batteries Contained
in Equipment — PI970 Section II

Packaging

- Cells and batteries must be protected so as to prevent short circuits. This includes protection against contact with electrically conductive materials within the same packaging that could lead to a short circuit.
- The equipment must be packed in strong rigid outer packaging constructed of suitable material of adequate strength and design in relation to the packaging's capacity and its intended use, unless the cell or battery is afforded equivalent protection by the equipment in which it is contained.
- The equipment containing the cells or batteries must be secured against movement within the outer packaging and must be equipped with an effective means of preventing accidental activation.
- Where multiple pieces of equipment are packed in the same outer packaging, each piece of the equipment must be packed and protected against contact with other equipment so as to prevent damage.
- All lithium batteries (Section I, IA, IB and II) in all packing instructions must not be shipped in the same package as the following dangerous goods classes/divisions: 1.4, 2.1, 3, 4.1, 4.2, 4.3, 5.1, 5.2 and 8 and 2.2 with a Cargo Aircraft Only label.
- Maximum 5 kg net weight of lithium metal cells or batteries per package (exclusive of equipment) for either passenger-and-cargo aircraft or cargo-only aircraft.
- Consignment cannot exceed 2 packages, where each package contains device with no more than 4 cells or 2 batteries.
- Each cell or battery must meet the provisions of IATA DGR 3.9.2.6.1 (a), (e), (f) and if applicable (g).
- See [Appendix](#) for packaging guidelines

Restrictions

- Batteries/cells known to be damaged or defective are prohibited from transport.
- Waste batteries and batteries being shipped for recycling/disposal are prohibited from air transport.

Documentation

- Not applicable

Required labels

- Not applicable



Cells up to 1g
Batteries up to 2g
More than **4 cells** or **2 batteries**

UN 3091, Lithium Metal Batteries Contained
in Equipment — PI970 Section II

Packaging

- Cells and batteries must be protected so as to prevent short circuits. This includes protection against contact with electrically conductive materials within the same packaging that could lead to a short circuit.
- The equipment must be packed in strong rigid outer packaging constructed of suitable material of adequate strength and design in relation to the packaging's capacity and its intended use unless the cell or battery is afforded equivalent protection by the equipment in which it is contained.
- The equipment containing the cells or batteries must be secured against movement within the outer packaging and must be equipped with an effective means of preventing accidental activation.
- Where multiple pieces of equipment are packed in the same outer packaging, each piece of the equipment must be packed and protected against contact with other equipment so as to prevent damage.
- All lithium batteries (Section I, IA, IB and II) in all packing instructions must not be shipped in the same package as the following dangerous goods classes/divisions: 1.4, 2.1, 3, 4.1, 4.2, 4.3, 5.1, 5.2 and 8 and 2.2 with a Cargo Aircraft Only label.
- Maximum 5 kg net weight of lithium metal cells or batteries per package (exclusive of equipment) for either passenger-and-cargo aircraft or cargo-only aircraft.
- Each cell or battery must meet the provisions of IATA DGR 3.9.2.6.1 (a), (e), (f) and if applicable (g).
- See [Appendix](#) for packaging guidelines

Restrictions

- Batteries/cells known to be damaged or defective are prohibited from transport.
- Waste batteries and batteries being shipped for recycling/disposal are prohibited from air transport.

Documentation

- When waybill is used, the following statement is required on the waybill: "Lithium Metal Batteries in compliance with Section II of PI970".

Required labels





Cells over 1g Batteries over 2g

UN 3091, Lithium Metal
Batteries Contained in
Equipment — PI970 Section I

Packaging

- Cells and batteries must be protected so as to prevent short circuits. This includes protection against contact with electrically conductive materials within the same packaging that could lead to a short circuit.
- The equipment must be packed in strong rigid outer packaging constructed of suitable material of adequate strength and design in relation to the packaging's capacity and its intended use unless the battery is afforded equivalent protection by the equipment in which it is contained.
 - The equipment containing the cells or batteries must be secured against movement within the outer packaging and be packed so as to prevent accidental activation.
 - Where multiple pieces of equipment are packed in the same outer packaging, the equipment must be packed and protected against contact with other equipment so as to prevent damage.
 - The weight of lithium metal contained in any piece of equipment must not exceed 12 g per cell and 500 g per battery. Maximum net weight of lithium metal per piece of equipment must not exceed 500 g per battery and 12 g per cell.
- All lithium batteries (Section I, IA, IB and II) in all packing instructions must not be shipped in the same package as the following dangerous goods classes/divisions: 1.4, 2.1, 3, 4.1, 4.2, 4.3, 5.1, 5.2 and 8 and 2.2 with a Cargo Aircraft Only label.
- Maximum net quantity per package (exclusive of equipment): 5 kg on passenger-and-cargo aircraft or 35 kg for cargo-only aircraft
- Each cell or battery must meet the provisions of IATA DGR 3.9.2.6.1 (a), (e), (f) and if applicable (g).
- UN specification packaging is not required.

Restrictions

- Acceptable to Dangerous Goods locations only ([see list](#))
- Batteries/cells known to be damaged or defective are prohibited from transport.
- Waste batteries and batteries being shipped for recycling/disposal are prohibited from air transport.

Documentation

- Shipper's Declaration for Dangerous Goods
- Waybill should have the statement "Dangerous goods as per associated Shipper's declaration," and if applicable, "CAO" or "Cargo Aircraft Only"

Required labels



when applicable:



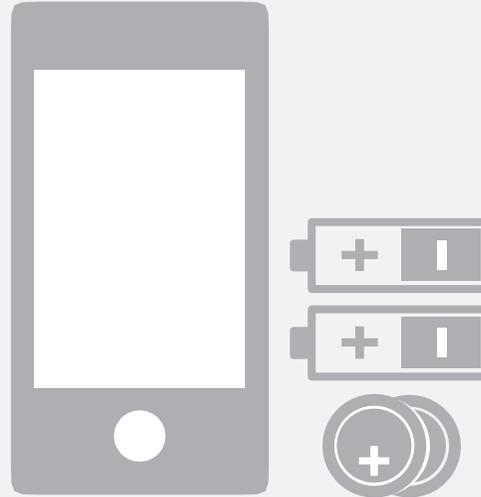
Shipping lithium ion by air



Lithium ion batteries or cells



Batteries/cells only

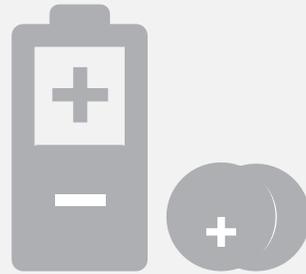


Packed with equipment
(separate in same package)



