



U.S. Department of Transportation
**Pipeline and Hazardous Materials
Safety Administration**

MAY 21 2009

1200 New Jersey Ave, S.E.
Washington, D.C. 20590

Mr. Terry Baiko
Palm Inc.
950 W. Maude Ave.
Sunnyvale, CA 94085-2801

Ref. No.: 09-0079

Dear Mr. Baiko:

This is in response to your April 7, 2009 email requesting clarification of the requirements for shipment of lithium batteries under the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180). Specifically, you ask whether a "Contains Lithium Ion Batteries" warning label is required on a pallet with packages containing lithium ion batteries contained in equipment when offered for transportation or transported by aircraft.

According to your letter, each pallet contains 720 individually packaged cellular phone products, each containing a single cell lithium ion battery. Ten boxes, each containing one cellular phone product with an installed lithium ion battery are packed in a carton. Seventy-two cartons are placed on a pallet and wrapped with polyethylene film. Each lithium ion battery has an equivalent lithium content of 0.36g.

The HMR prescribe packaging requirements for lithium batteries, including lithium batteries contained in equipment, in § 173.185. Each package containing lithium batteries packaged in accordance with this section must be marked and labeled in accordance with Subparts D and E of Part 172. In addition, when an overpack is used, it must be marked with the proper shipping name and identification number, and labeled for each hazardous material it contains unless the markings and labels representative of each hazardous material in the overpack are visible.

Based on the equivalent lithium content of the batteries described in your letter, the lithium battery powered devices may be transported in accordance with the exceptions for small lithium cells and batteries contained in § 172.102(c), Special Provision (SP) 188. The HMR do not prescribe marking requirements for lithium batteries contained in equipment when packaged in accordance with SP 188. The requirements in SP 188 of the HMR applicable to small lithium cells and batteries contained in equipment are as follows:

- (1) The lithium content is limited to 1.5 grams equivalent lithium content per cell or 8 grams equivalent lithium content per battery;

- (2) The equipment must contain no more than 5 kg (11 lbs) of batteries and contain no more than the maximum number of batteries necessary to power the piece of equipment;
- (3) Effective October 1, 2009, each cell or battery must be of a type proven to meet the requirements of each test in the UN Manual of Tests and Criteria; and
- (4) The batteries and equipment containing the batteries must be packaged in a manner which precludes sparks or the evolution of a dangerous quantity of heat.

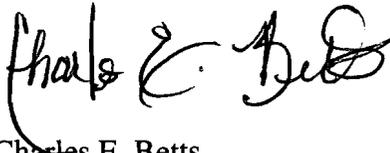
Thus, for the shipments described in your letter, a warning label for the pallet is not required.

You should note that the International Civil Aviation Organization Technical Instructions for the Safe Transport of Dangerous Goods by Air may prescribe additional requirements for lithium batteries, including lithium batteries packed with or contained in equipment. Frequently asked questions about transporting lithium batteries in accordance with the ICAO Technical Instructions are available at the following URL:

<http://www.icao.int/anb/FLS/DangerousGoods/ICAOLithiumBatteryGuidance/ICAOLithiumBatteryGuidance.pdf>.

I trust this satisfies your inquiry. If we can be of further assistance, please contact us.

Sincerely,

A handwritten signature in black ink, appearing to read "Charles E. Betts". The signature is written in a cursive style with a large initial "C" and "B".

Charles E. Betts
Chief, Standards Development
Office of Hazardous Materials Standards

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\$ 172.401
\$ 173.185
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09-0079

Drakeford, Carolyn <PHMSA>

From: INFOCNTR <PHMSA>
Sent: Tuesday, April 07, 2009 2:56 PM
To: Drakeford, Carolyn <PHMSA>
Subject: FW: Request for Interpretation of Air shipment of Lithium Ion batteries installed in end-use equipment.

From: Terry Baiko [mailto:Terry.Baiko@palm.com]
Sent: Tuesday, April 07, 2009 1:12 PM
To: PHMSA HM InfoCenter
Subject: RE: Request for Interpretation of Air shipment of Lithium Ion batteries installed in end-use equipment.

Good Afternoon.

I just reviewed this question with Dan Derway and he suggested that I request a formal interpretation.

We ship cell phone products with installed Lithium Ion batteries.

These are shipped at the pallet-level via air.

The pallet contains 720 installed single-cell batteries with a net battery weight of 19.44 kg and a net ELC of 0.26 kg.

Question:

Is a "Contains Lithium Ion Batterys" warning label required on the pallet for either PASSANGER AIR or CARGO AIR shipping?

Details are listed below.

Best regards

Terry Baiko
Global Environmental Compliance
Terry.Baiko@Palm.Com

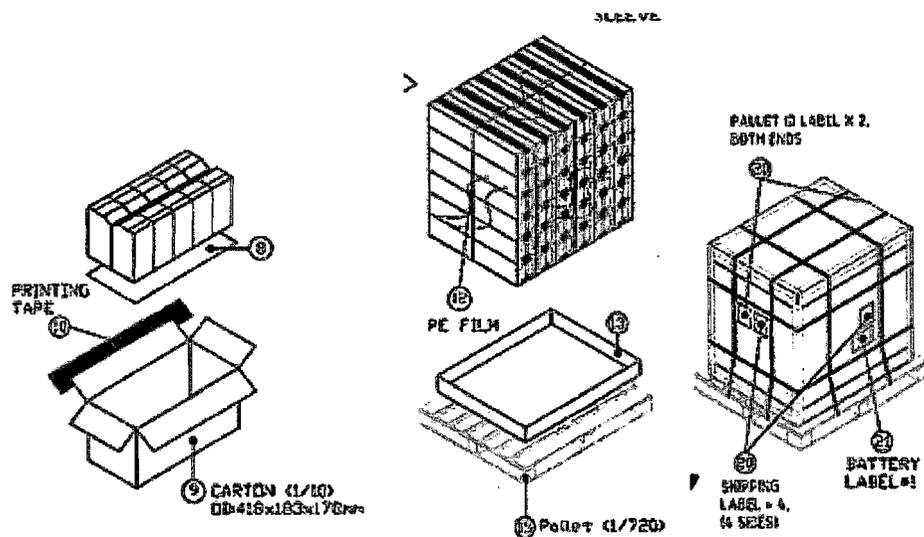
Office: 408 617 7789
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Palm, Inc.
950 W Maude Ave
m/s 21L01
Sunnyvale CA 94085-2801
USA

The battery is single cell with an ELC = 0.36gm. Battery weight is 27gm.

There are three packaging levels.

- Individual 1 phone/battery in an individual box
- Master 10 individual boxes in a carton
- Pallet 72 Master cartons wrapped in PE film.



	Individual	Master	Pallet
Phone/Battery	1	10	720
Pkg. Weight, kg	0.522	5.572	420.8
Battery Wt. kg	0.027	0.27	19.44
ELC, kg	0.00036	0.0036	0.2592