

Lithium Batteries & Cells Shipping Guide



Rev. 2022

Welcome

We are happy you decided to ship with us. Please take a few minutes to read the below page thoroughly, including the lithium battery prohibitions section. Our goal is for you to become familiar with the current Lithium Batteries & Cells Shipping Guide by following these simple instructions and for you to use it as an ongoing source for the proper packaging, documentation and labeling of lithium batteries.

IMPORTANT: Lithium battery prohibitions

Damaged, defective or recalled batteries are forbidden for air transport. However, batteries having some other defective feature (e.g., batteries with the incorrect model number on the label or batteries not holding enough charge) can still be shipped by air with proper packaging, labeling and documentation.

For reference

Lithium battery shipping information for air transport referenced in this guide (including pictured labels) are based on the 2022 International Air Transport Association (IATA) Dangerous Goods Regulations (DGR) 63rd Edition section 7.3.18.2, 7.4.2 and 7.1.C. Lithium battery shipping information for ocean transport referenced in this guide (including pictured labels) are based off the International Maritime Dangerous Goods Code 2020 Edition 5.2.1.102 and 5.2.2.2.2

Reminders and other disclaimers

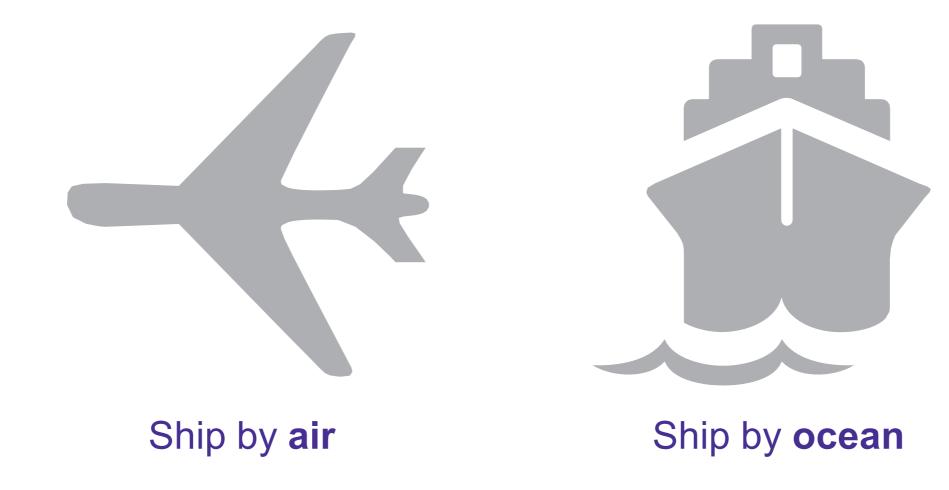
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I have read through and agree to the above information and terms.

I agree

I do not agree

Choose shipping method (Click on your choice)





Choose battery type (Click on your choice)







Lithium **ion** batteries or cells

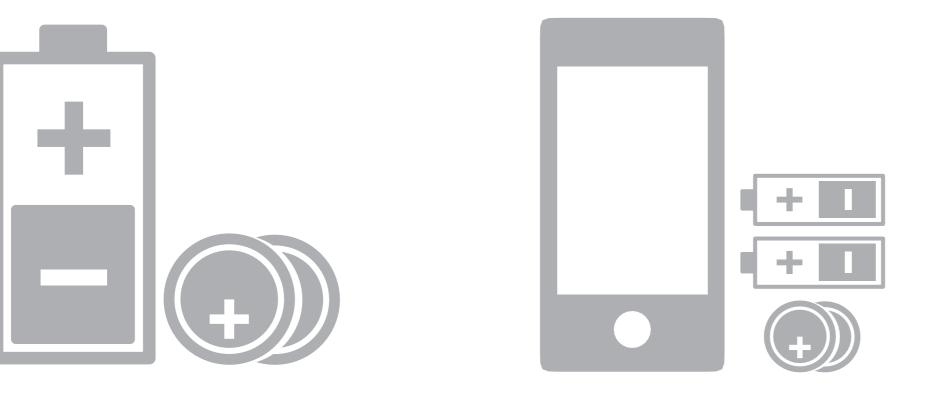


Lithium Batteries & Cells Shipping Guide by Air





Lithium **metal** batteries or cells



Batteries and cells only

Packed with equipment (separate in the same package)

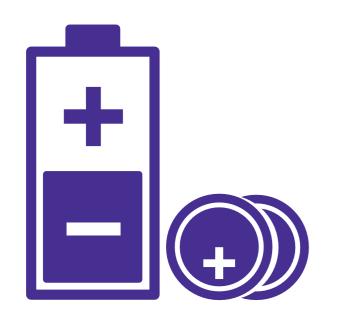


Lithium Batteries & Cells Shipping Guide by Air

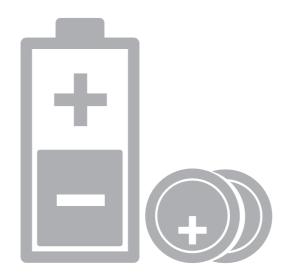




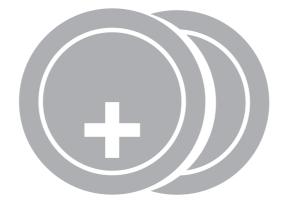
Contained in equipment



Batteries and cells only



Batteries and cells ≤ 0.3 g



Cells > 0.3g and \leq 1g



Lithium Batteries & Cells Shipping Guide by Air





Batteries > 0.3g and \leq 2g

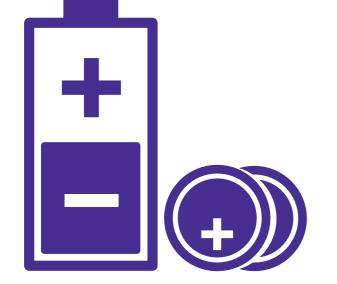


Cells > 1g and batteries > 2g



Packaging

- Maximum net quantity per package is 2.5 kg
- Cargo Aircraft Only (CAO)
- UN Specification Packaging is not required



Batteries and cells only $\leq 0.3g$



Documentation

- "Cargo Aircraft Only"

