



**Economic and Social  
Council**

**Distr.  
GENERAL**

**TRANS/WP.15/2000/11  
6 March 2000**

**Original: ENGLISH**

**ECONOMIC COMMISSION FOR EUROPE**

**INLAND TRANSPORT COMMITTEE**

**Working Party on the Transport  
of Dangerous Goods**

**(Sixty-eighth session, agenda item 4 (b),  
Geneva, 15-19 May 2000)**

**STOWAGE OF PACKAGES CONTAINING SUBSTANCES OF  
CLASSES 4.1 AND 5.2 OF ADR**

**AMENDMENTS TO ADR MARGINALS 41 414 (2) AND 52 403 (1)**

**Proposal transmitted by Germany**

Executive Summary:	a) Harmonized provisions for marginals 41 414 (2) and 52 414 (2) For the restructured ADR amendment of the additional provision CV21 under section 7.5.11
	b) New provisions for loading of packages bearing a label conforming to model No. 5.2 in the same vehicle with packages bearing a label of model Nos. 1, 1.4 (except for compatibility group S), 1.5, 1.6 or 01 (except for packages bearing labels conforming to Nos. 5.2 and 01)
Action to be taken:	Amendments to marginals 41 414 (2) and 52 403 (1) of ADR. For the restructured ADR amendments of the table under section 7.5.2.1 and amendments of the additional provision CV21 under section 7.5.11
Related documents:	None

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## **1. Amendments to ADR marginal 41 414 (2)**

### **General remarks**

At the Working Party on the Transport of Dangerous Goods (sixty-seventh session, Geneva, 8-12 November 1999), the German representative stated that the existing provisions for stowage of packages containing self-reactive substances requiring temperature control (41E to 50E) and organic peroxides requiring temperature control (11E to 20E) are not harmonized and lead to confusions (see doc. TRANS/WP.15/1999/40, 28 July 1999). At the same meeting, Germany announced the submission of a new proposal for the next meeting to solve these problems.

According to ADR marginal 41 414 (2), stacking of packages containing substances of 41E to 50E (self-reactive substances requiring temperature control) is not permitted. This means that these substances are not allowed to be placed on top of other goods.

There is no similar restrictive provision regarding stowage of substances of class 5.2, 11E to 20E (organic peroxides requiring temperature control) in ADR marginal 52 414 (2). In the opinion of Germany the provisions of marginal 41 414 (2) should be harmonized with those of ADR marginal 52 414 (2).

### **Proposal**

The new marginal 41 414 (2) of ADR should read as follows:

“(2) Packages containing substances of 41 to 50 shall be so stowed as to be readily accessible.”

For the restructured ADR the second point of the additional provision CV 21 under section 7.5.11 should read as follows:

“Packages shall be so stowed as to be readily accessible.”

### **Justification**

Germany is of the opinion that both groups of substances “organic peroxides” and “self-reactive substances” requiring temperature control because of similar physical/chemical properties should be stowed/stacked in the same manner. In sea-transport - which normally requests more stringent provisions - the stowage/stacking for the above mentioned groups of substances is allowed.

## **2. Amendments to ADR marginal 52 403 (1) + (2)**

### **Proposal**

(1) The new marginal 52 403 (1) of ADR should read as follows:

“(1) packages bearing a label conforming to model No. 5.2 shall not be loaded together in the same vehicle with packages bearing a label conforming to models Nos. 1, 1.4 (except for compatibility group S) 1.5, 1.6 or 01 (except for packages bearing labels conforming to models Nos. 5.2 and 01).”

For the restructured ADR no amendments are required.

(2) In the existing German version of ADR after “Muster 5.2” the part “und Muster 01” should be inserted, because the English and German versions of the existing ADR are different.

For the restructured ADR no amendments are required.

### **Justification**

The prohibition of “mixed loading” is justified for safety reasons, only if in case of leakage the content reacts dangerously with each other and cause:

- combustion and/or evolution of considerable heat;
- evolution of flammable, toxic or asphyxiant gases;
- the formation of unstable substances.

These hazardous reactions cannot occur with organic peroxides which have been classified in a different way because of their hazardous potential. On the contrary, in the case of organic peroxides marked with the additional label “explosive” and mixed with other less hazardous organic peroxides, there will be a dilution of the hazardous component and the “total hazardous potential” will decrease.

### **3. Amendments to the restructured ADR table under sub section 7.5.2.1**

#### **Proposal**

- a) The “x” in column 4.1 and line 4.1 + 1 should be deleted.
- b) The “x” in column 4.1 + 1 and line 4.1 should be deleted.

#### **Justification**

The substances of class 4.1 are so different that a mixed loading of self-reactive substances of class 4.1 with a subsidiary risk label conforming to model No.1. should be prohibited. In the current ADR it is prohibited.

#### **Proposal**

In column 1.4 and lines 4.1 + 1 and 5.2 + 1 a “1)” should be added.

#### **Justification**

The mixed loading of substances and articles of class 1.4 S with self-reactive substances of class 4.1 with a subsidiary risk label 01 and organic peroxides of class 5.2 with a subsidiary risk label 01 is allowed in the current ADR.

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