



TNT Air Network Transport of Lithium Batteries



FORBIDDEN				RESTRICTED				ACCEPTABLE				
Packed	UN number	Packing Instruction	Section / Limitations	Max Net weight or quantity per package	Packaging	Labels	Documentation	DG Option Code	Shipper Approved	Country Approved		
Lithium Ion Batteries	Batteries only Restricted on the TNT Air Network	UN 3480	PI 965	IA	> 20 Wh / Cell > 100 Wh / Battery	35 kg Net – CAO <i>Forbidden on passenger aircrafts</i>	UN certified	Class 9 LB Label (1) + CAO Label	HZ Text on the connote + Shipper's Declaration	HZ	YES	YES
				IB	≤ 20 Wh / Cell ≤ 100 Wh / Battery	10 kg Net – CAO more then 8 cells or 2 batteries <i>Forbidden on passenger aircrafts</i>	Non UN strong and rigid	Class 9 LB Label (1) + LB Mark + CAO Label	HZ Text on the connote + Shipper's Declaration	HZ	YES	YES
				FORBIDDEN on the TNT Air Network								
	Packed with equipment	UN 3481	PI 966 (3)	I	> 20 Wh / Cell > 100 Wh / Battery	35 kg Net – CAO (2) 5 kg Net – PAX (2)	UN certified	Class 9 LB Label (1)	HZ Text on the connote + Shipper's Declaration	HZ	YES	YES
				II	≤ 20 Wh / Cell ≤ 100 Wh / Battery	5 kg Net – CAO (2) 5 kg Net – PAX (2)	Non UN strong and rigid	LB Mark (1)	LB Text on connote +	LB	NO	NO
	Contained in equipment	UN 3481	PI 967 (3)	I	> 20 Wh / Cell > 100 Wh / Battery	35 kg Net – CAO 5 kg Net – PAX	Non UN strong and rigid	Class 9 LB Label (1)	HZ Text on the connote + Shipper's Declaration	HZ	YES	YES
				II	≤ 20 Wh / Cell or ≤ 100 Wh / Battery	5 kg Net – CAO 5 kg Net – PAX more then 4 cells or 2 batteries	Non UN strong and rigid	LB Mark (1)	LB Text on connote	LB	NO	NO
				II	≤ 20 Wh / Cell or ≤ 100 Wh / Battery	Max 4 cells or 2 batteries per package (not more then 2 packages per consignment) or button cells only	Non UN strong and rigid	None	None	NONE	NO	NO
	Lithium Metal Batteries	Batteries Only Restricted on the TNT Air Network	UN 3090	PI 968	IA	> 1 gr of Lithium / Cell > 2 gr of Lithium / Battery	35 kg Net – CAO <i>Forbidden on passenger aircrafts</i>	UN certified	Class 9 LB Label (1) + CAO Label	HZ Text on the connote + Shipper's Declaration	HZ	YES
IB					≤ 1 gr of Lithium / Cell ≤ 2 gr of Lithium / Battery	2.5 kg Net – CAO more then 8 cells or 2 batteries <i>Forbidden on passenger aircrafts</i>	Non UN strong and rigid	Class 9 LB Label (1) + LB Mark + CAO Label	HZ Text on the connote + Shipper's Declaration	HZ	YES	YES
FORBIDDEN on the TNT Air Network												
Packed with equipment		UN 3091	PI 969 (3)	I	> 1 gr of Lithium / Cell > 2 gr of Lithium / Battery	35 kg Net – CAO (2) 5 kg Net – PAX (2)	UN certified	Class 9 LB Label (1)	HZ Text on the connote + Shipper's Declaration	HZ	YES	YES
				II	≤ 1 gr of Lithium / Cell ≤ 2 gr of Lithium / Battery	5 kg Net – CAO (2) 5 kg Net – PAX (2)	Non UN strong and rigid	LB Mark (1)	LB Text on connote	LB	NO	NO
Contained in equipment		UN 3091	PI 970 (3)	I	> 1 gr of Lithium / Cell > 2 gr of Lithium / Battery	35 kg Net – CAO 5 kg Net – PAX	Non UN strong and rigid	Class 9 LB Label (1)	HZ Text on the connote + Shipper's Declaration	HZ	YES	YES
				II	≤ 1 gr of Lithium / Cell or ≤ 2 gr of Lithium / Battery	5 kg Net – CAO 5 kg Net – PAX more then 4 cells or 2 batteries	Non UN strong and rigid	LB Mark (1)	LB Text on connote	LB	NO	NO
				II	≤ 1 gr of Lithium / Cell or ≤ 2 gr of Lithium / Battery	Max 4 cells or 2 batteries per package (not more then 2 packages per consignment) or button cells only	Non UN strong and rigid	None	None	NONE	NO	NO