Contained
in equipment

Select capacity



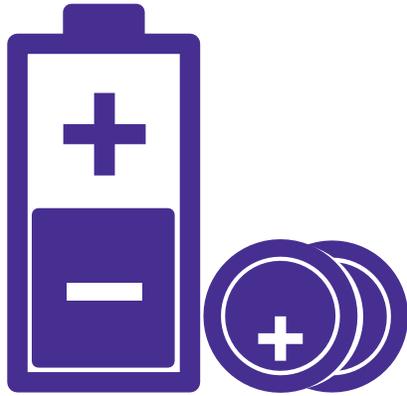
Cells **up to 20 Wh**
Batteries **up to 100 Wh**

UN 3480, Lithium Ion Batteries —
PI965 Section IB



Cells **over 20 Wh**
Batteries **over 100 Wh**

UN 3480, Lithium Ion Batteries —
PI965 Section IA



Cells up to 20 Wh
Batteries up to 100 Wh

UN 3480, Lithium Ion Batteries
— PI965 Section IB

Packaging

- Cells and batteries must be protected so as to prevent short circuits. This includes protection against contact with electrically conductive materials within the same packaging that could lead to a short circuit.
- Lithium ion cells and batteries must be offered for transport at a state of charge (SoC) not exceeding 30% of their rated capacity.
- Cells and batteries must be packed in strong outer packaging.
- Cells and batteries must be packed in inner packaging that completely encloses the cell or battery. To provide protection from damage or compression to the batteries, the inner packaging must be placed in a strong rigid outer packaging.
- Each package must be capable of withstanding a 1.2 m drop test
- All lithium batteries (Section I, IA, IB and II) in all packing instructions must not be shipped in the same package as the following dangerous goods classes/divisions: 1.4, 2.1, 3, 4.1, 4.2, 4.3, 5.1, 5.2 and 8 and 2.2 with a Cargo Aircraft Only label.
- Packages containing cells or batteries must not be placed in an overpack with packages containing dangerous goods classified in Class 1 other than Division 1.4S, Division, 2.1, Class 3, Division 4.1 or Division 5.1.
- Maximum net weight per package is 10 kg.
- UN specification packaging is not required.
- Each cell or battery must meet the provisions of IATA DGR 3.9.2.6.1 (a), (e) and (g).

Restrictions

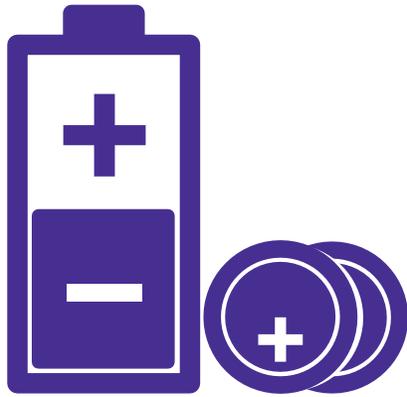
- Cargo aircraft only
- Acceptable to Dangerous Goods locations only ([see list](#))
- Batteries/cells known to be damaged or defective are prohibited from transport.
- Waste batteries and batteries being shipped for recycling/disposal are prohibited from air transport.

Documentation

- Shipper's Declaration for Dangerous Goods (with IB noted in the authorization column for the declaration)
- Waybill should have the statement "Dangerous goods as per associated Shipper's declaration," and "CAO" or "Cargo Aircraft Only"

Required labels





Cells over 20 Wh Batteries over 100 Wh

UN 3480, Lithium Ion Batteries
— PI965 Section IA

Packaging

- Cells and batteries must be protected so as to prevent short circuits. This includes protection against contact with electrically conductive materials within the same packaging that could lead to a short circuit.
- Each cell or battery must meet the provisions of IATA DGR 3.9.2.6.1.
- Lithium ion cells and batteries must be offered for transport at a state of charge (SoC) not exceeding 30% of their rated capacity
- Cells and batteries must be placed in inner packaging that completely encloses the cell or battery, then placed in outer packaging. The completed package for the cells or batteries must meet Packing Group II performance standards.
- All lithium batteries (Section I, IA, IB and II) in all packing instructions must not be shipped in the same package as the following dangerous goods classes/divisions: 1.4, 2.1, 3, 4.1, 4.2, 4.3, 5.1, 5.2 and 8 and 2.2 with a Cargo Aircraft Only label.
- Batteries with a weight of 12 kg or greater and having a strong, impact-resistant outer casing, or assemblies of such batteries, may be transported when packed in strong outer packaging or protective enclosure (e.g. in fully enclosed or wooden slatted crates) not subject to the requirements of Section 6 of IATA Regulations, if approved by the appropriate authority of the State of origin. A copy of the document of approval must accompany the consignment. Batteries manufactured after 31 December 2011 must be marked with the watt-hour rating on the outside case.
- Packages containing cells or batteries must not be placed in an overpack with packages containing dangerous goods classified in Class 1 other than Division 1.4S, Division, 2.1, Class 3, Division 4.1 or Division 5.1.
- Maximum net weight per package is 35 kg. (Shipments exceeding 35 kg require pre-approval. Contact Customer Support at fedex.com for details).
- UN specification packaging is required.

Restrictions

- Cargo aircraft only
- Acceptable to Dangerous Goods locations only ([see list](#))
- Batteries/cells known to be damaged or defective are prohibited from transport.
- Waste batteries and batteries being shipped for recycling/disposal are prohibited from air transport.

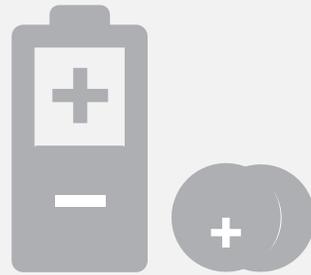
Documentation

- Shipper's Declaration for Dangerous Goods
- Waybill should have the statement "Dangerous goods as per associated Shipper's declaration," and "CAO" or "Cargo Aircraft Only"

Required labels



Select capacity



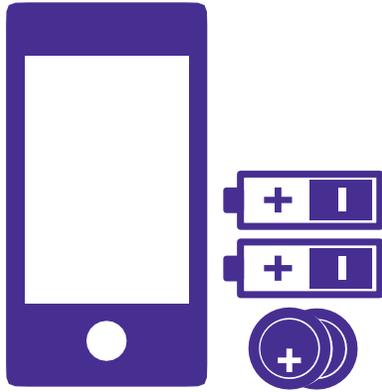
Cells **up to** 20 Wh
Batteries **up to** 100 Wh

UN 3481, Lithium Ion Batteries Packed
with Equipment — PI966 Section II



Cells **over** 20 Wh
Batteries **over** 100 Wh

UN 3481, Lithium Ion Batteries Packed
with Equipment — PI966 Section I



Cells up to 20 Wh
Batteries up to 100 Wh

UN 3481, Lithium Ion Batteries Packed
with Equipment — PI966 Section II

Packaging

- Cells and batteries must be protected so as to prevent short circuits. This includes protection against contact with electrically conductive materials within the same packaging that could lead to a short circuit.
- Cells and batteries offered for transport must meet the IATA 3.9.2.6.1 (a), (e) and (g).
- Cells and/or batteries must be completely enclosed in inner packaging, then placed with equipment in strong, rigid outer packaging.
- The equipment must be secured against movement within the outer packaging and must be equipped with an effective means of preventing accidental activation.
- The number of cells or batteries in each package must not exceed the number required for the 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.
- All lithium batteries (Section I, IA, IB and II) in all packing instructions must not be shipped in the same package as the following dangerous goods classes/divisions: 1.4, 2.1, 3, 4.1, 4.2, 4.3, 5.1, 5.2 and 8 and 2.2 with a Cargo Aircraft Only label.
- Each package must be capable of withstanding a 1.2 m drop test.
- Maximum net weight of lithium batteries or cells per package: 5 kg
- See [Appendix](#) for packaging guidelines

