





TRANSPORT OF LITHIUM CELLS OR BATTERIES – DAY DEFINITE NETWORK

	UN3480	UN3090	UN 3481	UN3091
Description	Lithium Ion Cells / Batteries loose (bulk)	Lithium Metal Cells / Batteries loose (bulk)	<ul style="list-style-type: none"> Lithium Ion Cells/Batteries packed with equipment Lithium Ion Cells / Batteries contained in equipment 	<ul style="list-style-type: none"> Lithium Metal Cells / Batteries packed with equipment Lithium Metal Cells / Batteries contained in equipment
Applicable Instruction	SP188	SP188	SP188	SP188
Maximum capacity	Per cell: ≤ 20Wh Per battery: ≤ 100Wh	Per cell: ≤ 1g Lithium Per battery: ≤ 2g Lithium	Per cell: ≤ 20Wh Per battery: ≤ 100Wh	Per cell: ≤ 1g Lithium Per battery: ≤ 2g Lithium
Labeling				
Limit for weight and number of cells/batteries	30kg G weight limit per package, no limit for maximum number of cells / batteries per package		30kg G weight limit per package, no limit for maximum number of cells / batteries per package	
Packaging	<ul style="list-style-type: none"> Short circuit prevention Strong outer packaging able to withstand a 1.2m drop test Batteries must be placed in inner packaging that completely enclose the battery 		<ul style="list-style-type: none"> Short circuit prevention Strong outer packaging able to withstand a 1.2m drop test for batteries packed with equipment Batteries must be placed in inner packaging that completely enclose the battery <p>Additionally for batteries/cells contained in equipment:</p> <ul style="list-style-type: none"> Protection against unintentional activation 	
Transport Document required?	No. Recommended to remark “Not Restricted as per SP188” on Waybill.		No. Recommended to remark “Not Restricted as per SP188” on Waybill.	
Accepted in Day Definite?	Yes. No account approval required. No service code required. DHL International can only accept Lithium Batteries under the provisions of ADR Special Provision 188 . As such, they cannot exceed the capacities which are reflected in row „Maximum capacity“.			
Network Capability	No restrictions.		No restrictions.	

SPECIAL PROVISION 188

Cells and batteries offered for carriage are not subject to other provisions of ADR if they meet the following:

- a) For a lithium metal or lithium alloy cell, the lithium content is not more than 1 g, and for a lithium ion cell, the Watt-hour rating is not more than 20 Wh;
Note: When lithium batteries in conformity with 2.2.9.1.7 (f) are carried in accordance with this special provision, the total lithium content of all lithium metal cells contained in the battery shall not exceed 1.5g and the total capacity of all lithium ion cells contained in the battery shall not exceed 10 Wh (see special provision 387)
- b) For a lithium metal or lithium alloy battery the aggregate lithium content is not more than 2 g, and for a lithium ion battery, the Watt-hour rating is not more than 100 Wh.
Lithium ion batteries subject to this provision shall be marked with the Watt-hour rating on the outside case, except those manufactured before 1 January 2009;
Note: When lithium batteries in conformity with 2.2.9.1.7 (f) are carried in accordance with this special provision, the total lithium content of all lithium metal cells contained in the battery shall not exceed 1.5g and the total capacity of all lithium ion cells contained in the battery shall not exceed 10 Wh (see special provision 387)
- c) Each cell or battery meets the provisions of 2.2.9.1.7 (a),(e),(f) if applicable and (g);
- d) Cells and batteries, except when installed in equipment, shall be packed in inner packagings that completely enclose the cell or battery. Cells and batteries shall be protected so as to prevent short circuits. This includes protection against contact with conductive material within the same packaging that could lead to a short circuit. The inner packagings shall be packed in strong outer packagings which conform to the provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.5;
- e) Cells and batteries when installed in equipment shall be protected from damage and short circuit, and the equipment shall be equipped with an 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 a dangerous evolution of heat. When batteries are installed in equipment, the equipment shall be packed in strong outer packagings 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;

- f) Each package shall be marked with the appropriate lithium battery mark, as illustrated in 5.2.1.9;

This requirement does not apply to:

- i. Packages containing only button cell batteries installed in equipment (including circuit boards); and
- ii. Packages containing no more than four cells or two batteries installed in equipment, where there are not more than two packages in the consignment;

When packages are placed in an overpack, the lithium battery mark shall either be clearly visible or be reproduced on the outside of the overpack and the overpack shall be marked with the word „OVERPACK“. The lettering of the „OVERPACK“ mark shall be at least 12mm high.
Note: Packages containing lithium batteries packed in conformity with the provisions of Part 4, Chapter 11, packing instructions 965 or 968, Section IB of the ICAO Technical Instructions that bear the mark as shown in 5.2.1.9 (lithium battery mark) and the label shown in 5.2.2.2.2, model No. 9A shall be deemed to meet the provisions of this special provision.

- g) Except when cells or batteries are installed in equipment, each package shall be capable of withstanding a 1.2 m drop test in any orientation without damage to cells 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; and
- h) Except when cells or batteries are installed in or packed with equipment, packages shall not exceed 30 kg gross mass.

As used above and elsewhere in ADR, "lithium content" means the mass of lithium in the anode of a lithium metal or lithium alloy cell. As used in this special provision "equipment" means apparatus for which the lithium cells or batteries will provide electrical power for its operation.

Separate entries exist for lithium metal batteries and lithium ion batteries to facilitate the carriage of these batteries for specific modes of carriage and to enable the application of different emergency response actions.

A single cell battery as defined in Part III, sub-section 38.3.2.3 of the Manual of Tests and Criteria is considered a "cell" and shall be carried according to the requirements for "cells" for the purpose of this special provision.

Source: https://www.unece.org/trans/danger/publi/adr/adr_e.html

