

**PACKING INSTRUCTION 968** (continued)

**TABLE 968-IA**

UN number	Net quantity per package Passenger aircraft	Net quantity per package Cargo Aircraft Only
UN 3090 Lithium metal batteries	Forbidden	35 kg

**OUTER PACKAGINGS**

Type	Drums						Jerricans			Boxes							
	Steel	Alu- minium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alu- minium	Plastic	Steel	Alu- minium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic	Other metal
Spec.	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H2	4N

**Section IB**

Lithium metal or lithium alloy cells and batteries may be offered for transport provided that each cell and battery meets the provisions of 3.9.2.6(a) and (e), and they meet all of the following:

1. for a lithium metal cell, the lithium content is not more than 1 g; and
2. for a lithium metal or lithium alloy battery, the aggregate lithium content is not more than 2 g

Section IB requirements apply to cells and batteries packed in quantities that exceed the allowance permitted in Section II, Table 968-II.

△ Quantities of lithium metal cells or batteries prepared in accordance with this section are subject to all of the applicable provisions of these Regulations (including the General Requirements of this packing instruction), except for the provisions of Section 6.

△ Cells or batteries shipped under the provisions of Section IB must be described on a Shipper's Declaration as set out in Section 8, and the air waybill, when used, must contain the applicable information required by 8.2.1 and 8.2.2.

⊗ Cells and batteries must be packed in strong outer packagings that conform to 5.0.2.4, 5.0.2.6.1 and 5.0.2.12.1.

**Additional Requirements—Section IB**

Cells and batteries must be packed in inner packagings that completely enclose the cell or battery. To provide protection from damage or compression to the batteries, the inner packagings must be placed in a strong outer packaging of one of the packaging types shown below.

Each package must be capable of withstanding a 1.2 m drop test in any orientation without:

- damage to cells or batteries contained therein;
- shifting of the contents so as to allow battery to battery (or cell to cell) contact;
- release of contents.

Each consignment must be accompanied with a document with an indication that:

- the package contains lithium metal cells or batteries;
- the package must be handled with care and that a flammability hazard exists if the package is damaged;
- special procedures must be followed in the event the package is damaged, to include inspection and repacking if necessary; and
- a telephone number for additional information.

△ Each package must be labelled with a lithium battery handling label (Figure 7.4.H) in addition to the Class 9 hazard label (Figure 7.3.W) and the Cargo Aircraft Only label (Figure 7.4.B).

Each package must be marked in accordance with the requirements of 7.1.4.1(a) and (b) and in addition the net weight when required by 7.1.4.1(c) must be marked on the package.

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# Dangerous Goods Regulations

## PACKING INSTRUCTION 968 (continued)

TABLE 968-IB

	Net quantity per package Passenger aircraft	Net quantity per package Cargo Aircraft Only
Lithium metal cells and batteries	Forbidden	2.5 kg

  

OUTER PACKAGINGS			
Type	Drums	Jerricans	Boxes

### Section II

△ Lithium metal or lithium alloy cells and batteries meeting the requirements in this section are not subject to other additional requirements of these Regulations except for:

- (a) restrictions on dangerous goods in consolidations (1.3.3.3 and 1.3.3.6);
- (b) dangerous goods in passenger and crew baggage (Subsection 2.3). Only those lithium metal batteries as specifically permitted may be carried in carry-on baggage;
- (c) dangerous goods in air mail (Subsection 2.4);
- (d) use of unit load devices (5.0.1.3);
- (e) reporting of dangerous goods accidents, incidents and other occurrences (9.6.1 and 9.6.2).

Cells and batteries offered for transport must meet the provisions of 3.9.2.6(a) and (e), the General Requirements of this packing instruction and:

1. for cells, the lithium content is not more than 1 g; and
2. for batteries, the aggregate lithium content is not more than 2 g;

Cells and batteries must be packed in strong outer packagings that conform to 5.0.2.4, 5.0.2.6.1 and 5.0.2.12.1.

### Additional Requirements—Section II

Cells and batteries must be packed in inner packagings that completely enclose the cell or battery. To provide protection from damage or compression to the batteries, the inner packagings must be placed in a strong rigid outer packaging of one of the packaging types shown below.

Each package must be capable of withstanding a 1.2 m drop test in any orientation without:

- damage to cells or batteries contained therein;
- shifting of the contents so as to allow battery to battery (or cell to cell) contact;
- release of contents.