Restrictions

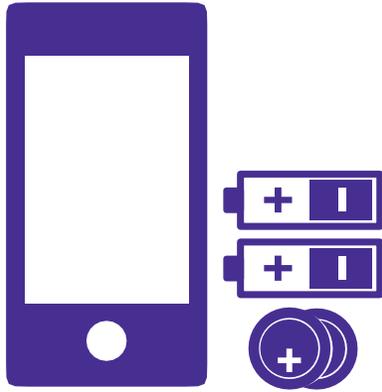
- Batteries/cells known to be damaged or defective are prohibited from transport.
- Waste batteries and batteries being shipped for recycling/disposal are prohibited from air transport.

Documentation

- The following statement is required on the waybill: “Lithium Ion Batteries in compliance with Section II of PI966”.

Required labels





Cells over 20 Wh Batteries over 100 Wh

UN 3481, Lithium Ion Batteries
Packed with Equipment —
PI966 Section I

Packaging

- Cells and batteries must be protected so as to prevent short circuits. This includes protection against contact with electrically conductive materials within the same packaging that could lead to a short circuit.
- Each cell or battery must meet the provisions of IATA DGR 3.9.2.6.1.
- The number of cells or batteries in each package must not exceed the number required for the 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.
- Cells and/or batteries must either:
 - Be completely enclosed in inner packaging, then placed in packaging of the type described below that meets Packing Group II performance standards, then placed with the equipment in a strong, rigid outer packaging; or
 - Be completely enclosed in inner packaging, then placed with equipment in packaging of a type described below that meets Packing Group II performance standards
- The equipment must be secured against movement within the outer packaging and must be equipped with an effective means of preventing accidental activation.
- All lithium batteries (Section I, IA, IB and II) in all packing instructions must not be shipped in the same package as the following dangerous goods classes/divisions: 1.4, 2.1, 3, 4.1, 4.2, 4.3, 5.1, 5.2 and 8 and 2.2 with a Cargo Aircraft Only label.
- Batteries manufactured after 31 December 2011 must be marked with the watt-hour rating on the outside case.
- UN specification packaging is required.
- Maximum 5 kg net weight of lithium-ion cell or batteries per package (exclusive of equipment) for passenger-and-cargo aircraft and 35 kg for cargo-only aircraft. (Shipments exceeding 35 kg require pre-approval. Contact Customer Support at fedex.com for details).

Restrictions

- Acceptable to Dangerous Goods locations only ([see list](#))
- Batteries/cells known to be damaged or defective are prohibited from transport.
- Waste batteries and batteries being shipped for recycling/disposal are prohibited from air transport.

Documentation

- Shipper's Declaration for Dangerous Goods
- Waybill should have the statement "Dangerous goods as per associated Shipper's declaration," and if applicable, "CAO" or "Cargo Aircraft Only"

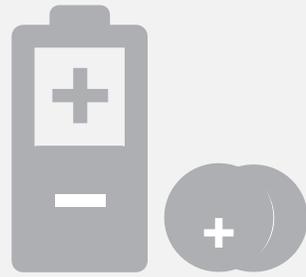
Required labels



when applicable:



Select capacity



Cells **up to 20 Wh**
Batteries **up to 100 Wh**

UN 3481, Lithium Ion Batteries
Contained in Equipment — PI967
Section II



Cells **over 20 Wh**
Batteries **over 100 Wh**

UN 3481, Lithium Ion Batteries
Contained in Equipment — PI967
Section I

Select quantity



Cells up to 20 Wh
Batteries up to 100 Wh



Up to 4 cells
or 2 batteries



More than 4 cells
or 2 batteries

UN 3481, Lithium Ion Batteries Contained in Equipment — PI967 Section II



Cells up to 20 Wh
Batteries up to 100 Wh
Up to 4 cells or 2 batteries

UN 3481, Lithium Ion Batteries
Contained in Equipment —
PI967 Section II

Packaging

- Cells and batteries must be protected so as to prevent short circuits. This includes protection against contact with electrically conductive materials within the same packaging that could lead to a short circuit.
- UN specification packaging is not required.
- Cells and batteries offered for transport must meet the IATA 3.9.2.6.1 (a), (e) and (g).
- The equipment must be packed in strong rigid outer packaging constructed of suitable material of adequate strength and design in relation to the packaging's capacity and its intended use, unless the cell or battery is afforded equivalent protection by the equipment in which it is contained.
- The equipment containing the cells or batteries must be secured against movement within the outer packaging and must be equipped with an effective means of preventing accidental activation.
- Where multiple pieces of equipment are packed in the same outer packaging, each piece of the equipment must be packed and protected against contact with other equipment so as to prevent damage.
- All lithium batteries (Section I, IA, IB and II) in all packing instructions must not be shipped in the same package as the following dangerous goods classes/divisions: 1.4, 2.1, 3, 4.1, 4.2, 4.3, 5.1, 5.2 and 8 and 2.2 with a Cargo Aircraft Only label.
- Maximum 5 kg net weight of lithium ion cells or batteries per package (exclusive of equipment) for either passenger-and-cargo aircraft or cargo-only aircraft.
- Consignment cannot exceed 2 packages, where each package contains device with no more than 4 cells or 2 batteries.
- See [Appendix](#) for packaging guidelines

Restrictions

- Batteries/cells known to be damaged or defective are prohibited from transport.
- Waste batteries and batteries being shipped for recycling/disposal are prohibited from air transport.

Documentation

- The following statement is required on the waybill: "Lithium Ion Batteries in compliance with Section II of PI967".