Required labeling





UN 3090, Lithium Metal Batteries — PI968 Section IB



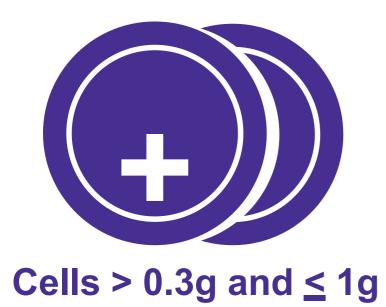
Lithium Batteries & Cells Shipping Guide by Air

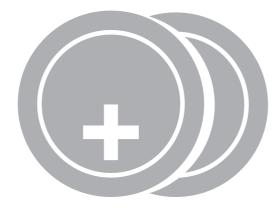


• Each battery or cell must be protected against a short circuit and placed in an inner packaging that completely encloses the battery or cell, then placed in a strong rigid outer packaging

• Shipper's Declaration for Dangerous Goods (with IB noted in the Authorization column of the declaration or immediately following the Packing Instruction number)

• Waybill should have the statement "Dangerous Goods as per associated DGD" and "CAO" or



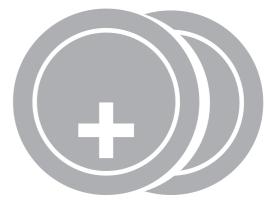


 \leq 8 cells



Lithium Batteries & Cells Shipping Guide by Air





> 8 cells



Packaging

- Maximum net quantity per package is 2.5 kg
- Cargo Aircraft Only (CAO)
- UN Specification Packaging is not required



Cells > 0.3g and \leq 1g \leq 8 cells



Documentation

- "Cargo Aircraft Only"

Required labeling





UN 3090, Lithium Metal Batteries — PI968 Section IB



Lithium Batteries & Cells Shipping Guide by Air



• Each battery or cell must be protected against a short circuit and placed in an inner packaging that completely encloses the battery or cell, then placed in a strong rigid outer packaging

• Shipper's Declaration for Dangerous Goods (with IB noted in the Authorization column of the declaration or immediately following the Packing Instruction number)

• Waybill should have the statement "Dangerous Goods as per associated DGD" and "CAO" or



Packaging

- Maximum net quantity per package is 2.5 kg
- Cargo Aircraft Only (CAO)
- UN Specification Packaging is not required



- "CAO" or "Cargo Aircraft Only"

Required labeling



UN 3090, Lithium Metal Batteries — PI968 Section IB



Lithium Batteries & Cells Shipping Guide by Air



Cells > 0.3g and \leq 1g > 8 cells



• Each battery or cell must be protected against a short circuit and placed in an inner packaging that completely encloses the battery or cell, then placed in a strong rigid outer packaging

• Shipper's Declaration for Dangerous Goods (with IB noted in the Authorization column of the declaration or immediately following the Packing Instruction number)

• Waybill should have the statement "Dangerous Goods as per associated DGD" and



Batteries > 0.3g and ≤ 2g



 \leq 2 batteries



Lithium Batteries & Cells Shipping Guide by Air





> 2 batteries



Packaging

- Maximum net quantity per package is 2.5 kg
- Cargo Aircraft Only (CAO)
- UN Specification Packaging is not required



- Aircraft Only" or "CAO"

Required labeling

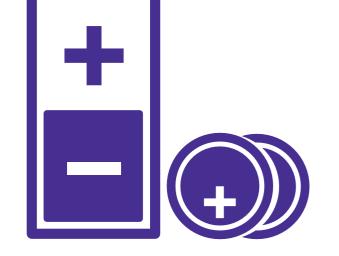




UN 3090, Lithium Metal Batteries — PI968 Section IB



Lithium Batteries & Cells Shipping Guide by Air



Batteries > 0.3g and < $2g \leq 2$ batteries



• Each battery or cell must be protected against a short circuit and placed in an inner packaging that completely encloses the battery or cell, then placed in a strong rigid outer packaging

• Shipper's Declaration for Dangerous Goods (with IB noted in the Authorization column of the declaration or immediately following the Packing Instruction number)

• Waybill should have the statement "Dangerous Goods as per associated DGD" and "Cargo







Packaging

- Maximum net quantity per package is 2.5 kg
- Cargo Aircraft Only (CAO)
- UN Specification Packaging is not required



- "CAO" or "Cargo Aircraft Only"

Required labeling

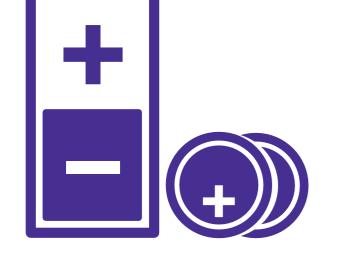




UN 3090, Lithium Metal Batteries — PI968 Section IB



Lithium Batteries & Cells Shipping Guide by Air



Batteries > 0.3g and \leq 2g > 2 batteries



• Each battery or cell must be protected against a short circuit and placed in an inner packaging that completely encloses the battery or cell, then placed in a strong rigid outer packaging

• Shipper's Declaration for Dangerous Goods (with IB noted in the authorization column of the declaration or immediately following the Packing Instruction number)

• Waybill should have the statement "Dangerous Goods as per associated DGD" and

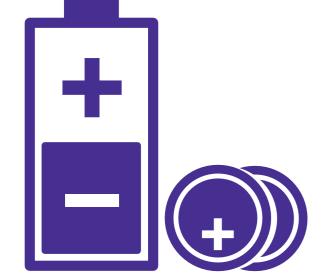






Packaging

- Each battery or cell must be protected against a short circuit and placed in an inner packaging that completely encloses the battery or cell
- Maximum net quantity per package is 35 kg for Cargo Aircraft Only (CAO)
- UN Specification Packaging is required



Cells > 1g and batteries > 2g



Documentation

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

Required labeling





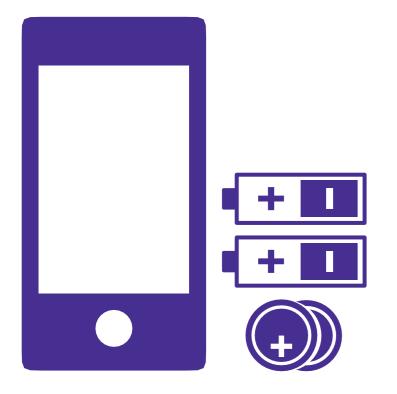
UN 3090, Lithium Metal Batteries — PI968 Section IA

