Practical information on the transport of batteries classified as dangerous goods

Due to their dual hazard properties associated with their chemical and electrical content, Li-ion batteries (UN 3480) as well as Li-ion batteries contained in equipment or packed with equipment (UN 3481) are classified under CLASS 9 Dangerous Goods.

The International Transport Regulation for Transport of Dangerous Goods involves the following points prior to shipment (via road, train, air or ship):

**ADR/RID** Class 9 Packing group II, tunnel category E ADR/RID -Labels 9 Proper shipping name Lithium-Ion batteries, UN 3480 ADR Special Provisions 230, 188, 310, 376, 377, 636 and 348 will apply and Packing Instruction P903, P908, P909 and P910.

Note: For ADR, see the following address: [link to ADR 2019](#)

- The Transport of Li-ion batteries is organized by appropriately trained persons and/or the shipment is accompanied by corresponding experts or qualified companies.
- The Li-ion battery is of the type proved to meet the requirements of each test in the [UN Manual of Tests and Criteria, Part III, sub-section 38.3](#);
- In accordance with the requirements of the UN Model Regulation, Chapter 2.9.4, the manufacturer of the battery or the battery pack shall make available on request of the Competent Authority the evidences that a Quality Certification program is in place in its manufacturing facility for Lithium-ion batteries.

**IMO** Class Packing group II IMO-Labels 9 Proper shipping name Lithium-Ion batteries, UN 3480 IMDG Code: Special provisions 188, 310, 376, 377, 636 and 348 will apply and Packing Instruction P903, P908, P909 and P910 EmS: F-A, S-I Stowage category A

**IATA-DGR** Class Packing group II ICAO-Labels 9 Proper shipping name Lithium-Ion batteries, UN 3480 IATA: Special provisions A88, A99, A154, A164, packing instructions P965, P966, P967, P968, P969, P970 Damaged and defective batteries or waste batteries are not allowed for transport by air. Lithium metal batteries (UN 3090) are not allowed for transport in cargo of passenger aircrafts. Lithium-ion batteries (UN 3480) are accepted for cargo transport only with a State of Charge of 30% or less. Note: For the IATA Guidance Document on lithium batteries, see the address:

- [UN DGR Lithium Batteries](#)
- [UN DGR Lithium Batteries Shipping Guidelines](#)
- [Guidance for the 30% SOC implementation](#)