Required labels

Not applicable



Cells up to 20 Wh
Batteries up to 100 Wh
More than 4 cells or 2 batteries

UN 3481, Lithium Ion Batteries
Contained in Equipment —
PI967 Section II

Packaging

- Cells and batteries must be protected so as to prevent short circuits. This includes protection against contact with electrically conductive materials within the same packaging that could lead to a short circuit.
- UN specification packaging is not required.
- Cells and batteries offered for transport must meet the IATA 3.9.2.6.1 (a), (e) and (g).
- The equipment must be packed in strong rigid outer packaging constructed of suitable material of adequate strength and design in relation to the packaging's capacity and its intended use, unless the cell or battery is afforded equivalent protection by the equipment in which it is contained.
- The equipment containing the cells or batteries must be secured against movement within the outer packaging and must be equipped with an effective means of preventing accidental activation.
- Where multiple pieces of equipment are packed in the same outer packaging, each piece of the equipment must be packed and protected against contact with other equipment so as to prevent damage.
- All lithium batteries (Section I, IA, IB and II) in all packing instructions must not be shipped in the same package as the following dangerous goods classes/divisions: 1.4, 2.1, 3, 4.1, 4.2, 4.3, 5.1, 5.2 and 8 and 2.2 with a Cargo Aircraft Only label.
- Maximum 5 kg net weight of lithium ion cells or batteries per package (exclusive of equipment) for either passenger-and-cargo aircraft or cargo-only aircraft.
- See [Appendix](#) for packaging guidelines

Restrictions

- Batteries/cells known to be damaged or defective are prohibited from transport.
- Waste batteries and batteries being shipped for recycling/disposal are prohibited from air transport.

Documentation

- The following statement is required on the waybill: "Lithium Ion Batteries in compliance with Section II of PI967".

Required labels





Cells over 20 Wh Batteries over 100 Wh

UN 3481, Lithium Ion Batteries
Contained in Equipment —
PI967 Section I

Packaging

- Cells and batteries must be protected so as to prevent short circuits. This includes protection against contact with electrically conductive materials within the same packaging that could lead to a short circuit.
- Each cell or battery must meet the provisions of IATA DGR 3.9.2.6.1.
 - The equipment must be packed in strong rigid outer packaging constructed of suitable material of adequate strength and design in relation to the packaging's capacity and its intended use, unless the battery is afforded equivalent protection by the equipment in which it is contained.
 - The equipment containing the cells or batteries must be secured against movement within the outer packaging and be packed so as to prevent accidental activation.
 - Where multiple pieces of equipment are packed in the same outer packaging, the equipment must be packed and protected against contact with other equipment so as to prevent damage.
- All lithium batteries (Section I, IA, IB and II) in all packing instructions must not be shipped in the same package as the following dangerous goods classes/divisions: 1.4, 2.1, 3, 4.1, 4.2, 4.3, 5.1, 5.2 and 8 and 2.2 with a Cargo Aircraft Only label.
- Maximum net quantity per package (exclusive of equipment): 5 kg on passenger-and-cargo aircraft or 35 kg for cargo-only aircraft. (Shipments exceeding 35 kg require pre-approval. Contact customer support.)
- UN specification packaging is not required.

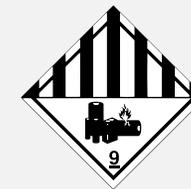
Restrictions

- Acceptable to Dangerous Goods locations only ([see list](#))
- Batteries/cells known to be damaged or defective are prohibited from transport.
- Waste batteries and batteries being shipped for recycling/disposal are prohibited from air transport.

Documentation

- Shipper's Declaration for Dangerous Goods
- Waybill should have the statement "Dangerous goods as per associated Shipper's declaration," and if applicable, "CAO" or "Cargo Aircraft Only"

Required labels



when applicable:



What are you shipping?



BY ROAD

Including:
FedEx® Regional Economy
FedEx® Regional Economy Freight
FedEx Priority Overnight®



Lithium **metal** or **alloy**
batteries or cells

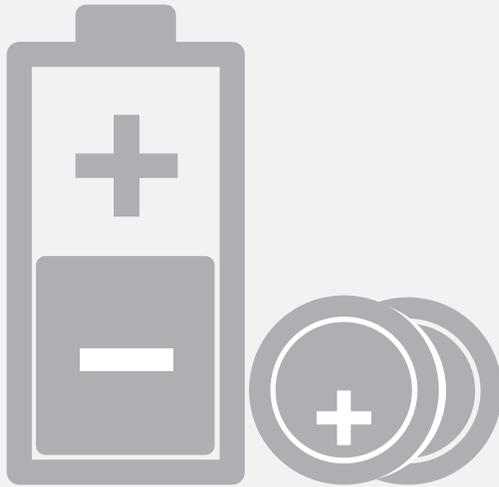


Lithium **ion**
batteries or cells

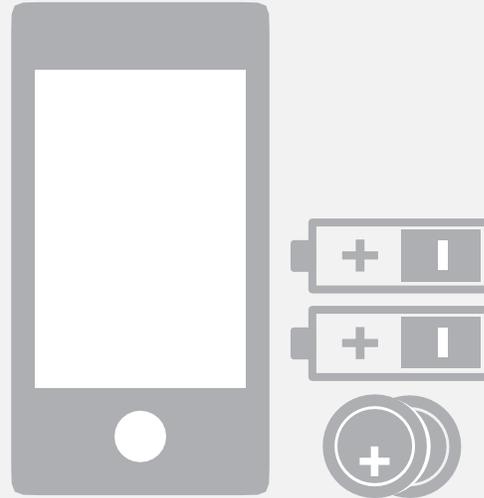
Shipping lithium metal
or **alloy** batteries or cells by road



Lithium metal or alloy batteries or cells



Batteries/cells only

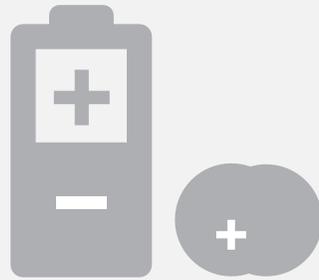


Packed with equipment
(separate in same package)



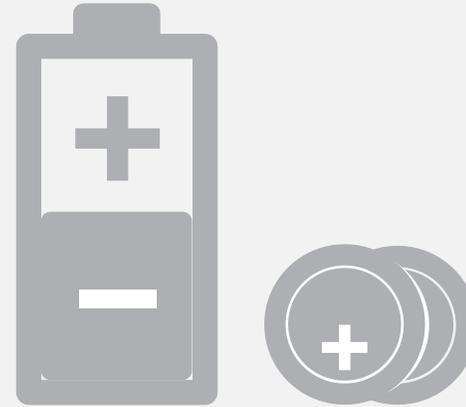
Contained
in equipment

Select capacity



Cells **up to 1g**
Batteries **up to 2g**

UN 3090, Lithium Metal Batteries —
Special Provision 188



Cells **over 1g**
Batteries **over 2g**

UN 3090, Lithium Metal Batteries —
Fully Regulated



Cells up to 1g
Batteries up to 2g

UN 3090, Lithium Metal Batteries
— Special Provision 188



Packaging

- UN specification packaging is not required
- Cells and batteries shall be packed in inner packaging that completely encloses the cell or battery. Cells and batteries shall be protected to prevent short circuits. This includes protection against contact with electrically conductive material within the same packaging that could lead to a short circuit. The inner packaging shall be packed in strong outer packaging.
- Each package shall be capable of withstanding a 1.2 m drop test in any orientation without damage to cell or batteries contained therein, without shifting of the contents so as to allow battery to battery (or cell to cell) contact and without release of contents.
- Package shall not exceed 30 kg gross weight.
- Each cell or battery must meet the provision of ADR 2.2.9.1.7 (a), (e), (f) and if applicable (g).