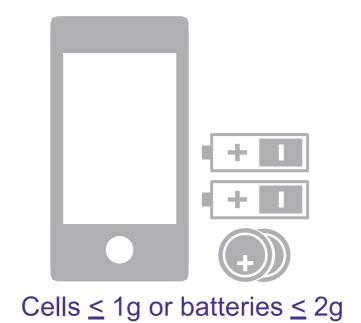


Lithium Batteries & Cells Shipping Guide by Air









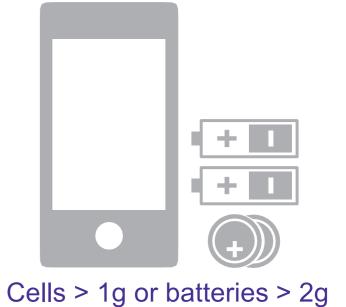
Packed with equipment

(separate in the same package)

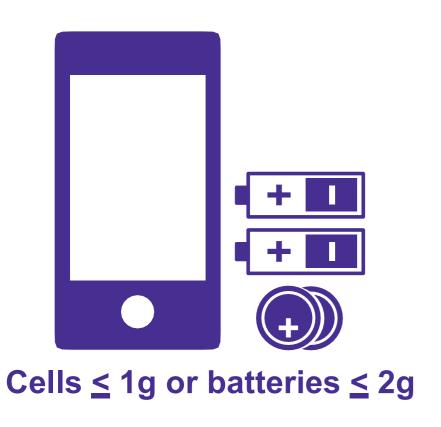


Lithium Batteries & Cells Shipping Guide by Air





Shipping instructions: Packed with equipment





Packaging

- accidental activation
- 2 spare sets
- · Maximum total quantity of lithium metal cells or batteries per package (exclusive of equipment): 5 kg



Section II of PI 969"

Required Labeling



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



Lithium Batteries & Cells Shipping Guide by Air



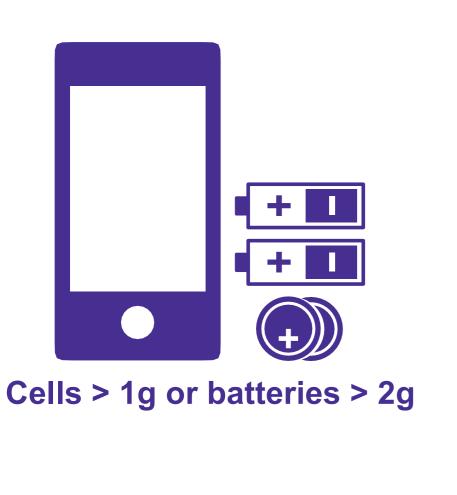
• Each battery or cell must be protected against a short circuit and placed in an inner packaging that completely encloses the battery or cell, then placed in a strong outer packaging

• Equipment must be secured against movement within the outer-packaging, and against

• Maximum number of batteries per package: Those necessary to power the equipment, plus

• The following statement is required on the waybill: "Lithium Metal Batteries in compliance with

Shipping instructions: Packed with equipment





Packaging

- accidental activation
- cushioning material that is non-combustible and non-conductive
- 2 spare sets
- Aircraft (PAX) or 35 kg for Cargo Aircraft Only (CAO)

Documentation

- Shipper's Declaration for Dangerous Goods
- and if applicable, "CAO" or "Cargo Aircraft Only"

Required Labeling





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



Lithium Batteries & Cells Shipping Guide by Air



• Each battery or cell must be protected against a short circuit and placed in an inner packaging that completely encloses the battery or cell, then placed in a strong outer packaging

Equipment must be secured against movement within the outer-packaging, and against

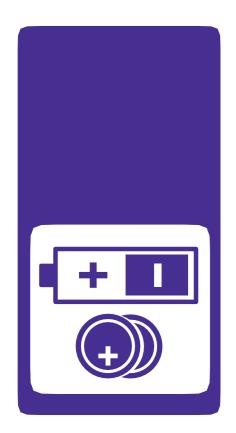
• If prepared for transport on Passenger Aircraft: 1) Each battery or cell must be packed in either a rigid metal intermediate or a metal outer packaging 2) Each battery or cell must be surrounded by

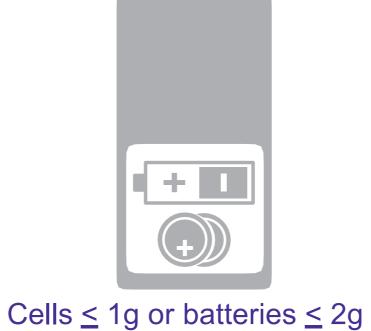
• Maximum number of batteries per package: Those necessary to power the equipment, plus

Maximum net quantity per package (exclusive of equipment): 5 kg on Passenger and Cargo

Waybill should have the statement "Dangerous Goods as per associated DGD,"







Contained in equipment

Lithium Batteries & Cells Shipping Guide by Air







Cells > 1g or batteries > 2g





<_4 Cells or <_2 batteries</pre>

Cells \leq 1g or batteries \leq 2g



Lithium Batteries & Cells Shipping Guide by Air





> 4 Cells or > 2 batteries

Shipping instructions: Contained in equipment



<4 Cells or <2 batteries</pre>



Packaging



Documentation

with Section II of PI 970"

Required labeling

- If more than two packages, use the below label



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





• The equipment must be packed in a 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

• Maximum 5 kg total quantity of lithium metal cells or batteries per package (exclusive of equipment)

• The following statement is required on the waybill: "Lithium Metal Batteries in compliance

• Exempt from any marking and labeling requirements for consignments of two packages or less

Shipping instructions: Contained in equipment



> 4 Cells or > 2 batteries



Packaging

- UN Specification Packaging is not required
- equipment in which it is contained
- for either "Passenger and Cargo Aircraft" or "Cargo Aircraft Only"



Documentation

Section II of PI 970"

Required labeling





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



Lithium Batteries & Cells Shipping Guide by Air



• Equipment with batteries must be placed in outer packaging of suitable construction and strength so as to provide adequate protection, unless the battery is afforded equivalent protection by the

• Maximum 5 kg total quantity of lithium metal cells or batteries per package (exclusive of equipment)

• The following statement is required on the waybill: "Lithium Metal Batteries in compliance with

Shipping instructions: Contained in equipment



Cells > 1g or batteries > 2g



Packaging

- which it is contained
- 12 g per cell
- (PAX) or 35 kg for Cargo Aircraft Only Shipments (CAO)
- UN Specification Packaging is not required

