



工 作 文 件

危险品专家组（DGP）

第二十四次会议

2013年10月28日至11月8日，蒙特利尔

议程项目2： 拟定对《危险物品安全航空运输技术细则》（Doc 9284号文件）的修订建议，以便纳入2015年—2016年版

含有危险物品的灯具

（由 Teun Muller 提交）

摘要

2015-2016年版《技术细则》第1部分建议2.6引入关于含有危险物品的灯具的新规定（见DGP/24-WP/3号文件），可能导致混乱并与《技术细则》现有文本产生潜在矛盾。本文件建议采用与运输含有危险物品的灯具相关的现有和新文本，以消除任何不一致之处。

由危险品专家组采取的行动：请危险品专家组考虑按本工作文件附录中所述，对第1部分2.6关于含有危险物品的灯具的新规定以及《技术细则》特殊规定A69进行修订。

1. INTRODUCTION

1.1 With the introduction of a new provisions for lamps containing dangerous goods in Part 1;2.6 (see DGP/24-WP/3) of the Technical Instructions, we find three different places in the Technical Instructions where the transport conditions of lamps (with the exception of lamps containing radioactive material which are addressed separately) are established:

- a) Part 1; 2.6

[2.6 LAMPS CONTAINING DANGEROUS GOODS

The following lamps are not subject to these Instructions provided that they do not contain radioactive material and do not contain mercury in quantities above those specified in Special Provision A69:

- a) lamps that are collected directly from individuals and households when transported to a collection or recycling facility;

- b) lamps each containing not more than 1 g of dangerous goods and packaged so that there is not more than 30 g of dangerous goods per package, provided that:
- 1) the lamps are certified to a manufacturer's quality management system; and
- Note.— The application of ISO 9001:2008 may be considered acceptable for this purpose.*
- 2) each lamp is either individually packed in inner packagings, separated by dividers, or surrounded with cushioning material to protect the lamps and packed into strong outer packagings meeting the general provisions of 4;1.1 and capable of passing a 1.2 m drop test.
- c) used, damaged or defective lamps each containing not more than 1 g of dangerous goods with not more than 30 g of dangerous goods per package when transported from a collection or recycling facility.

The lamps must be packed in strong outer packagings that are sufficient for preventing release of the contents under normal conditions of transport meeting the general provisions of 4;1.1 and that are capable of passing a drop test of not less than 1.2 m.

Note.— Lamps containing radioactive material are addressed in 2;7.2.2.2 b) and light bulbs containing Division 2.2 gases are addressed in 2;2.2.3 d).]

b) Part 2; 2.2.3 d)

“2.2.3 Gases of Division 2.2 are not subject to these Instructions when contained in the following:

- a) foodstuffs, including carbonated beverages (except UN 1950);
- b) balls intended for use in sports;
- c) tyres which meet the provisions of Special Provision A59; or
- d) light bulbs, provided they are packaged so that the projectile effects of any rupture of the bulb will be contained within the package.”

c) Special Provision A69

A69 The following are not subject to these Instructions when carried as cargo:

- a) articles such as thermometers, switches and relays, each containing a total quantity of not more than 15 g of mercury, if they are installed as an integral part of a machine or apparatus and so fitted that shock or impact damage, leading to leakage of mercury, is unlikely to occur under normal conditions of transport.
- b) lamps, each containing not more than 1 g of mercury and packaged so that there is not more than 30 g of mercury per package. Packages must be so designed and constructed such that when subjected to drop tests from a height of not less than 0.5 m the packages must still be fit for transport and there must be no damage to the contents.
- c) articles, each containing not more than 100 mg of mercury, gallium or inert gas and packaged so that the quantity of mercury, gallium or inert gas per package is 1 g or less.

The words “not restricted” and the special provision number A69 must be provided on the air waybill when an air waybill is issued.

1.2

Several observations can be made:

- a) It is felt that the provisions in Part 1;2.6 a) are not applicable to air transport but are mainly a concern for the surface mode. Also, the transport of used, damaged and defective lamps from a collection or recycling facility (Part 1;2.6 c)) does not seem to fit with the philosophy of the Technical Instructions. Therefore, it seems inappropriate to incorporate the new proposed paragraphs in the 2015-2016 Edition of the Technical Instructions.

- b) Current Special Provision A69 b) imposes a drop test for lamps containing mercury of 0.5 m. The UN Model Regulations do not have this specific requirement for lamps containing mercury. However, with the introduction of new Part 1;2.6, all packages containing lamps must be capable of withstanding a 1.2 m drop test. Moreover, in accordance with Special Provision A69 b), each lamp containing mercury may not contain more than 1 g of mercury and must be packaged so that there is not more than 30 g of mercury per package. These criteria are exactly the same as the new criteria specified in Part 1;2.6.

Therefore it is proposed to delete paragraph b) of Special Provision A69.

- c) Special Provision A69 c) speaks about “articles” in general. These may include lamps, in which case some confusion may occur. For example, in accordance with this special provision a light bulb containing an inert gas such as Neon is limited to 100 mg while in accordance with Part 2;2.2.3 d) these are not subject to the Instructions. Therefore, it is felt that lamps should be excluded from Special Provision A69 c). The same approach should be taken for paragraph a) of Special Provision A69. In addition, a note could be added to Special Provision A69 referring to the provisions for lamps in Part 1;2.6

附录

对《技术细则》第 1 部分的修订提案

第 1 部分

概论

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2.6 含有危险物品的灯具

下列灯具不受本细则约束，条件是它们不含有放射性物质且所含汞不超过特殊规定 A69 所规定的量：

a) 直接从个人和家庭收集的，运输至收集或回收设施的灯具；

b) 每一件含有危险物品不超过1克，且包装后每个包装件的危险物品含量不超过30克的灯具，条件是：

1) 灯具经制造商的质量管理体系认证；和

注：为此目的而适用 ISO9001：2008 被认为是可以接受的。

2) 每一件灯具要么单独包装在内包装内，并用隔板分开，要么周围塞满用于保护灯具的缓冲材料并装进符合4.1.1的一般规定且能够通过1.2米高度的跌落测试的硬质外壳包装内。

e) 从收集或回收设施运输的，用过的、损坏的或有缺陷的灯具，每一件含有危险物品不超过1克且每一个包装件内的危险物品不超过30克。

灯具必须包装进硬质外壳包装内，这些包装足以在符合 4.1.1 一般规定的正常运输条件下防止内装物泄露，并且能够通过不低于 1.2 米高度的跌落测试。

注：含有放射性物质的灯具，见 2;7.2.2.2 b)，含有项别 2.2 气体的灯泡，见 2;2.2.3 d)。]

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第3部分

危险物品表，特殊规定和限制数量与例外数量

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第3章

特殊规定

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表 3-2 特殊规定

本细则 UN

A69	下列物品作为货物运输时，不受本细则限制： a) <u>除灯具之外</u> ，诸如温度计、交换器和继电器等物品，每个物品包含的汞总量不超过15 g，且作为机器或设备的组成部分安装其中并得到固定，从而在正常运输条件下不会发生造成汞泄漏的冲击或撞击损坏。 b) 灯 ，每盏灯含有不超过1 g 的汞，包装后每个包装件内含有的汞不超过30 g。包装件的设计和构造必须使其在接受不低于0.5 米高度的跌落试验时，仍能适于运输， 内装物不得受到任何损坏。 eb) <u>除灯具之外</u> ，包含不超过100 mg 汞、镓或惰性气体的物品，经包装后每个包装件所含的汞、镓或惰性气体的量是1 g 或更低。
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注：含有危险物品的灯具，见第1部分2.6。