



Committee of Experts on the Transport of Dangerous Goods and on the Globally Harmonized System of Classification and Labelling of Chemicals

Sub-Committee of Experts on the Transport of Dangerous Goods

Sixty-fifth session

Geneva, 25 November-3 December 2024

Item 3 of the provisional agenda

Listing, classification and packing

Proper shipping names for UN 3536

Transmitted by the expert from the United States of America*

I. Introduction

1. During the sixty-fourth session an additional proper shipping name (PSN) was added to UN 3536, “LITHIUM BATTERIES INSTALLED IN A CARGO TRANSPORT UNIT lithium ion batteries or lithium metal batteries” to include a new PSN in uppercase for “SODIUM ION BATTERIES INSTALLED IN CARGO TRANSPORT UNIT” and an additional description “sodium ion batteries” in lower case.

2. Three possible battery chemistries (lithium ion, lithium metal, and sodium ion) are all listed under the same UN number with no indication of the battery chemistry. An indication of the type of batteries being transported allows for differentiation of transport provisions where appropriate and for differing emergency response actions based on the types of batteries installed in the container.

II. Discussion

3. A recent fire involving UN3536, LITHIUM BATTERIES INSTALLED IN A CARGO TRANSPORT UNIT occurred in the United States of America. Emergency responders on the scene were initially unable to determine whether the cargo transport unit contained lithium ion or lithium metal batteries. This uncertainty negatively impacted the response.

4. It is understood that most energy storage systems offered for transport in accordance with the provisions for UN3536 are lithium ion, and that the existing lithium metal description is primarily a facilitation option in case lithium metal batteries are transported installed in cargo transport units (CTU's). New allowances to offer sodium ion batteries installed in CTU's were accepted at the sixty-fourth session and if adopted will become applicable in the twenty-fourth revised edition of the *Model Regulations*.

5. To communicate to emergency responders and those in the transport chain more precisely the chemistry of the batteries being transported in CTU's and to allow for the

* A/78/6 (Sect. 20), table 20.5.



assignment of transport provisions applicable to a specific chemistry, if deemed appropriate, it is proposed to split the existing single entry for UN 3536 into three separate UN numbers. To minimize impacts to shippers it is proposed to keep CTU's containing lithium ion batteries in UN 3536 and create two new UN numbers for lithium metal batteries and sodium ion batteries installed in CTU's. In addition, for the entry UN3536 the PSN would include an indication of "lithium ion". Consequential amendments are proposed to special provisions 360, 388 and 410 to identify the appropriate entry for batteries installed in a cargo transport unit.

III. Proposal

6. In chapter 3.2, amend the 3.2 Dangerous Goods List entry for UN 3536 to read as follows:

(1)	(2)	(3)	(4)	(5)	(6)	(7a)	(7b)	(8)	(9)	(10)	(11)
3536	LITHIUM <u>ION</u> BATTERIES INSTALLED IN CARGO TRANSPORT UNIT lithium ion batteries or lithium metal batteries	9			389	0	E0				

Add two new entries in the list of dangerous goods list to read as follows:

(1)	(2)	(3)	(4)	(5)	(6)	(7a)	(7b)	(8)	(9)	(10)	(11)
XXXX	LITHIUM METAL BATTERIES INSTALLED IN CARGO TRANSPORT UNIT	9			389	0	E0				
YYYY	SODIUM ION BATTERIES INSTALLED IN CARGO TRANSPORT UNIT	9			389	0	E0				

7. Consequential amendments to text shown in the report of the sixty-fourth session (ST/SG/AC.10/C.3/128/Add.1) and the sixty-third session (ST/SG/AC.10/C.3/126/Add.1). New text to be inserted is underlined and text to be deleted is shown with a line through it (~~struck out~~).

Chapter 3.3, special provisions

In special provision 360, amend the last sentence as follows:

“Lithium ion batteries, lithium metal batteries, sodium ion batteries or hybrid batteries containing both lithium ion cells and sodium ion cells in accordance with 2.9.4 (h) installed in cargo transport units, designed only to provide power external to the transport unit shall be assigned to entries UN 3536 LITHIUM ION BATTERIES INSTALLED IN CARGO TRANSPORT UNIT, UN XXXX LITHIUM METAL BATTERIES INSTALLED IN CARGO TRANSPORT UNIT or UN YYYY~~3536~~ SODIUM ION BATTERIES INSTALLED IN CARGO TRANSPORT UNIT, as applicable.”

In special provision 388 in the eighth paragraph, amend the last sentence to read as follows:

“Lithium ion batteries, lithium metal batteries or sodium ion batteries installed in a cargo transport unit and designed only to provide power external to the cargo transport unit shall be assigned to the entries UN 3536 LITHIUM ION BATTERIES INSTALLED IN CARGO TRANSPORT UNIT, UNXXXX LITHIUM METAL BATTERIES INSTALLED IN CARGO TRANSPORT UNIT or UN ~~3536~~ YYYY SODIUM ION BATTERIES INSTALLED IN CARGO TRANSPORT UNIT, as appropriate”.

In special provision 410, amend the first sentence to read as follows:

“Hybrid batteries in conformity with 2.9.4 (h) containing both lithium ion cells and sodium ion cells shall be assigned to UN Nos. 3480, ~~or 3481~~, or 3536, as appropriate.

Alphabetical index of substances and articles

For “LITHIUM BATTERIES INSTALLED IN CARGO TRANSPORT UNIT lithium ion batteries or lithium metal batteries” amend column “Name and description” to read: “LITHIUM ION BATTERIES INSTALLED IN CARGO TRANSPORT UNIT”

Add the following new entry in alphabetical order:

LITHIUM METAL BATTERIES INSTALLED IN CARGO TRANSPORT UNIT	9	XXXX
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For “SODIUM ION BATTERIES INSTALLED IN CARGO TRANSPORT UNIT” amend column “UN No.” to read YYYY

IV. Sustainable Development Goals

8. This document supports Sustainable Development Goal 16, *Peace, justice, and strong institutions*. Specifically, the proposal supports target 16.6 to *Develop effective, accountable and transparent institutions at all levels*.