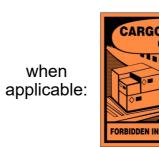
Documentation

- Shipper's Declaration for Dangerous Goods
- and if applicable, "CAO" or "Cargo Aircraft Only"

when

Required labeling





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



Lithium Batteries & Cells Shipping Guide by Air



• Equipment with batteries must be placed in outer packaging of suitable construction and strength so as to provide adequate protection, unless the battery is afforded equivalent protection by the equipment in

• Maximum net quantity of lithium metal per piece of equipment must not exceed 500 g per battery and

• Maximum net quantity per package (exclusive of equipment): 5 kg on Passenger and Cargo Aircraft

• Waybill should have the statement "Dangerous Goods as per associated DGD,"





Batteries and cells only

Packed with equipment (separate in the same package)



Lithium Batteries & Cells Shipping Guide by Air

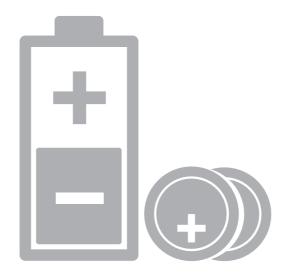




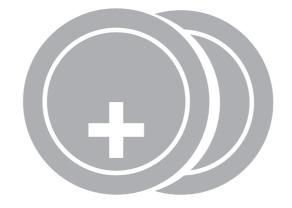
Contained in equipment



Batteries and cells only



Batteries and cells \leq 2.7 Wh



Cells > 2.7 Wh and \leq 20 Wh



Lithium Batteries & Cells Shipping Guide by Air

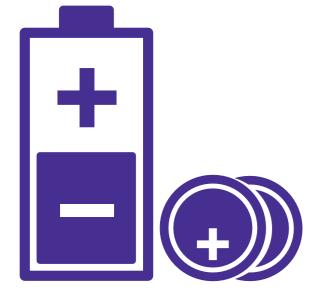




Batteries > 2.7 Wh, but \leq 100 Wh



Cells > 20 Wh and batteries > 100 Wh



Batteries and cells only ≤ 2.7 Wh



Packaging

- Each battery or cell must be protected against a short circuit and placed in an inner packaging that completely encloses the battery and cell, then placed in a strong rigid outer packaging
- For stand alone batteries, the State of Charge (SoC) may not exceed 30% of rated capacity
- UN Specification Packaging is not required
- Maximum 10 kg net quantity per package
- Cargo Aircraft Only (CAO)

Documentation

- Shipper's Declaration of Dangerous Goods (with IB noted in the Authorization column of the declaration or immediately following the Packing Instruction number)
- Waybill should have the following statement "Dangerous Goods as per associated DGD" and "CAO" or "Cargo Aircraft Only"

Required labeling





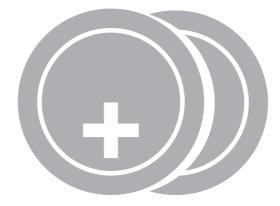
UN 3480, Lithium Ion Batteries — PI965 Section IB



Lithium Batteries & Cells Shipping Guide by Air







≤ 8 cells per package



Lithium Batteries & Cells Shipping Guide by Air





> 8 cells per package



Packaging

- UN Specification Packaging is not required
- Maximum 10 kg net quantity per package
- Cargo Aircraft Only (CAO)



Documentation

- "Cargo Aircraft Only"

Required labeling

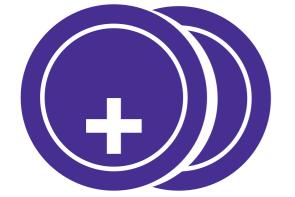




UN 3480, Lithium Ion Batteries — PI965 Section IB



Lithium Batteries & Cells Shipping Guide by Air



Cells > 2.7 Wh and \leq 20 Wh ≤ 8 cells per package



• Each battery or cell must be protected against a short circuit and placed in an inner packaging that completely encloses the battery or cell, then placed in a strong rigid outer packaging

• For stand alone batteries, the State of Charge (SoC) may not exceed 30% of rated capacity

• Shipper's Declaration for Dangerous Goods (with IB noted in the Authorization column of the declaration or immediately following the Packing Instruction number)

• Waybill should have that statement "Dangerous Goods as per associated DGD" and "CAO" or



Packaging

- UN Specification Packaging is not required
- Maximum 10 kg net quantity per package
- Cargo Aircraft Only (CAO)

Documentation

- and "CAO" or "Cargo Aircraft Only"

Required labeling



UN 3480, Lithium Ion Batteries — PI965 Section IB



Lithium Batteries & Cells Shipping Guide by Air



Cells > 2.7 Wh and \leq 20 Wh > 8 cells



• Each battery or cell must be protected against a short circuit and placed in an inner packaging that completely encloses the battery or cell, then placed in a strong rigid outer packaging

• For stand alone batteries, the State of Charge (SoC) may not exceed 30% of rated capacity

• Shipper's Declaration for Dangerous Goods (with IB noted in the authorization column of the declaration or immediately following the Packing Instruction number)

• The following statements are required on the waybill: "Dangerous Goods as per associated DGD"







Batteries > 2.7 Wh, but ≤ 100Wh



< 2
batteries per
package</pre>

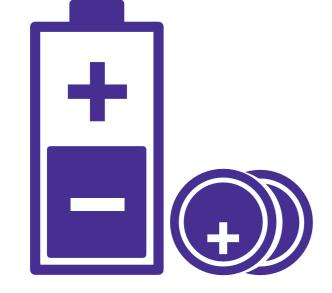


Lithium Batteries & Cells Shipping Guide by Air





> 2 batteries
per package



Batteries > 2.7 Wh, but $\leq 100 \, \text{Wh}$ ≤ 2 batteries per package



Packaging

- UN Specification Packaging is not required
- Maximum 10 kg net quantity per package



- "CAO" or "Cargo Aircraft Only"

Required labeling







UN 3480, Lithium Ion Batteries — PI965 Section IB



Lithium Batteries & Cells Shipping Guide by Air



• Each battery and cell must be protected against a short circuit and placed in an inner packaging that completely encloses the battery and cell, then placed in a strong rigid outer packaging

• For stand alone batteries, the State of Charge (SoC) may not exceed 30% of rated capacity

