



Transport of Excepted Lithium Batteries by TNT Express

(applicable from January 1, 2010)

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?

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| AIR | <ul style="list-style-type: none"> ▪ The 51st/2010 edition of the IATA DGR: Section II of the relevant Packing Instructions |
| ROAD | <ul style="list-style-type: none"> ▪ The 2009 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 | <ul style="list-style-type: none"> ▪ The 2008 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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| AIR | <ul style="list-style-type: none"> ▪ 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 |
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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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| AIR | <ul style="list-style-type: none"> ▪ Lithium ION: Max. weight per package: 10 kg Gross ▪ Lithium METAL: Max. weight per package: 2.5 kg Gross |
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| ROAD & SEA | <ul style="list-style-type: none"> ▪ Max. weight per package: 30 kg Gross |
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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.



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How must I label/mark the packages?	AIR	<ul style="list-style-type: none"> Each package must be labelled with a completed lithium battery handling label.  <ul style="list-style-type: none"> This label must contain; <ul style="list-style-type: none"> -> 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
	ROAD & SEA	<ul style="list-style-type: none"> Each package must be marked with (an indication that); <ul style="list-style-type: none"> -> the package contains lithium ion/metal batteries/cells (<i>as applicable</i>) -> 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 <ul style="list-style-type: none"> The label /marking is not required for packages containing 4 cells or 2 batteries (or less) that are contained in equipment

Must I provide a document with the package?	<ul style="list-style-type: none"> Each consignment must be accompanied by a document indicating that: <ul style="list-style-type: none"> -> the package contains lithium ion/metal batteries/cells (<i>as applicable</i>) -> 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 The document is not required for packages containing 4 cells or 2 batteries (or less) that are contained in equipment
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How must I complete the TNT Consignment note?		<ul style="list-style-type: none"> The Collection Address (4) must contain the telephone number of the shipper Dangerous Goods (7): the 'Yes' must be ticked
	AIR	<ul style="list-style-type: none"> The Special Delivery Instructions (9) must contain the statement (<i>as applicable</i>): "Lithium Ion Batteries, Not Restricted, PI#" (*) "Lithium Metal Batteries, Not Restricted, PI#" (*) (*) insert the applicable IATA DGR Packing Instruction Number
	ROAD & SEA	<ul style="list-style-type: none"> The Special Delivery Instructions (9) must contain the statement: "Excepted Lithium Batteries as per Special Provision 188"

May I consolidate several packages containing Excepted Lithium Batteries in one shipment?		<ul style="list-style-type: none"> Individual packages each complying with the relevant requirements above may be consolidated
	AIR	<ul style="list-style-type: none"> An overpack must be marked with the word "overpack" and labelled with the Lithium Battery Handling Label (as above) unless the labels on the individual packages inside the overpack are visible or the label is not required.

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 United States, please consult the IATA DGR for more information.

Transport Document for Excepted Lithium Batteries

<p style="text-align: center;">CAUTION!</p> <div style="text-align: center;"></div> <p style="text-align: center;">DO NOT LOAD OR TRANSPORT THIS SHIPMENT IF THE PACKAGE IS DAMAGED</p>	<p>SHIPPER: <i>(optional)</i></p>
<p>TNT CONNOTE NUMBER: <i>(optional)</i></p>	<p>CONSIGNEE: <i>(optional)</i></p>
<p>CONTENT INFORMATION: <i>(mandatory)</i></p> <p style="text-align: center;">Lithium _____ batteries</p> <p style="text-align: center;"><i>Please indicate the type of battery i.e. METAL or ION</i></p>	
<p>ADDITIONAL INFORMATION: <i>(mandatory)</i></p> <ul style="list-style-type: none">➔ This package must be handled with care➔ A flammability hazard exists if the package is damaged➔ Special procedures should be followed in the event the package is damaged including inspection and repacking if necessary.	
<p>FOR ADDITIONAL INFORMATION, CALL: <i>(mandatory)</i></p> <p><i>Please provide a telephone number that can be used in case more information is needed on this shipment and/or it's content</i></p>	<p>DATE: <i>(optional)</i></p>
	<p>PLACE: <i>(optional)</i></p>
	<p>NAME: <i>(optional)</i></p>
	<p>SIGNATURE: <i>(optional)</i></p>