Documentation

Waybill



Required labels





Cells over 1g
Batteries over 2g

UN 3090, Lithium Metal
Batteries — Fully Regulated

Note: Please reach out to your Account Executive for applicability of services. As we continue with our integration, some Dangerous Goods shipments by Road will only be available through TNT Economy services.

Packaging



- Cells or batteries shall be packed in packagings so that the cells or batteries are protected against damage that may be caused by the movement or placement of the cells or batteries within the packagings.
- Packaging shall conform to the packaging group II performance level.
- In addition for cells or batteries with a gross mass of 12 kg or more employing a strong, impact resistant outer casing, and assemblies of such cells or batteries:

- a) Strong outer packagings;
- b) Protective enclosures (e.g., fully enclosed or wooden slatted crates); or
- c) Pallets or other handling devices.

Cells or batteries shall be secured to prevent inadvertent movement, and the terminals shall not support the weight of other superimposed elements.

- Each cell or battery must meet the provision of ADR 2.2.9.1.7
- Cells and batteries shall be protected against short circuit.

Documentation

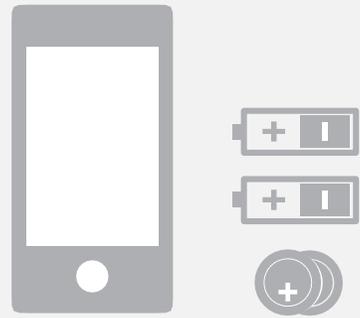


- ADR declaration or Multimodal Dangerous Goods Form
- Waybill

Required labels

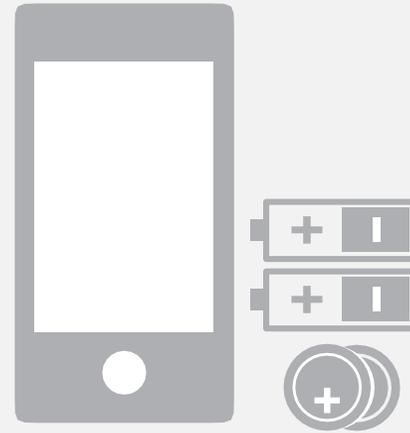


Select capacity



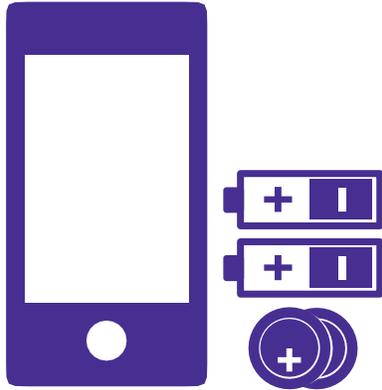
Cells up to 1g
Batteries up to 2g

UN 3091, Lithium Metal Batteries —
Special Provision 188



Cells over 1g
Batteries over 2g

UN 3091, Lithium Metal Batteries
Packed with Equipment
PI969 Section I



Cells up to 1g
Batteries up to 2g
UN 3091, Lithium Metal Batteries
— Special Provision 188



Packaging

- UN specification packaging is not required.
- Cells and batteries shall be packed in inner packaging that completely encloses the cell or battery. Cells and batteries shall be protected to prevent short circuits. This includes protection against contact with electrically conductive material within the same packaging that could lead to a short circuit. The inner packaging shall be packed in strong outer packaging.
- Each package shall be capable of withstanding a 1.2 m drop test in any orientation without damage to cell or batteries contained therein, without shifting of the contents so as to allow battery to battery (or cell to cell) contact and without release of contents.
- Package shall not exceed 30 kg gross weight.
- Each cell or battery must meet the provision of ADR 2.2.9.1.7 (a), (e), (f) and if applicable (g).

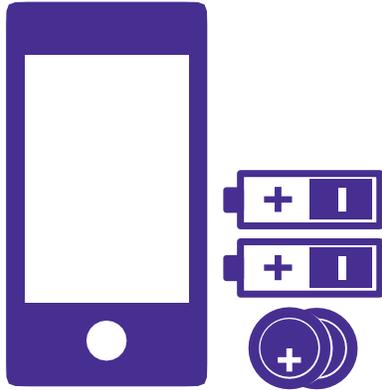


Documentation

Waybill



Required labels



Cells over 1g
Batteries over 2g

UN 3091, Lithium Metal
Batteries Packed with
Equipment —Fully Regulated



Packaging

- Cells or batteries shall be packed in packagings so that the cells or batteries are protected against damage that may be caused by the movement or placement of the cells or batteries within the packagings, then placed with the equipment in an outer packaging, or
- Packagings that completely enclose the cells or batteries, then placed with equipment in a packaging conforming that cells or batteries are protected against damage that may be caused by the movement or placement of the cells or batteries within the packagings
- Packaging shall conform to the packaging group II performance level.
- The equipment shall be secured against movement within the outer packaging.
- Each cell or battery must meet the provision of ADR 2.2.9.1.7
- Cells and batteries shall be protected against short circuit.

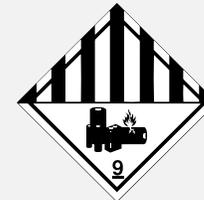


Documentation

- ADR declaration or Multimodal Dangerous Goods Form
- Waybill



Required labels



Note: Please reach out to your Account Executive for applicability of services. As we continue with our integration, some Dangerous Goods shipments by Road will only be available through TNT Economy services.

Select capacity



Cells up to 1g
Batteries up to 2g

UN 3091, Lithium Metal Batteries
Contained in Equipment — Special
Provision 188



Cells over 1g
Batteries over 2g

UN 3091, Lithium Metal Batteries
Contained in Equipment — Fully Regulated

Select quantity



Cells up to 1g
Batteries up to 2g



Up to 4 cells
or 2 batteries



More than 4 cells
or 2 batteries

UN 3091, Lithium Metal Batteries Contained in Equipment — Special Provision 188



Cells up to 1g
Batteries up to 2g
Up to 4 cells
or 2 batteries

UN 3091, Lithium Metal
Batteries Contained in
Equipment — Special
Provision 188



Packaging

- UN specification packaging is not required.
- Cells and batteries when installed in equipment shall be protected from damage and short circuit, and the equipment shall be equipped with effective means of preventing accidental activation.
- This requirement does not apply to devices which are intentionally active in carriage (e.g. radio frequency identification (RFID) transmitters, watches, sensors, etc.) and which are not capable of generating dangerous evolution of heat.
- When batteries are installed in equipment, the equipment shall be packed in a strong outer packaging constructed of suitable material of adequate strength and design in relation to the packaging's capacity and its intended use, unless the battery is afforded equivalent protection by the equipment which it is contained.
- Package shall not exceed 30 kg gross weight.
- Each cell or battery must meet the provision of ADR 2.2.9.1.7 (a), (e), (f) and if applicable (g).