• Shipper's Declaration for Dangerous Goods (with IB noted in the Authorization column of the declaration or immediately following the Packing Instruction number)

• Waybill should have the following statement "Dangerous Goods as per associated DGD" and





Batteries > 2.7 Wh, but $\leq 100 \, \text{Wh}$ > 2 batteries per package



Packaging

- UN Specification Packaging is not required
- Maximum 10 kg net weight per package



- "Cargo Aircraft Only"

Required labeling





UN 3480, Lithium Ion Batteries — PI965 Section IB



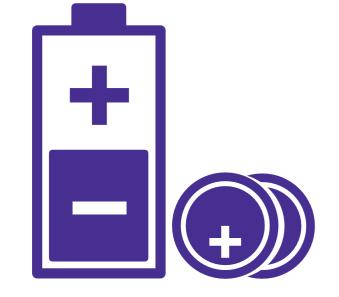


• Each battery and cell must be protected against a short circuit and placed in an inner packaging that completely encloses the battery or cell, then placed in a strong rigid outer packaging

• For stand alone batteries, the State of Charge (SoC) may not exceed 30% of rated capacity

• Shipper's Declaration for Dangerous Goods (with IB noted in the Authorization column of the declaration or immediately following the Packing Instruction number)

• Waybill should have the statement "Dangerous Goods as per associated DGD" and "CAO" or



Cells > 20 Wh and batteries > 100 Wh



Packaging

- UN Specification Packaging is required
- Fully Regulated

Documentation

- Shipper's Declaration for Dangerous Goods
- "CAO" or "Cargo Aircraft Only"

Required labeling





UN 3480, Lithium Ion Batteries — PI965 Section IA



Lithium Batteries & Cells Shipping Guide by Air



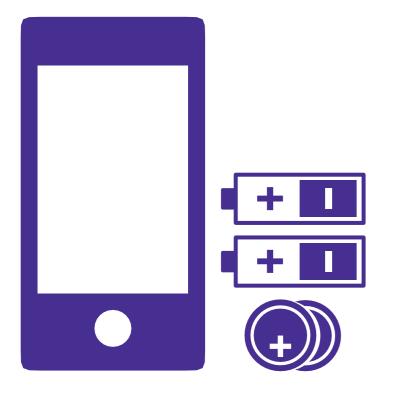
• Each battery and cell must be protected against a short circuit and placed in an inner packaging that completely encloses the battery or cell, then placed in a strong outer packaging

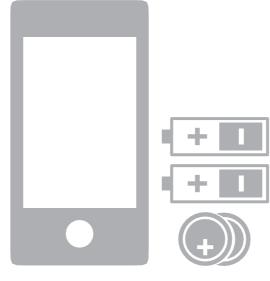
• Maximum net quantity per package is 35 kg for Cargo Aircraft only (CAO)

• For stand alone batteries, the State of Charge (SoC) may not exceed 30% of rated capacity

• Waybill should have the statement "Dangerous Goods as per associated DGD" and







Packed with equipment

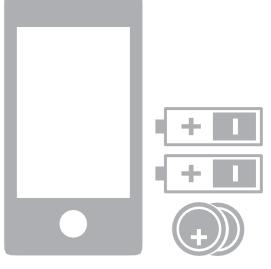
(separate in the same package)

Cells \leq 20 Wh or batteries \leq 100 Wh



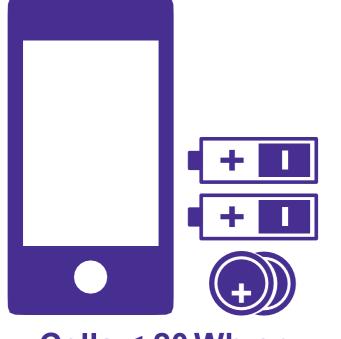
Lithium Batteries & Cells Shipping Guide by Air





Cells > 20 Wh or batteries > 100 Wh

Shipping instructions: Packed with equipment



Cells \leq 20 Wh or batteries ≤ 100 Wh



Packaging

- Each battery and cell must be protected against a short circuit and placed in an inner packaging that completely encloses the battery and cell, then placed in a strong rigid outer packaging
- 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
- Maximum number of batteries includes those necessary to power the equipment, plus 2 spare sets
- Maximum net quantity of lithium batteries or cells per package = 5 kg per package (exclusive of equipment)

Documentation

• The following statement is required on the waybill: "Lithium Ion Batteries in compliance with Section II of PI 966"

Required labeling



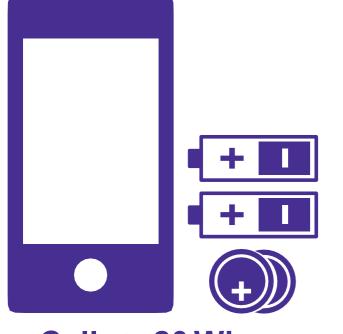
UN 3481, Lithium Ion Batteries Packed with Equipment — PI966 Section II



Lithium Batteries & Cells Shipping Guide by Air



Shipping instructions: Packed with equipment



Cells > 20 Wh or batteries > 100 Wh



Packaging

- UN Specification Packaging is required
- sets

Documentation

- Shipper's Declaration for Dangerous Goods
- and if applicable, "CAO" or "Cargo Aircraft Only"

Required labeling





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



Lithium Batteries & Cells Shipping Guide by Air



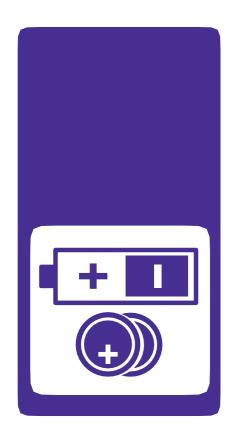
• Each battery or cell must be protected against a short circuit and placed in an inner packaging that completely encloses the battery or cell, then placed in a strong rigid outer packaging

• Maximum number of batteries includes those necessary to power the equipment, plus 2 spare

• Maximum 5 kg net quantity of cells or batteries per package (exclusive of equipment) for "Passenger and Cargo Aircraft" (PAX) and 35 kg for Cargo Aircraft Only Shipments (CAO)

• Waybill should have the statement "Dangerous Goods as per associated DGD,"





