

Transport of Excepted Lithium Batteries by TNT Express

Why Dangerous Goods?

Lithium batteries (or cells) which are used to power a very large variety of electronic devices, are considered as Dangerous Goods due to the fact that they can overheat and ignite under certain conditions.

What are the applicable regulations for the different transport modes?

- The 52st/2011 edition of the IATA DGR: Section II of the relevant Packing Instructions
 - The 2011 edition of the ADR in ADR affiliated countries (i.e. Europe): Special Provision 188
 - Any relevant local legislation in non ADR countries (i.e. Rest of the World)
- SEA The 2010 edition of the IMDG Code: Special Provision 188

What are the general requirements for the transport of Excepted Lithium Batteries?

- Each battery/cell must be of the type proven to meet the requirements of each test in the UN Manual of Tests and Criteria. The manufacturer of the battery should be able to confirm whether this is the case.
- Shipments containing lithium batteries that are not compliant with the requirements of Section II of the relevant IATA DGR Packing Instructions and/or Special Provision 188 of the ADR and the IMDG Code, must be declared and shipped as fully regulated "Class 9" dangerous goods.

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- Any person preparing or offering batteries/cells for transport must receive adequate instruction on the relevant regulatory requirements commensurate with their responsibilities.
- Lithium batteries identified by the manufacturer as being defective for safety reasons, or that have been damaged, that have the potential of producing a dangerous evolution of heat, fire or short circuit are forbidden in air transport

What are the cell/battery capacity limitations?

- Lithium ION = Maximum Watt-hour rating Cells: 20 Wh Batteries: 100 Wh
 Lithium METAL = Maximum lithium content
 - Cells: 1 gram Batteries: 2 gram = aggregate lithium content

How must I pack loose cells/batteries?

- Each battery/cell must be packed in inner packaging(s) that completely enclose the battery/cell.
- Each battery/cell must be protected so as to prevent short circuits
- Each outer package must be strong and capable of withstanding a 1.2 m drop test in any
 orientation without damage to batteries/cells contained therein and/or shifting of the
 contents so as to allow battery to battery (or cell to cell) contact and/or release of contents

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- Lithium ION: Max. weight per package: 10 kg Gross
- Lithium METAL: Max. weight per package: 2.5 kg Gross

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Max. weight per package: 30 kg Gross

How must I pack cells/batteries that are contained in equipment?

- The equipment must be equipped with an effective means of preventing accidental activation.
- Batteries/cells must be protected so as to prevent short circuits.
- Unless the battery is afforded equivalent protection by the equipment in which it is contained, the equipment must be packed in strong outer packaging that is constructed of suitable material of adequate strength and design in relation to the packaging's capacity and its intended use.

Please consult the relevant DG regulations for full details of the applicable transport requirements. This overview is for information purposes only and consequently it is not intended to replace the IATA DGR training requirements that are applicable for shippers and packers of Lithium Batteries.

Air transport of Lithium Metal Batteries is restricted from, to and through the <u>United States</u>, please consult the IATA DGR for more information.



How must I

label/mark the

packages?

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CAUTION!

CAUTION!

DO NOT LOAD OR TRANSPORT

 The label /marking is not required for packages containing 4 cells or 2 batteries (or less) that are contained in equipment

Each package must be labelled with a completed lithium battery label.

• This label must contain;

- -> the statement "Lithium ion battery" or "Lithium metal battery"
- -> a telephone number where more information on the shipment and it's content can be obtained.
- Label specifications: Design: see example.

Minimum dimensions: 120 x 110 mm

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Each package must be marked with (an indication that);

- -> the package contains lithium ion/metal batteries/cells (as applicable)
- -> the package must be handled with care
- -> a flammability hazard exists if the package is damaged
- -> special procedures must be followed in the event the package is damaged, to include inspection and repacking if necessary
- -> a telephone number where more information on the shipment and it's content can be obtained

Must I provide a document with the package?

- The document is not required for packages containing 4 cells or 2 batteries (or less) that are contained in equipment
- Each consignment, bearing the lithium battery label, must be accompanied by a
 document indicating that:
 - -> the package contains lithium ion/metal batteries/cells (as applicable)
 - -> the package must be handled with care and that a flammability hazard exists if the package is damaged
 - special procedures must be followed if package is damaged, to include inspection and repacking if necessary
 - -> a telephone number for additional information.
- A Shipper's Declaration for DG is not required
- The last page of this requirement summary contains a document template that is in line with these requirements

How must I complete the TNT Consignment note (Air Waybill)?

- The Collection Address (4) must contain the telephone number of the shipper
- Dangerous Goods (7): the 'Yes' must be ticked
 - For shipments bearing the lithium battery label, the Special Delivery Instructions (9) must contain the statement (as applicable):

 "Lithium Ion Batteries, Not Restricted, PI#" (*)

 "Lithium Metal Batteries, Not Restricted, PI#" (*)
 - (*) insert the applicable IATA DGR Packing Instruction Number
 - The IATA lithium battery guidance document has been updated as follows to reflect decisions taken by the IATA Dangerous Goods Board regarding when the Air Waybill must be completed with the lithum battery information;
 - "The Air Waybill is only required to contain the statements "Lithium ion/metal cell/battery, not restricted, PI#" when the lithium battery label needs to be affixed."

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■ The Special Delivery Instructions (9) must contain the statement: "Excepted Lithium Batteries as per Special Provision 188"

IF A SHIPMENT IS COMPLIANT FOR AIR TRANSPORT, THE AIR TRANSPORT STATEMENT MAY BE USED IN STEAD

May I consolidate several packages containing Excepted Lithium Batteries in one shipment?

- Individual packages each complying with the relevant requirements above may be consolidated
 - All An overpack must be marked with the word "overpack" and labelled with the Lithium battery label (as above) unless the labels on the individual packages inside the overpack are visible or the label is not required.

Excepted Lithium Batteries CAUTION - DO NOT LOAD OR TRANSPORT THIS SHIPMENT IF THE PACKAGE IS DAMAGED TNT CONNOTE NUMBER: · This package must be handled with care · A flammability hazard exists if the package is • Special procedures should be followed in the event the FOR ADDITIONAL INFORMATION, CALL: (please provide a package is damaged including inspection and repacking if necessary. **CONTENT INFORMATION:** (please lick the relevant box) ☐ Lithium Ion Batteries, Not Restricted, PI965 ☐ Lithium Ion Batteries Contained in Equipment, Not Restricted, PI967 ☐ Lithium Ion Batteries Packed with Equipment, Not Restricted, Pl966 ☐ Lithium Metal Batteries, Not Restricted, PI968 ☐ Lithium Metal Batteries Contained in Equipment, Not Restricted, PI970 ☐ Lithium Metal Batteries Packed with Equipment, Not Restricted, PI969 SHIPPER: (optional) CONSIGNEE: (optional) Please fold here

Please fold here

After entering the above details, please fold this document along the line and place it in the clear plastic envelope, in such a way that the LB information is clearly visible from the outside, without the need to open the plastic envelope and or manipulate the document.