Documentation

Waybill



Required labels

Not applicable



Cells up to 1g
Batteries up to 2g
More than 4 cells
or 2 batteries

UN 3091, Lithium Metal
Batteries Contained in
Equipment — Special
Provision 188



Packaging

- UN specification packaging is not required.
- Cells and batteries when installed in equipment shall be protected from damage and short circuit, and the equipment shall be equipped with effective means of preventing accidental activation.
- This requirement does not apply to devices which are intentionally active in carriage (e.g. radio frequency identification (RFID) transmitters, watches, sensors, etc.) and which are not capable of generating dangerous evolution of heat.
- When batteries are installed in equipment, the equipment shall be packed in a strong outer packaging constructed of suitable material of adequate strength and design in relation to the packaging's capacity and its intended use, unless the battery is afforded equivalent protection by the equipment which it is contained.
- Package shall not exceed 30 kg gross weight.
- Consignment cannot exceed 2 packages, where each package contains device with no more than 4 cells or 2 batteries.
- Each cell or battery must meet the provision of ADR 2.2.9.1.7 (a), (e), (f) and if applicable (g).



Documentation

- Waybill



Required labels





Cells over 1g
Batteries over 2g

UN 3091, Lithium Metal
Batteries Contained in
Equipment — Fully Regulated



Packaging

- Strong outer packagings constructed of suitable material, and of adequate strength and design in relation to the packaging capacity and its intended use. They shall be constructed in such a manner as to prevent accidental operation during carriage. Packagings need not meet the requirements of ADR 4.1.1.3.
- Large equipment can be offered for carriage unpackaged or on pallets when the cells or batteries are afforded equivalent protection by the equipment in which they are contained.
- Devices such as radio frequency identification (RFID) tags, watches and temperature loggers, which are not capable of generating a dangerous evolution of heat, may be carried when intentionally active in strong outer packagings.
- Each cell or battery must meet the provision of ADR 2.2.9.1.7
- Cells and batteries shall be protected against short circuit.



Documentation

- ADR declaration or Multimodal Dangerous Goods Form
- Waybill



Required labels

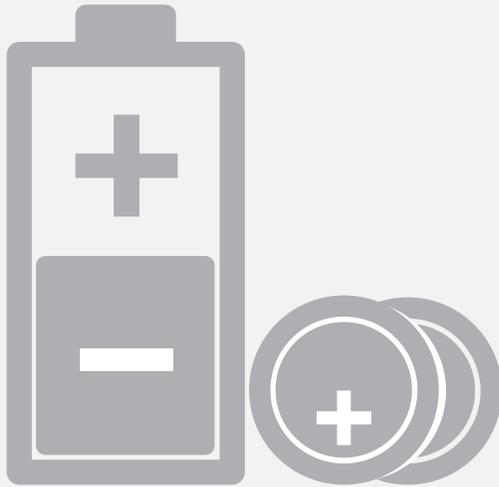


Note: Please reach out to your Account Executive for applicability of services. As we continue with our integration, some Dangerous Goods shipments by Road will only be available through TNT Economy services.

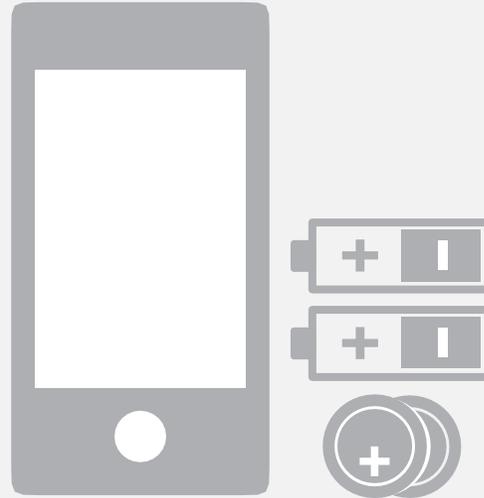
Shipping lithium ion by road



Lithium ion batteries or cells



Batteries/cells only

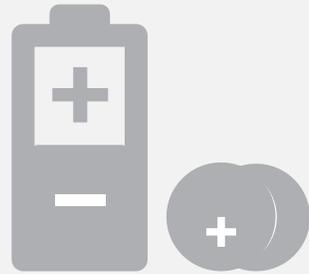


Packed with equipment
(separate in same package)



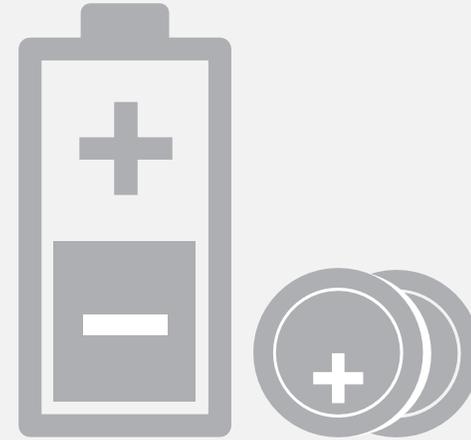
Contained
in equipment

Select capacity



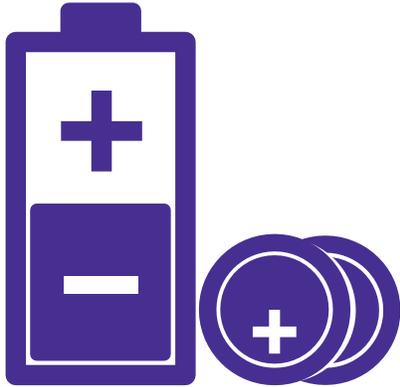
Cells **up to** 20 Wh
Batteries **up to** 100 Wh

UN 3480, Lithium Ion Batteries — Special
Provision 188



Cells **over** 20 Wh
Batteries **over** 100 Wh

UN 3480, Lithium Ion Batteries – Fully
Regulated



Cells up to 20 Wh
Batteries up to 100 Wh

UN 3480, Lithium Ion Batteries
— Special Provision 188



Packaging

- UN specification packaging is not required.
- Cells and batteries shall be packed in inner packaging that completely encloses the cell or battery. Cells and batteries shall be protected to prevent short circuits. This includes protection against contact with electrically conductive material within the same packaging that could lead to a short circuit. The inner packaging shall be packed in strong outer packaging.
- Each package shall be capable of withstanding a 1.2 m drop test in any orientation without damage to cell or batteries contained therein, without shifting of the contents so as to allow battery to battery (or cell to cell) contact and without release of contents.
- Package shall not exceed 30 kg gross weight.
- Each cell or battery must meet the provision of ADR 2.2.9.1.7 (a), (e), (f) and if applicable (g).