Contained in equipment



Cells \leq 20 Wh or batteries \leq 100 Wh



Lithium Batteries & Cells Shipping Guide by Air





Cells > 20 Wh or batteries > 100 Wh





<_4 Cells or <_2 batteries

Cells ≤ 20 Wh or batteries ≤ 100 Wh



Lithium Batteries & Cells Shipping Guide by Air





> 4 Cells or > 2 batteries



Packaging



\leq 4 Cells or \leq 2 batteries



Documentation

Section II of PI 967"



Required labeling

- If more than two packages, use the below labels



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



Lithium Batteries & Cells Shipping Guide by Air



• 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

• Maximum 5 kg net quantity of cells or batteries per package (exclusive of equipment)

• The following statement is required on the waybill: "Lithium Ion Batteries in compliance with

• Exempt from any marking and labeling requirements for consignments of two packages or less



Packaging

- UN Specification Packaging is not required
- equipment in which it is contained



> 4 Cells or > 2 batteries



Documentation

Section II of PI967"

Required labeling



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



Lithium Batteries & Cells Shipping Guide by Air



• Equipment with batteries must be placed in an outer packaging of suitable construction and strength so as to provide adequate protection, unless the battery is afforded equivalent protection by the

• Maximum 5 kg net quantity of cells or batteries per package (exclusive of equipment)

• The following statement is required on the waybill: "Lithium Ion Batteries in compliance with

Shipping instructions: Batteries & cells only



Cells > 20 Wh and batteries > 100 Wh



Packaging

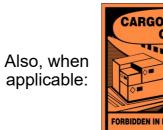
- equipment in which it is contained
- UN Specification Packaging is not required

Documentation

- Shipper's Declaration for Dangerous Goods
- and if applicable, "CAO" or "Cargo Aircraft Only"







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



Lithium Batteries & Cells Shipping Guide by Air



• Equipment with batteries must be placed in outer packaging of suitable construction and strength so as to provide adequate protection, unless the battery is afforded equivalent protection by the

• Maximum 5 kg net qty of lithium-ion cell or batteries per package (exclusive of equipment) for "Passenger and Cargo Aircraft" (PAX) and 35 kg for Cargo Aircraft Only Shipments (CAO)

• Waybill should have the statement "Dangerous Goods as per associated DGD,"



Choose battery type (Click on your choice)



Ship by ocean



Lithium **ion** batteries or cells

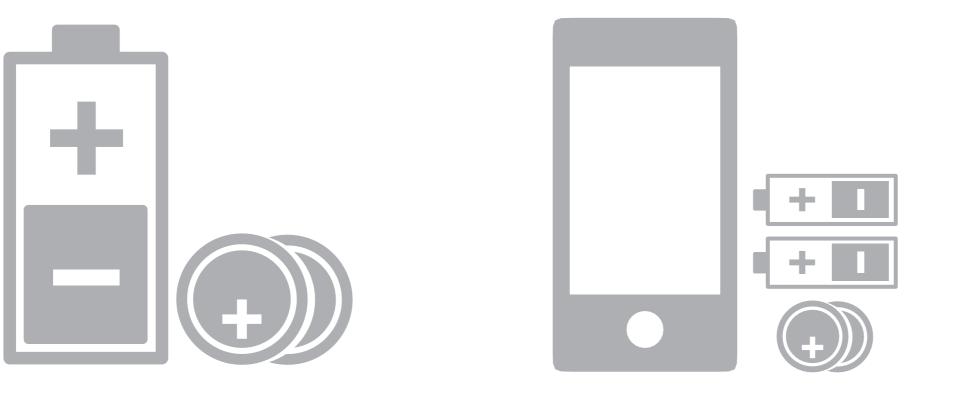


Lithium Batteries & Cells Shipping Guide by Ocean





Lithium **metal** batteries or cells



Batteries and cells only

Packed with equipment (separate in the same package)



Lithium Batteries & Cells Shipping Guide by Ocean

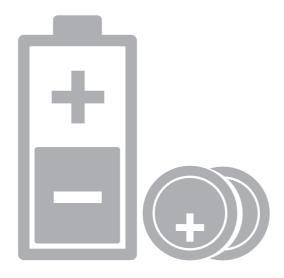




Contained in equipment



Batteries and cells only



Cells \leq 20 Wh or batteries \leq 100 Wh



Lithium Batteries & Cells Shipping Guide by Ocean





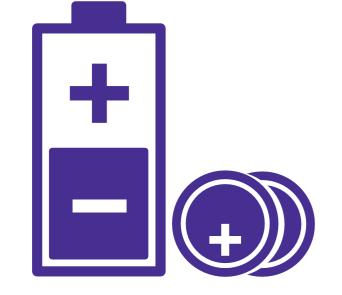
Cells > 20 Wh and batteries > 100 Wh

Shipping instructions: Batteries & cells only



Packaging

- Maximum 30 kgs gross per package



Cells \leq 20 Wh and batteries ≤ 100 Wh



Documentation

Waybill



Required labeling



UN 3480, Lithium Ion Batteries Complying with Special Provision 188

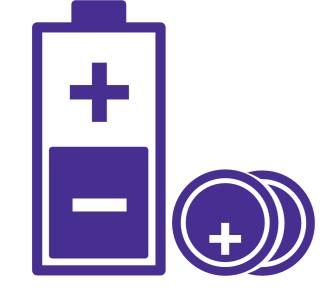


Lithium Batteries & Cells Shipping Guide by Ocean



• Each battery and cell must be protected against a short circuit and placed in an inner packaging that completely encloses the battery and cell, then placed in a strong rigid outer packaging

Shipping instructions: Batteries & cells only



Cells > 20 Wh and batteries > 100 Wh



Packaging

- Maximum gross quantity per package 30 kg
- UN Specification Packaging required
- Fully Regulated

Documentation

- Shipper's Declaration
- Waybill



Required labeling



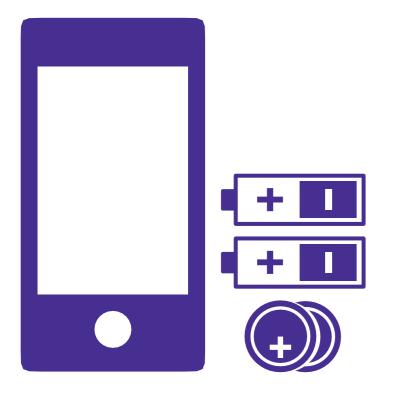
UN 3480, Lithium Ion Batteries — Fully Regulated

