



**WORKING PAPER**

**DANGEROUS GOODS PANEL (DGP)  
WORKING GROUP MEETING (DGP-WG/21)**

**Virtual Meeting, 24 to 28 May 2021**

**Agenda Item 2: Managing air-specific safety risks and identifying anomalies**

**2.3: Develop proposals, if necessary, for amendments to the Supplement to the *Technical Instructions for the Safe Transport of Dangerous Goods by Air* (Doc 9284SU) for incorporation in the 2023-2024 Edition**

**CLARIFICATION FOR PACKING INSTRUCTION 974**

(Presented by the Rapporteur of the DGP Working Group on the Supplement)

**SUMMARY**

Packing Instruction 974 applies to large lithium ion/metal batteries and cells with a mass exceeding 35 kg, both packed on their own, or when packed with or contained in equipment. The batteries and cells transported under this Packing Instruction are required to be UN 38.3 tested.

In Packing Instruction 974, there is a requirement for the lithium ion batteries or cells to be offered into transport with a state of charge that does not exceed 30 per cent; this requirement applies to lithium ion batteries and cells that are packed alone.

Action by the DGP-WG is in paragraph 2.

**1. INTRODUCTION**

1.1 Packing Instruction 974 in the Supplement relates to the following dangerous goods: UN 3090 — Lithium metal batteries, UN 3091 — Lithium metal batteries packed with equipment, UN 3091 — Lithium metal batteries contained in equipment, UN 3480 — Lithium ion batteries, UN 3481 — Lithium ion batteries packed equipment and UN 3481 — Lithium ion batteries contained in equipment.

1.2 Packing Instruction 974 applies to large lithium ion/metal batteries and cells with a mass exceeding 35 kg, both packed alone, or when packed with or contained in equipment. The batteries and cells transported under Packing Instruction 974 must meet the requirements of Part 2;9.3 a) of the

Technical Instructions, being the tests of section 38.3 contained within the UN Manual of Tests and Criteria.

1.3 The 'General requirements' section of Packing Instruction 974, requires that:

Lithium ion cells and batteries must be offered for transport at a state of charge not exceeding 30 per cent of their rated capacity unless a higher state of charge is specifically approved by the State of Origin and the State of the Operator.

1.4 The DGP Working Group on the Supplement (DGP-WG/SUPP) considered that Packing Instruction 974 relates to UN 38.3 tested lithium batteries and cells, and therefore the requirement for no more than a 30 per cent SOC applies to only lithium ion batteries and cells packed on their own (UN 3480 only).

1.5 To address this issue and provide clarification within Packing Instruction 974, DGP-WG/SUPP has put forth recommendations within the appendix for review and consideration by the DGP.

## 2. **ACTION BY THE DGP-WG**

2.1 The DGP-WG is invited to review the amendments shown in the appendix and consider these amendments for inclusion into the Supplement by corrigendum, if a corrigendum is to be issued.

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**APPENDIX**

**PROPOSED AMENDMENT TO PART S-4 OF THE SUPPLEMENT TO THE TECHNICAL  
INSTRUCTIONS**

**Part S-4**

**PACKING INSTRUCTIONS**

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**Chapter 11**

**CLASS 9 – MISCELLANEOUS DANGEROUS GOODS**

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**Packing Instruction 974**

Cargo aircraft only

**Introduction**

This packing instruction applies to UN Nos. 3090, 3091, 3480 and 3481 where the lithium cell or battery has a mass exceeding 35 kg.

**General requirements**

Part 4;1 requirements of the Technical Instructions must be met.

Lithium ion cells and batteries ([UN 3480](#)) must be offered for transport at a state of charge not exceeding 30 per cent of their rated capacity unless a higher state of charge is specifically approved by the State of Origin and the State of the Operator.

Each cell or battery must meet the provisions of Part 2;9.3 of the Technical Instructions.

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