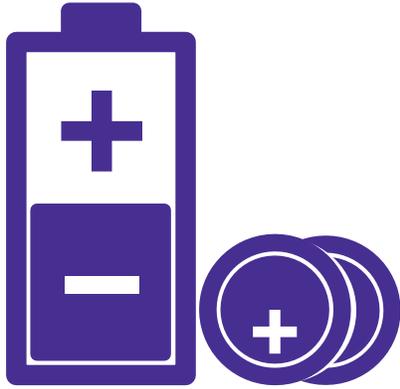
Documentation

- Waybill



Required labels





Cells over 20 Wh
Batteries over 100 Wh

UN 3480, Lithium Ion Batteries
— Fully Regulated

Packaging



- Cells or batteries shall be packed in packagings so that the cells or batteries are protected against damage that may be caused by the movement or placement of the cells or batteries within the packagings.
- Packaging shall conform to the packaging group II performance level.
- In addition for cells or batteries with a gross mass of 12 kg or more employing a strong, impact resistant outer casing, and assemblies of such cells or batteries:

- a) Strong outer packagings;
- b) Protective enclosures (e.g., fully enclosed or wooden slatted crates); or
- c) Pallets or other handling devices.

Cells or batteries shall be secured to prevent inadvertent movement, and the terminals shall not support the weight of other superimposed elements.

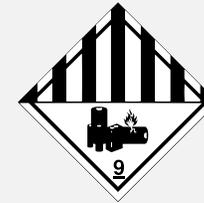
- Each cell or battery must meet the provision of ADR 2.2.9.1.7
- Cells and batteries shall be protected against short circuit.

Documentation



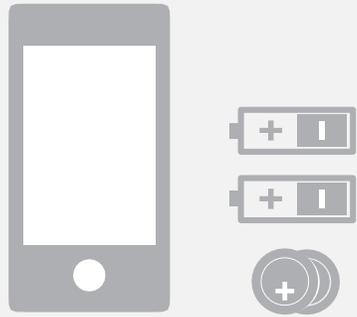
- ADR declaration or Multimodal Dangerous Goods Form
- Waybill

Required labels



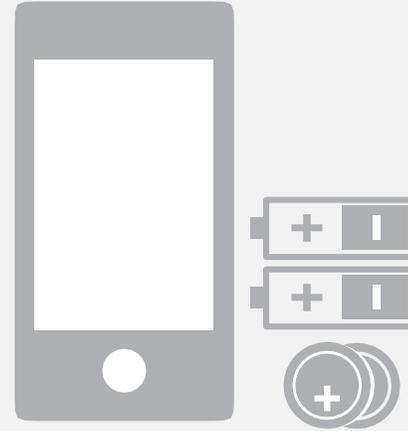
Note: Please reach out to your Account Executive for applicability of services. As we continue with our integration, some Dangerous Goods shipments by Road will only be available through TNT Economy services.

Select capacity



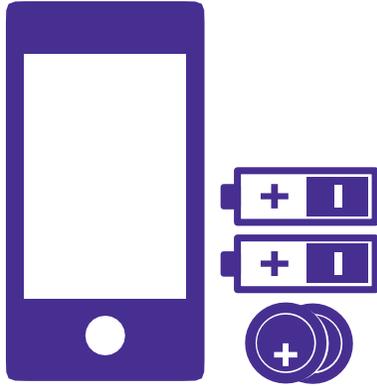
Cells **up to** 20 Wh
Batteries **up to** 100 Wh

UN 3481, Lithium Ion Batteries Packed
with Equipment - Complying with Special
Provision 188



Cells **over** 20 Wh
Batteries **over** 100 Wh

UN 3481, Lithium Ion Batteries Packed with
Equipment — Fully Regulated



Cells up to 20 Wh
Batteries up to 100 Wh

UN 3481, Lithium Ion Batteries
Packed with Equipment - Complying
with Special Provision 188



Packaging

- UN specification packaging is not required.
- Cells and batteries shall be packed in inner packaging that completely encloses the cell or battery. Cells and batteries shall be protected to prevent short circuits. This includes protection against contact with electrically conductive material within the same packaging that could lead to a short circuit. The inner packaging shall be packed in strong outer packaging.
- Each package shall be capable of withstanding a 1.2 m drop test in any orientation without damage to cell or batteries contained therein, without shifting of the contents so as to allow battery to battery (or cell to cell) contact and without release of contents.
- The equipment must also be secured against any movement within the outer packaging and must be equipped with an effective means of preventing accidental activation.
- Each cell or battery must meet the provision of ADR 2.2.9.1.7 (a), (e), (f) and if applicable (g).



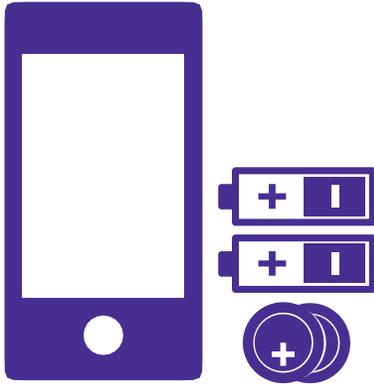
Documentation

- Waybill



Required labels





Cells over 20 Wh
Batteries over 100 Wh

UN 3481, Lithium Ion Batteries
Packed with Equipment —
Fully Regulated



Packaging

- Cells or batteries shall be packed in packagings so that the cells or batteries are protected against damage that may be caused by the movement or placement of the cells or batteries within the packagings, then placed with the equipment in an outer packaging, or
- Packagings that completely enclose the cells or batteries, then placed with equipment in a packaging conforming that cells or batteries are protected against damage that may be caused by the movement or placement of the cells or batteries within the packagings
- Packaging shall conform to the packaging group II performance level.
- The equipment shall be secured against movement within the outer packaging.
- Each cell or battery must meet the provision of ADR 2.2.9.1.7
- Cells and batteries shall be protected against short circuit.



Documentation

- ADR declaration or Multimodal Dangerous Goods Form
- Waybill



Required labels



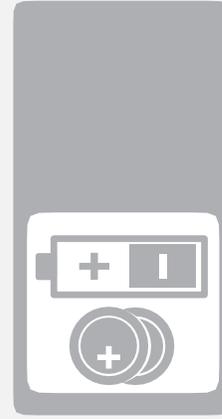
Note: Please reach out to your Account Executive for applicability of services. As we continue with our integration, some Dangerous Goods shipments by Road will only be available through TNT Economy services.

