



LABELMASTER DANGEROUS GOODS SYMPOSIUM 2018

**Industry Update on Shipping Damaged/Defective
Lithium Batteries**

September 5 – 7, 2018

George A. Kerchner

Executive Director

PRBA – The Rechargeable Battery Association

202.719.4109

gkerchner@wileyrein.com

U.S. Imports of Lithium Batteries, Portable Electronic Products

U.S. Trade Value for Affected Products (2017)

	Total (millions)	Air (millions)	% of Total
<u>U.S. Imports</u>			
Cellphones & Related Products	\$105,046	\$85,982	82%
Notebook and Handheld Computers	\$39,990	\$32,054	80%
Audio & Video Equipment	\$9,848	\$4,279	43%
Hand Power Tools	\$3,321	\$128	4%
Other Electronic Products	\$9,887	\$4,006	41%
Combined Total	\$168,092	\$126,449	75%
Lithium Ion Batteries	\$3,953	\$759	19%
Lithium Metal Batteries	\$371	\$118	32%
	\$4,324	\$877	20%

PRBA's Efforts on Damaged/ Defective Lithium Batteries

- Successful at June 2018 UN Sub-Committee meeting to amend Special Provision 376 in UN Model Regulations
- Amendments will help battery and product manufacturers (and shippers) to quantify if lithium cell or battery is damaged or defective
- Next step – ICAO Dangerous Goods Panel
 - Interest at ICAO to align with UN Model Regulations
 - PRBA exploring proposal to allow for transport of damaged/defective lithium batteries by air

Assessing Damaged/Defective Lithium Cells or Batteries

(Amended Special Provision 376)

- “An assessment or evaluation may include, but is not limited to, the following criteria:
 - Acute danger, such as gas, fire, or electrolyte leaking;
 - The use or misuse of the cell or battery;
 - Signs of physical damage, such as deformation to cell or battery casing, or colours on the casing;
 - External and internal short circuit protection, such as voltage or isolation measures;
 - The condition of the cell or battery safety features; or
 - Damage to any internal safety components, such as the battery management system.”

U.S. DOT Special Permits for Shipping Damaged/Defective Lithium Batteries

- Authorizes transport of damaged/defective/recalled lithium ion (and in some cases lithium metal cells and batteries) without Class 9, “fully-regulated” status
- Special Permits often used for CPSC lithium battery recalls
 - *Not all lithium ion battery recalls require use of Special Permit*
- PRBA-members’ Special Permits providing relief from Class 9, fully-regulated status:

SP-16011	Americase
SP-16532	Kinsbursky Brothers
SP-16563	Call2Recycle
SP-20331	C.L. Smith Company
SP-20432	Labelmaster
SP-20584	Battery Solutions
SP-20631	Americase

– International Fire Code – Storage of “Used” and “Off-Specification” Lithium Batteries

- IFC currently does not address storage of new, used, or off-specification lithium batteries
- Proposed amendments would amend 2018 IFC:
 - Identify storage requirements for used and off-specification lithium batteries
 - List new lithium ion batteries as a “high hazard commodity”
 - Effective date 2022 or later if adopted at International Code Council meeting in October 2018 (also dependent on state adoption)
- PRBA/industry to develop “best practices” for storage of lithium batteries