



**NOTA DE ESTUDIO**

**GRUPO DE EXPERTOS SOBRE MERCANCÍAS PELIGROSAS (DGP)**

**VIGESIMOCUARTA REUNIÓN**

**Montreal, 28 de octubre – 8 de noviembre de 2013**

**Cuestión 2 del orden del día:** **Formulación de recomendaciones sobre las enmiendas de las *Instrucciones Técnicas para el transporte sin riesgos de mercancías peligrosas por vía aérea* (Doc 9284) que haya que incorporar en la edición de 2015-2016**

**DISPOSICIÓN ESPECIAL A123**

(Nota presentada por J. McLaughlin)

*Por falta de recursos, sólo se han traducido el resumen y el apéndice*

**RESUMEN**

En esta nota de estudio se propone requerir una indicación de cumplimiento de la Disposición especial A123 únicamente para las baterías de más de 9 voltios.

**Medidas recomendadas al DGP:** Se invita al DGP a revisar la Disposición especial A123 para que la declaración de “sin restricciones” y la indicación del número de la Disposición especial 123 se apliquen únicamente a las baterías de más de 9 voltios.

**1. INTRODUCTION**

1.1 Shippers must indicate on the air waybill when a substance or article is exempted from the requirements of the Technical Instructions by the prescribed conditions of a special provision. This requirement is intended to serve as an additional check on the shipper to ensure compliance.

1.2 Special Provision A123 applies to “Batteries, electric storage”. Examples of such batteries are alkali-manganese, zinc-carbon, nickel-metal hydride and nickel-cadmium batteries. These batteries are widely available (AAA, AA, C, D, and 9 volt are most common size batteries) and are used in a variety of consumer devices such as flashlights, toys, games and smoke detectors. Prior to transport, these batteries and devices with installed batteries must be protected from short circuit and unintentional activation. The words not-restricted and the special provision number A123 must be provided on an air waybill when an air waybill is used.

1.3 The requirements of Special Provision A123 apply to all batteries and devices, including those that pose little to no risk in transportation (e.g. 1.5 volt alkaline batteries and devices powered by such batteries). Our experience with dry batteries (up to 9 Volts) indicates that undischarged dry batteries

pose a hazard in transportation, but that hazard is negligible and can be minimized through short circuit protection, while spent or used dry cell batteries pose virtually no risk of generating a dangerous amount of heat or short circuits. The U.S. Hazardous Materials Regulations includes the provision of A123 (49 CFR §172.102 Special Provision A130), but applies the “not restricted” documentation requirement only to batteries exceeding 9 volts. The 9 volt threshold was based on test data demonstrating the effects of various types, sizes, and configurations of common consumer dry cell batteries when intentionally short circuited. The data represents the maximum temperature observed when undischarged alkaline and carbon zinc batteries; AA, AAA, D (1.5V) were placed randomly into a container, lantern (6V) battery sizes intentionally short circuited; and 12 D cell batteries connected in series (19.4V) and intentionally short circuited:

Battery Type	Maximum Temperature (Celsius)
Alkaline AA/AAA	28.5
Carbon Zinc AA/AAA	26.2
Alkaline Lantern	151.2
Carbon Zinc Lantern	137.8
D Cell connected in series (12 batteries)	109.4

1.4 Taking into account the data does not address all dry cell chemistries, and limited configurations and voltage levels, the U.S. DOT adopted a measured approach by applying the “not restricted” statement only to consignments containing batteries exceeding 9 volts. This addressed the practical challenges for additional documentation requirements on common small consumer batteries while maintaining focus on additional safety measures for larger batteries.

1.5 While it is important to ensure all batteries are protected from short circuits and devices protected from unintentional activation, the additional requirement to indicate compliance with Special Provision A123 appears unnecessarily burdensome in the case of low voltage dry cell batteries.

1.6 For dry batteries greater than 9 volts, a notification on an air waybill or other shipping document is appropriate. This threshold would apply the notification requirements to higher voltage batteries that pose a comparatively greater risk in transport if short circuited but would largely exempt individual consumers from this requirement.

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## APÉNDICE

### ENMIENDAS PROPUESTAS DE LA PARTE 3 DE LAS INSTRUCCIONES TÉCNICAS

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#### Parte 3

### LISTA DE MERCANCÍAS PELIGROSAS, DISPOSICIONES ESPECIALES Y CANTIDADES LIMITADAS Y EXCEPTUADAS

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#### Capítulo 3

### DISPOSICIONES ESPECIALES

Tabla 3-2. Disposiciones especiales

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A123

Esta entrada se aplica a los acumuladores eléctricos que no figuran de otro modo en la Tabla 3-1. A modo de ejemplo están las baterías de alcali-manganeso, cinc-carbono, níquel-metal híbrido y níquel-cadmio. Todo acumulador eléctrico o dispositivo, equipo o vehículo accionado con acumuladores que puede producir una emisión peligrosa de calor debe estar preparado para el transporte de manera que se evite:

- a) cortocircuito (p. ej., en el caso de los acumuladores, mediante el aislamiento eficaz de los terminales expuestos o, en el caso de equipo, mediante la desconexión del acumulador y la protección de los terminales expuestos); y
- b) activación accidental.

Cuando se expide una carta de porte aéreo, para las baterías cuyo voltaje es superior a 9 voltios deben incluirse en la misma el término "sin restricciones" y el número de disposición especial A123.

— FIN —