Select capacity



Cells **up to** 20 Wh
Batteries **up to** 100 Wh

UN 3480, Lithium Ion Batteries — Special
Provision 188



Cells **over** 20 Wh
Batteries **over** 100 Wh

UN 3480, Lithium Ion Batteries –
Fully Regulated

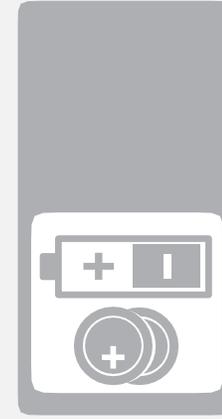
Select quantity



Cells up to 20 Wh
Batteries up to
100 Wh



Up to 4 cells
or 2 batteries



More than 4 cells
or 2 batteries

UN 3480, Lithium Ion Batteries — Special Provision 188



Cells up to 20 Wh
Batteries up to 100 Wh

**Up to 4 cells
or 2 batteries**

UN 3481, Lithium Ion Batteries
Contained in Equipment —
Special Provision 188



Packaging

- UN specification packaging is not required.
- Cells and batteries when installed in equipment shall be protected from damage and short circuit, and the equipment shall be equipped with effective means of preventing accidental activation.
- This requirement does not apply to devices which are intentionally active in carriage (e.g. radio frequency identification (RFID) transmitters, watches, sensors, etc.) and which are not capable of generating dangerous evolution of heat.
- When batteries are installed in equipment, the equipment shall be packed in a strong outer packaging constructed of suitable material of adequate strength and design in relation to the packaging's capacity and its intended use, unless the battery is afforded equivalent protection by the equipment which it is contained.
- Consignment cannot exceed 2 packages, where each package contains device with no more than 4 cells or 2 batteries.
- Each cell or battery must meet the provision of ADR 2.2.9.1.7 (a), (e), (f) and if applicable (g).



Documentation

- Waybill



Required labels

- Not applicable



Cells up to 20 Wh
Batteries up to 100 Wh

**More than 4 cells or
2 batteries**

UN 3481, Lithium Ion Batteries
Contained in Equipment —
Special Provision 188



Packaging

- UN specification packaging is not required.
- Cells and batteries when installed in equipment shall be protected from damage and short circuit, and the equipment shall be equipped with effective means of preventing accidental activation.
- This requirement does not apply to devices which are intentionally active in carriage (radio frequency identification (RFID) transmitters, watches, sensors etc.) and which are not capable of generating of dangerous evolution of heat.
- When batteries are installed in equipment, the equipment shall be packed in a strong outer packaging constructed of suitable material of adequate strength and design in relation to the packaging's capacity and its intended use unless the battery is afforded equivalent protection by the equipment which it is contained.
- Each cell or battery must meet the provision of ADR 2.2.9.1.7 (a), (e), (f) and if applicable (g).



Documentation

- Waybill



Required labels





Cells over 20 Wh
Batteries over 100 Wh

UN 3481, Lithium Ion Batteries
Contained in Equipment —
Fully Regulated



Packaging

- Strong outer packagings constructed of suitable material, and of adequate strength and design in relation to the packaging capacity and its intended use. They shall be constructed in such a manner as to prevent accidental operation during carriage. Packagings need not meet the requirements of ADR 4.1.1.3.
- Large equipment can be offered for carriage unpackaged or on pallets when the cells or batteries are afforded equivalent protection by the equipment in which they are contained.
- Devices such as radio frequency identification (RFID) tags, watches and temperature loggers, which are not capable of generating a dangerous evolution of heat, may be carried when intentionally active in strong outer packagings.
- Each cell or battery must meet the provision of ADR 2.2.9.1.7
- Cells and batteries shall be protected against short circuit.

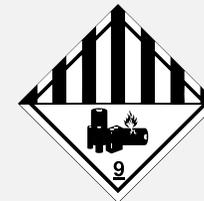


Documentation

- ADR declaration or Multimodal Dangerous Goods Form
- Waybill



Required labels



Note: Please reach out to your Account Executive for applicability of services. As we continue with our integration, some Dangerous Goods shipments by Road will only be available through TNT Economy services.



Thank You

Appendix

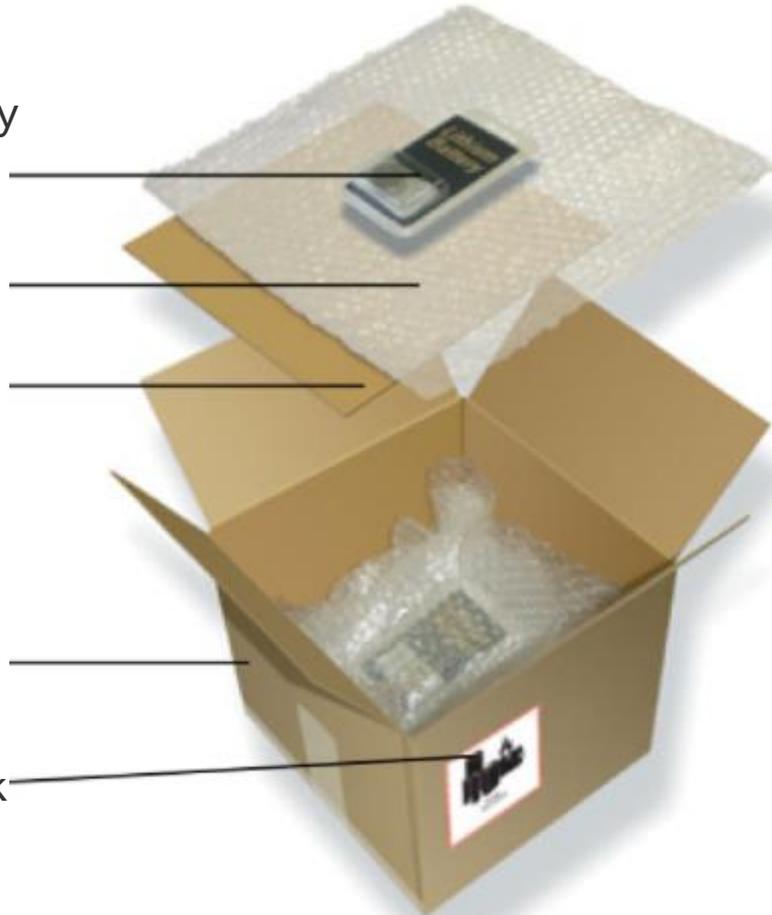
Lithium metal battery
in blister pack

Cushioning

Nonconductive
dividers

Sturdy outer box

Lithium battery mark
UN 3481 or UN 3091
(123) 456 - 7890



Section II Lithium Battery Packaging Guidelines

To comply with Section II IATA shipping requirements, shipments containing lithium batteries and cells must comply with specific packaging guidelines.

- Ensure that lithium batteries are individually packaged in fully enclosed inner packaging such as a plastic blister wrap or pasteboard to provide protection for each battery.
- Shield and protect lithium batteries to prevent short circuits or contact with conductive materials within the packaging that could cause short circuits.
- Ensure that packaging is proven (i.e., tested) to meet the requirements of each test in the UN Manual of Tests and Criteria, Part III, Sub-Section 38.3.
- Make sure that lithium batteries are completely enclosed (such as in equipment or surrounded by plastic with void space filled to prevent movement), except when the proper shipping names end with “contained in equipment.”
- Place contents in a sturdy outer container.
- Provide correct labeling and documentation.

Certain fully regulated Section IA and Section I Packing Instructions require UN specification packaging that meets Packing Group II performance standards. Refer to the specific IATA Packing Instruction for complete packaging requirements.