1 – The previous provisions for the Class 9 label and Lithium Battery Label may continue to be used until 31 December 2018

2 – For batteries / cells packed with equipment the number of cells or batteries in each package must not exceed the appropriate number for the equipment's operation plus two spares.

3 – For the purposes of this packing instruction "equipment" means the device or apparatus for which the lithium cells or batteries will provide electrical power for its operation. Therefore devices like Powerbanks must be classified as batteries and not as batteries contained in equipment.



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.

Section / Limitation

- Section I (A) – subject to all provisions of the IATA DGR as applicable to fully regulated Dangerous Goods.
- Section I B – subject to Packing Instruction 965 / 968 Section 1B of the IATA DGR as applicable.
- Section II – for further information please consult [Section II Lithium Battery Guidance](#)

Definitions

- Cell – A single electrochemical unit consisting of one positive and one negative electrode.
- Battery – One or more lithium cells electrically connected
- Button-Cell – Round small cell whose height is less than its diameter
- Watt rating – Can be found on a battery or calculated:
 $Volts (V) \times Ampere\ hours (Ah) = Watt\ hours$

Labels / Marks

- Lithium Battery Mark.
- Class 9 LB label
- CAO label



- For further information please consult IATA DGR or relevant guidance document
 - The previous provisions for the Class 9 label and Lithium Battery Label may continue to be used until 31 December 2018
 - When the lithium battery handling label (IATA Figure 7.4.H) is applied to packages / overpacks for [Section II](#) lithium battery shipments, the applicable UN number(s) must be marked on the package adjacent to the lithium battery handling label - **effective 1st of July 2017.**

Labels

- Lithium Battery Label
- Class 9 Label



+ UN number



Packaging

- UN certified
 - Required for Section I (A)
 - Need to be compliant with all relevant IATA DGR requirements for fully regulated packages
- Non UN certified
 - Do not required to be certified as per IATA requirements
 - However must be compliant to the requirements detailed in the relevant Packing Instruction in the IATA Dangerous Goods Regulations
 - For further information please consult IATA DGR or relevant guidance document (see "Limitation" above)

Documentation

- Consignment note
 - Collection Address (4): must contain the name and address of the shipper.
 - To (5) or Delivery Address (6): must contain the name and address of the consignee.
 - Dangerous Goods (7): the 'Yes' must be ticked (not applicable for packages where there are not more than 4 cells or 2 batteries or button-cells only contained in equipment)
 - "Goods Description" (10) or "Special Delivery Instructions" (9) must contain appropriate statements.
- Shipper's Declaration
 - Is a legal document required for fully regulated Dangerous Goods
 - For further information please consult IATA DGR regulations
- Lithium Battery Transport Document is not mandatory

TNT Requirements

- DG option code – The TNT DG Option (HZ or LB) must be used as applicable (not applicable for packages where there are not more than 4 cells or 2 batteries or button-cells only contained in equipment)⁴
- Shipper's Approval – Approval for the transport of DG through the TNT Fixed Air Network can only be granted by the TNT Express, Head Office DG Department after successful completion of certain procedure.
- Country Approval – Dangerous Goods (DG) services are available on the TNT Fixed Networks (Road or Air) to, from and through limited number of countries. For more details please consult [DG Approved Country List](#)