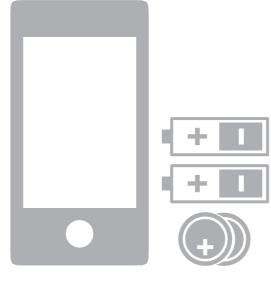


Lithium Batteries & Cells Shipping Guide by Ocean



• Each battery and cell must be protected against a short circuit and placed in an inner packaging that completely encloses the battery and cell, then placed in a strong rigid outer packaging





Packed with equipment

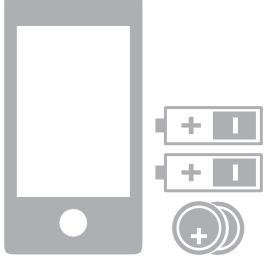
(separate in the same package)

Cells \leq 20 Wh or batteries \leq 100 Wh



Lithium Batteries & Cells Shipping Guide by Ocean



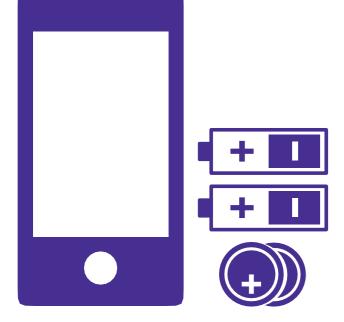


Cells > 20 Wh or batteries > 100 Wh

Shipping instructions: Packed with equipment



Packaging



Cells \leq 20 Wh or batteries ≤ 100 Wh



Documentation

Waybill

Required labeling



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



Lithium Batteries & Cells Shipping Guide by Ocean



• Each battery and cell must be protected against a short circuit and placed in an inner packaging that completely encloses the battery and cell, then placed in a strong rigid outer packaging

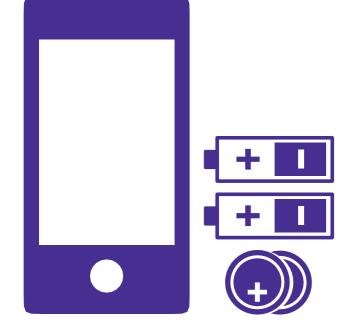
• The equipment must also be secured against any movement within the outer packaging and must be equipped with an effective means of preventing accidental activation

Shipping instructions: Packed with equipment



Packaging

- UN Specification Packaging is required



Cells > 20 Wh or batteries > 100 Wh



Documentation

- Shipper's Declaration
- Waybill

Required labeling



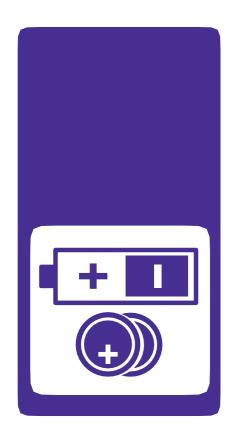
UN 3481, Lithium Ion Batteries Packed with Equipment — Fully Regulated



Lithium Batteries & Cells Shipping Guide by Ocean



• Each battery and cell must be protected against a short circuit and placed in an inner packaging that completely encloses the battery and cell, then placed in a strong rigid outer packaging



Contained in equipment



Cells \leq 20 Wh or batteries \leq 100 Wh

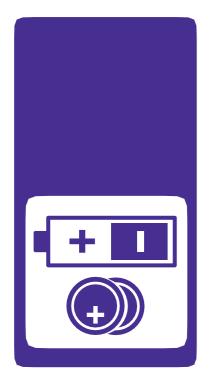


Lithium Batteries & Cells Shipping Guide by Ocean





Cells > 20 Wh or batteries > 100 Wh





<_4 Cells or <_2 batteries

Cells ≤ 20 Wh or batteries ≤ 100 Wh



Lithium Batteries & Cells Shipping Guide by Ocean





> 4 Cells or > 2 batteries



Packaging

- No more than 4 cells or 2 batteries contained in equipment



Documentation

Waybill

Required labeling

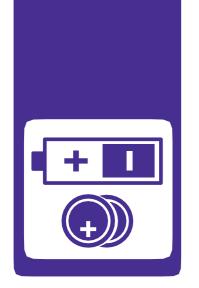
- If more than two packages, use the below labels



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



Lithium Batteries & Cells Shipping Guide by Ocean



\leq 4 Cells or \leq 2 batteries



• 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

• Exempt from any marking and labeling requirements for consignments of two packages or less



Packaging

- equipment in which it is contained



> 4 Cells or > 2 **batteries**



Documentation

Waybill

Required labeling



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



Lithium Batteries & Cells Shipping Guide by Ocean



• Equipment with batteries must be placed in outer packaging of suitable construction and strength so as to provide adequate protection, unless the battery is afforded equivalent protection by the

• 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

LITHIUM ION Shipping instructions: Contained in equipment



Packaging

- equipment in which it is contained
- UN Specification Packaging is required



Documentation

- Shipper's Declaration
- Waybill



Cells > 20 Wh and batteries > 100 Wh

Required labeling



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



Lithium Batteries & Cells Shipping Guide by Ocean



• Equipment with batteries must be placed in outer packaging of suitable construction and strength so as to provide adequate protection, unless the battery is afforded equivalent protection by the



Batteries and cells only

Packed with equipment (separate in the same package)







Contained in equipment



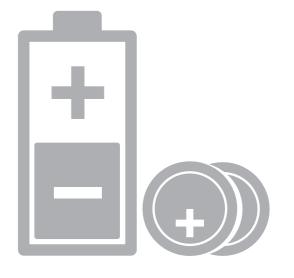
Batteries and cells only





Lithium Batteries & Cells Shipping Guide by Ocean





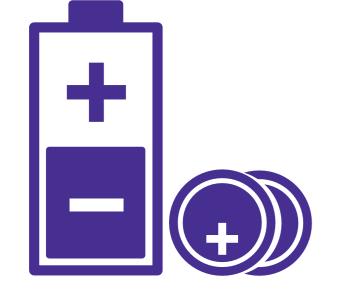
Cells with lithium content > 1g and batteries > 2g