Each consignment must be accompanied with a document with an indication that:

- the package contains lithium metal cells or batteries;
- the package must be handled with care and that a flammability hazard exists if the package is damaged;
- special procedures must be followed in the event the package is damaged, to include inspection and repacking if necessary; and
- a telephone number for additional information.



△ Each package must be labelled with a lithium battery handling label (Figure 7.4.H) and the Cargo Aircraft Only label (Figure 7.4.B). When the package dimensions are adequate, the Cargo Aircraft Only label must be located on the same surface of the package near the lithium battery handling label;

A Shipper's Declaration for Dangerous Goods is not required.

The words "Lithium metal batteries in compliance with Section II of PI 968" and "Cargo Aircraft Only" or "CAO" must be included on the air waybill, when an air waybill is used. The information should be shown in the "Nature and Quantity of Goods" box of the air waybill.

Any person preparing or offering cells or batteries for transport must receive adequate instruction on these requirements commensurate with their responsibilities.

### Overpacks—Section II

△ Individual packages each complying with the requirements of Section II may be placed in an overpack. The overpack may also contain packages of dangerous goods or goods not subject to these Regulations provided that there are no packages enclosing different substances which might react dangerously with each other. An overpack must be marked with the word "Overpack" and labelled with the lithium battery label (Figure 7.4.H) and the Cargo Aircraft Only label (Figure 7.4.B), unless the label(s) on the package(s) inside the overpack are visible.

**PACKING INSTRUCTION 968** (continued)

**TABLE 968-II**

Contents	Lithium metal cells and/or batteries with a lithium content of 0.3 g or less	Lithium metal cells with a lithium content of more than 0.3 g but not more than 1 g	Lithium metal batteries with a lithium content of more than 0.3 g but not more than 2 g
1	2	3	4
Maximum number of cells/batteries per package	No limit	8 cells	2 Batteries
Maximum net quantity (weight) per package	2.5 kg	N/A	N/A

Cells and/or batteries specified in columns 2, 3 and 4 of Table 968-II must not be combined in the same package.

**OUTER PACKAGINGS**

Type	Drums	Jerricans	Boxes

**PACKING INSTRUCTION 969**

STATE VARIATIONS: USG-02/03

△ OPERATOR VARIATIONS: 4C-08, 4M-08, 5X-07, AC-06, AM-09, AR-11, AU-11, BR-18/19, C8-04, CV-04, CZ-08, D0-03, EY-04, GF-14, HX-06, JJ-08, KQ-09, L7-08, LA-16, LP-08, LU-08, LX-06, M3-08, M7-08, OZ-10, PZ-08, QK-06, QR-04, QY-03/05, RS-06, RV-06, SQ-07, TZ-06, UC-08, WN-01, WY-07, XL-07, XW-06

**Introduction**

This instruction applies to lithium metal or lithium alloy cells and batteries packed with equipment (UN 3091) on passenger and Cargo Aircraft Only.

The general requirements apply to all lithium metal batteries packed with equipment prepared for transport according to this packing instruction:

- Section I applies where equipment is packed with lithium metal cells with a lithium metal content in excess of 1 g or lithium metal batteries with a lithium metal content in excess of 2 g which must be assigned to Class 9 and are subject to all of the applicable requirements of these Regulations; and
- Section II applies where equipment is packed with lithium metal cells with a lithium metal content not exceeding 1 g or lithium metal batteries with a lithium metal content not exceeding 2 g.

**General Requirements**

The following requirements apply to all lithium metal or lithium alloy cells and batteries:

- (a) cells and batteries identified by the manufacturer as being defective for safety reasons, or that have been damaged, that have the potential of producing a dangerous evolution of heat, fire or short circuit are forbidden for transport (e.g. those being returned to the manufacturer for safety reasons);
- (b) cells and batteries must be protected so as to prevent short circuits. This includes protection against contact with conductive materials within the same packaging that could lead to a short circuit.

**Section I**

These requirements apply to lithium metal cells with a lithium metal content in excess of 1 g and lithium metal batteries with a lithium metal content in excess of 2 g that been determined to meet the criteria for assignment to Class 9.

The General Packing Requirements of 5.0.2 must be met.

Each cell or battery must:

1. meet the provisions of 3.9.2.6; and
2. meet the General Requirements, above;

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