



# BATTERY SHIPPING OVER 100WH CAPACITY

## Battery Capacities and Transportation

The total amount of energy in a battery is measured in Watt Hours, which are calculated by multiplying voltage (V) by amp hours (Ah).

Batteries over 100Wh are categorised as Class 9 Hazardous Goods. Watt hours are shown on the ratings label of on the underside of the battery pack.

### Example Black+Decker Dual Volt battery Watt hour (Wh) calculations:

BL1554 (18V/54V 1.5Ah )  
 $18V \times (1.5Ah+1.5Ah+2.5Ah) = 99Wh$

BL2554 (18V/54V 2.5Ah)  
 $18V \times (2.5Ah+2.5Ah+2.5Ah) = 135Wh$



## Transportation

Warning! Fire hazard. Transporting batteries can possibly cause fire if the battery terminals inadvertently come in contact with conductive materials. When transporting batteries, make sure that the battery terminals are protected and well insulated from materials that could contact them and cause a short circuit.

BLACK+DECKER batteries comply with all applicable shipping regulations as prescribed by industry and legal standards which include UN Recommendations on the Transport of Dangerous Goods; International Air Transport Association (IATA) Dangerous Goods Regulations, International Maritime Dangerous Goods (IMDG) Regulations, and the European Agreement Concerning the International Carriage of Dangerous Goods by Road (ADR). Lithium-ion cells and batteries have been tested to section 38.3 of the UN Recommendations on the Transport of Dangerous Goods Manual of Tests and Criteria.

In most instances, shipping a BLACK+DECKER battery pack will be accepted from being classified as a fully regulated Class 9 Hazardous Material. In general, only shipments containing a lithium-ion battery with an energy rating greater than 100 Watt Hours (Wh) will require being shipped as fully regulated Class 9. All lithium-ion batteries have the Watt Hour rating marked on the pack. Furthermore, due to regulation complexities, BLACK+DECKER does not recommend air shipping lithium-ion battery packs alone regardless of Watt Hour rating. Shipments of tools with batteries (combo kits) can be air shipped as excepted if the Watt Hour rating of the battery pack is no greater than 100 Wh.

Regardless of whether a shipment is considered excepted or fully regulated, it is the shipper's responsibility to consult the latest regulations for packaging, labelling/marketing and documentation requirements.

The information provided in this section of the manual is provided in good faith and believed to be accurate at the time the document was created. However, no warranty, expressed or implied, is given. It is the buyer's responsibility to ensure that its activities comply with the applicable regulations.



# BATTERY SHIPPING OVER 100WH CAPACITY

Shipping of battery packs over 100 watt hour capacity			
<ul style="list-style-type: none"><li>• Shipment of batteries on their own</li><li>• Shipment of batteries contained in equipment</li><li>• Shipment of batteries packed with equipment</li></ul>			
Transport Route		Shipping Method	Shipping requirements
Retailer / Service Agent	Black+Decker Distribution Centre	Approved Shipping Contractor / Courier	Class 9 Label Over Pack Label (only if over packed) Consigner / Consignee Label PGII approved packaging Dangerous Goods Declaration
End User	Black+Decker Retailer / Service Agent	Approved Shipping Contractor / Courier	Class 9 Label Over Pack Label (only if over packed) Consigner / Consignee Label PGII approved packaging Dangerous Goods Declaration
End User	Black+Decker Retailer / Service Agent	User's own vehicle	Packed for retail sale Intended for personal / domestic use No specific DG requirements

Damaged and or Defective batteries should never be shipped. This includes

Batteries identified as being defective for safety reasons;

- Batteries that have leaked or vented;
- Batteries that cannot be diagnosed prior to carriage; or
- Batteries that have sustained physical or mechanical damage

Batteries liable to rapidly disassemble, dangerously react, produce a flame or a dangerous evolution of heat or a dangerous emission of toxic, corrosive or flammable gases or vapours.



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Shipping of battery packs under 100 watt hour capacity			
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Transport Route		Shipping Method	Shipping requirements
Retailer / Service Agent	Black+Decker Distribution Centre	Approved Shipping Contractor / Courier	Excepted from requirements of fully regulated dangerous goods. Strong outer packaging, Lithium ion battery shipping label. No formal training requirement. Adequate instruction needed
End User	Black+Decker Retailer / Service Agent	Approved Shipping Contractor / Courier	Excepted from requirements of fully regulated dangerous goods. Strong outer packaging, Lithium ion battery shipping label. No formal training requirement. Adequate instruction needed
End User	Black+Decker Retailer / Service Agent	User's own vehicle	Packed for retail sale Intended for personal / domestic use. No specific DG requirements

For batteries shipped 'on their own' package weight limit is 30 kg.

For batteries shipped 'in equipment' there are no labeling requirements when no more than four cells or two batteries installed when more than two packages are in a consignment.

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- Batteries that cannot be diagnosed prior to carriage; or
- Batteries that have sustained physical or mechanical damage

Batteries liable to rapidly disassemble, dangerously react, produce a flame or a dangerous evolution of heat or a dangerous emission of toxic, corrosive or flammable gases or vapours.