Shipping instructions: Batteries & cells only



Packaging

- UN Specification Packaging is not required
- Maximum 30 kgs gross per package



Cells with lithium content \leq 1g or batteries \leq 2g



Documentation

Waybill



Required labeling



UN 3090, Lithium Metal Batteries Complying with Special Provision 188



Lithium Batteries & Cells Shipping Guide by Ocean



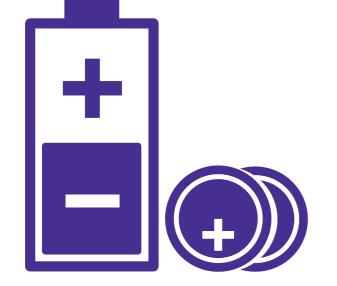
• Each battery and cell must be protected against a short circuit and placed in an inner packaging that completely encloses the battery and cell, then placed in a strong rigid outer packaging

Shipping instructions: Batteries & cells only



Packaging

- UN Specification Packaging is required
- Fully Regulated



Cells with lithium content > 1g and batteries > 2g



Documentation

- Shipper's declaration
- Waybill



Required labeling



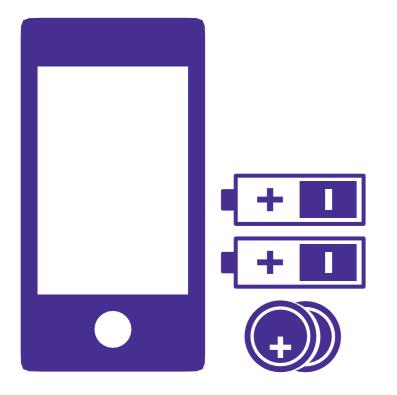
UN 3090, Lithium Metal Batteries — Fully Regulated

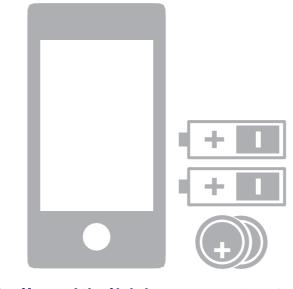


Lithium Batteries & Cells Shipping Guide by Ocean



• Each battery and cell must be protected against a short circuit and placed in an inner packaging that completely encloses the battery or cell, then placed in a strong rigid outer packaging





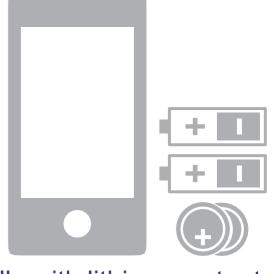
Packed with equipment

(separate in the same package)



Lithium Batteries & Cells Shipping Guide by Ocean



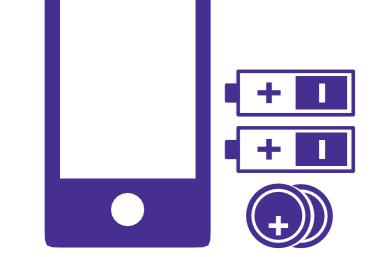


Cells with lithium content > 1g and batteries > 2g

Shipping instructions: Packed with equipment



Packaging



Cells with lithium content \leq 1g or batteries \leq 2g



Documentation

Waybill



Required labeling



UN 3091, Lithium Metal Batteries Packed with Equipment - Complying with Special Provision 188



Lithium Batteries & Cells Shipping Guide by Ocean



• Each battery and cell must be protected against a short circuit and placed in an inner packaging that completely encloses the battery and cell, then placed in a strong rigid outer packaging

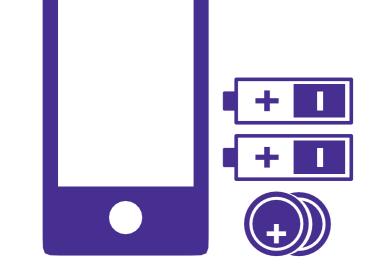
• The equipment must also be secured against any movement within the outer packaging and must be equipped with an effective means of preventing accidental activation

Shipping instructions: Packed with equipment



Packaging

- UN Specification Packaging is required



Cells with lithium content > 1g and batteries > 2g



Documentation

- Shipper's Declaration
- Waybill

Required labeling



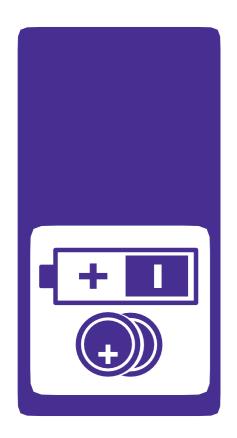
UN 3091, Lithium Metal Batteries Packed with Equipment —Fully Regulated



Lithium Batteries & Cells Shipping Guide by Ocean



• Each battery and cell must be protected against a short circuit and placed in an inner packaging that completely encloses the battery and cell, then placed in a strong rigid outer packaging



Contained in equipment



Cells with lithium content < 1g or batteries <_2g



Lithium Batteries & Cells Shipping Guide by Ocean





Cells with lithium content > 1g and batteries > 2g





<_4 Cells or <_2 batteries

Cells with lithium content ≤ 1g or batteries ≤ 2g



Lithium Batteries & Cells Shipping Guide by Ocean





> 4 Cells or > 2 batteries



Packaging

- No more than 4 cells or 2 batteries contained in equipment



Documentation

Waybill

Required labeling

• If more than two packages, use the below labels



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



Lithium Batteries & Cells Shipping Guide by Ocean



\leq 4 Cells or \leq 2 batteries



• 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

• Exempt from any marking and labeling requirements for consignments of two packages or less



Packaging

- equipment in which it is contained



> 4 Cells or > 2 **batteries**



Documentation

Waybill

Required labeling



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



Lithium Batteries & Cells Shipping Guide by Ocean



• Equipment with batteries must be placed in outer packaging of suitable construction and strength so as to provide adequate protection, unless the battery is afforded equivalent protection by the

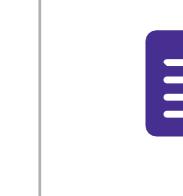
• The equipment must also be secured against any movement within the outer packaging and must be equipped with an effective means of preventing accidental activation

LITHIUM METAL Shipping instructions: Contained in equipment



Packaging

- equipment in which it is contained
- UN Specification Packaging is required



Documentation

- Shipper's Declaration
- Waybill



Cells with lithium content > 1g and batteries > 2g



Required labeling



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



Lithium Batteries & Cells Shipping Guide by Ocean



• Equipment with batteries must be placed in outer packaging of suitable construction and strength so as to provide adequate protection, unless the battery is afforded equivalent protection by the