

# COMPLIANT EV LOGISTICS

IN THE COMPLEX, EVER-CHANGING BUSINESS OF EV LOGISTICS, YOU NEED AN EFFICIENT, FLEXIBLE, AND COMPLIANT AIR FREIGHT SOLUTION

Staying compliant isn't easy.
























Shipments of EV batteries are often rejected due to non-compliance with international or domestic dangerous goods (DG) regulations. That's because shipping EV batteries is unfamiliar territory, full of unforeseen regulatory obstacles that make gathering the right data for compliant documentation a challenge.

Our DG specialists help you understand all the requirements, regardless of destination. We also design standardized DG compliance processes to optimize efficiency and leverage our strong partnerships to offer you maximum flexibility.

With our EV battery logistics solutions, you'll have full regulatory compliance, efficient processes, and service excellence – all of which will ensure your shipments clear customers faster and reach their destinations on time.

# Expertise & adapted capabilities required to comply with complex regulations

Regulations allow the movement of Lithium Batteries in most instances, however there are a number of specific exceptions and very limited market acceptance and coverage

	New / Used 	Damaged / Defect 
<b>Transportation</b>  	 	 Special packaging
	 	 Special packaging
	 	 Special packaging
	 	
<b>Warehouse</b>  	 	 Special packaging
Key regulatory elements 		
<b>UN 3480</b>  <ul style="list-style-type: none"> <li>• Packaged UN Group II</li> <li>• Classification and labeling</li> <li>• Safety tested (Manual of Tests and Criteria, III.38.3)</li> <li>• Safety venting device</li> <li>• Short circuit prevention</li> <li>• Quality management program</li> <li>• Trained personnel</li> </ul>		
 <ul style="list-style-type: none"> <li>• <b>SP 188 : New/used</b> → Exemption</li> <li>• <b>SP 230 : New/used</b> → Additional specs for li-ion batteries (P903)</li> <li>• <b>SP 376 : Damaged</b> → Special packaging required (P908)</li> <li>• <b>SP 377: Disposal / Recycling</b> → Special packaging required (P909)</li> <li>• <b>SP 310:</b> Prototypes (P910)</li> <li>• <b>333kg</b> max per transport unit</li> </ul>		
 <ul style="list-style-type: none"> <li>• &lt; 30% SoC</li> <li>• CAO only</li> <li>• A88: Prototypes (P910)</li> </ul>		
<ul style="list-style-type: none"> <li>• <b>A99: &gt;35kg</b> required approval</li> <li>• <b>A154:</b> Damaged forbidden</li> </ul>		
<ul style="list-style-type: none"> <li>• Cooperation with <b>local fire brigade</b></li> <li>• <b>EU Batteries Directive</b> 2006/66/EC (impermeable surfaces)</li> </ul>		
<ul style="list-style-type: none"> <li>• <b>Workplace regulations</b></li> <li>• <b>Building regulations</b></li> <li>• <b>Insurance constraints</b></li> </ul>		

# Lithium-Ion batteries cells air freight solution

Compliant Batteries cells (UN3480, PI965, Section IA, class 9 DG ) transportation ex-CN to EU



## CUSTOMER CHALLENGES

- **Situation**  
Battery manufacturer targets **shipping battery cell packages (>35 kg)** ex-China to Europe
- **Risk**  
**Lengthy application process** for transportation of >35kg batteries under **A99 rules** since relevant authorities in two countries require to review on a case-basis
- **Requirement**  
**Compliant Packaging** following ICAO 947 and a **fully compliant** alternative to A99 with **short lead time**



## DHL SOLUTION

- **Expert Advise**  
Fully certified advisors suggest customer to **optimized shipment weight to <35kg per piece**, thus **exempt from A99 requirement**.
- Share requirements on packaging, labelling, marking and international & local regulations for **PI965 Section IA**
- **Operational Support**  
Leverage DHL experience to create **detailed SOP** to ensure proper cargo handling and provide **alternative routings** based on DHL partnerships with airlines



## CUSTOMER BENEFITS

- **Full regulatory compliance** to UN3480 PI965 Section IA IATA DGR regulations
- **Shortened lead time** and increased flexibility with more carriers and routes to choose from as shipments are not bound by A99 requirements
- **Standardized process** developed benefitting future EV Batteries Shipments
- **Excellent Services** that is compliant and reliable