



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

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Miscellaneous proposals for amendments to the Model Regulations on the Transport of Dangerous Goods: other miscellaneous proposals

Interpretation problem in ADR 7.5.2.3

Submitted by the Council on Safe Transportation of Hazardous Articles (COSTHA)*

Introduction

1. In 7.5.2.3 of ADR, the following text can be found that is confusing for practical application.

“For the purpose of the application of the prohibitions of mixed loading on one vehicle, no account shall be taken of substances contained in closed containers with complete sides. Nevertheless, the mixed loading prohibitions laid down in 7.5.2.1 concerning mixed loading of packages bearing labels conforming to model Nos. 1, 1.4, 1.5 or 1.6 with other packages, and in 7.5.2.2 concerning mixed loading of explosives of different compatibility groups shall also apply between dangerous goods contained in container and the other dangerous goods loaded on the same vehicle, whether or not the latter goods are enclosed in one or more other containers.”

2. This sub-section contains two sentences. The first sentence allows the mixed loading on one vehicle in closed containers (see Figure 1 below). The second sentence specifies the exceptions from this allowance. These exceptions are label model Nos. 1, 1.4, 1.5 and 1.6 in 7.5.2.1 (Figure 2) and 7.5.2.2 among compatibility groups of Class 1 explosives (Figure 3).

Background

3. This sub-section can also be found in the previous editions of ADR. The earliest edition available on the UNECE website is published in 2001, in which the sub-section is already inserted. Before 2001, the ADR had a different structure. In those editions, the first sentence can be found at marginal 10 405; the second sentence can be found at marginal 11 405, that relates to **Class 1 explosives only**. During the creation of the new structure, the two sentences have been combined. This combination was unsuccessful because the origin

* A/75/6 (Sect.20), para. 20.51

of the two sentences were different. The first is from Class 2 to 9 dangerous goods, the second is from Class 1. The second sentence is in a different context now. As a result, 7.5.2.3. is now affecting substances of the labels "4.1+1" and "5.2+1" as well (for the former and current text, see Table 1 below).

4. In RID, this sub-section is '*Reserved*', since a protective distance shall be kept in there.

Table 1

ADR till 1999	ADR from 2001
<p>Prohibition of mixed loading with goods contained in a container</p> <p>10 405</p> <p>For the purpose of the application of the prohibitions of mixed loading on one vehicle, no account shall be taken of substances contained in closed container with complete sides.</p> <p>Class 1</p> <p>Prohibitions on mixed loading</p> <p>11 403</p> <p>Packages bearing label conforming to models Nos. 1, 1.4, 1.5, 1.6 but which are assigned to different compatibility groups shall not be loaded together on one vehicle, unless mixed loading of the corresponding compatibility groups is authorized in the following table: <i>(mixed loading table for Class 1 compatibility groups, see Figure 3 below)</i></p> <p>11 405</p> <p>(1) The prohibitions of mixed loading of goods laid down in marginal 11 403 shall apply within each container.</p> <p>(2) The provisions of marginal 11 403 shall apply as between the dangerous goods contained in a container and the other dangerous goods loaded on the same vehicle, whether or not the latter goods are enclosed in one or more containers.</p>	<p>7.5.2.3 (first sentence)</p> <p>For the purpose of the application of the prohibitions of mixed loading on one vehicle, no account shall be taken of substances contained in closed containers with complete sides.</p> <p>7.5.2.1</p> <p>Packages bearing different danger labels shall not be loaded together in the same vehicle or container unless mixed loading is permitted according to the following Table based on the danger labels they bear. <i>(mixed loading table for all labels, see Figure 2 below)</i></p> <p>7.5.2.3 (second sentence)</p> <p>Nevertheless, the mixed loading prohibitions laid down in 7.5.2.1 concerning mixed loading of packages bearing labels conforming to model Nos. 1, 1.4, 1.5 or 1.6 with other packages, and in 7.5.2.2 concerning mixed loading of explosives of different compatibility groups shall also apply between dangerous goods contained in container and the other dangerous goods loaded on the same vehicle, whether or not the latter goods are enclosed in one or more other containers</p>

Problem

5. The exceptions listed in the second sentence of 7.5.2.3 refer to all kinds of mixed loading prohibitions in 7.5.2. In this form 7.5.2.3 is unusable for any practical cases.

Proposal 1

6. Materials and substances that are under mixed loading prohibition by 7.5.2 are prohibited to be loaded on one vehicle neither enclosed in separated containers nor without containers, therefore **7.5.2.3 shall be deleted** completely. In this case, the prohibition relates to all explosives listed in ADR (Class 1, explosives that are self-reactive and organic

peroxides). Since this subsection is unusable for any cases, there is no need to keep it in the regulation. **This will not affect any standard and will not increase the risk of transport.**

Proposal 2

7. In the case of materials and substances that have label model Nos. 4.1+1 or 5.2+1 and other packages containing dangerous goods are allowed to be loaded on one vehicle in closed containers, the second sentence in 7.5.2.3 shall be modified as follows (new text is underlined, deleted text is ~~strike through~~). **This modification results the same regulation as it was in ADR editions till 1999.**

Option 1

“7.5.2.3 Nevertheless, the mixed loading prohibitions laid down in 7.5.2.1 and 7.5.2.2 concerning mixed loading of packages of Class 1 explosives bearing labels conforming to model Nos. 1, 1.4, 1.5 or 1.6 with other packages, and in ~~7.5.2.2 concerning mixed loading of explosives of different compatibility groups~~ shall also apply between dangerous goods contained in container and the other dangerous goods loaded on the same vehicle, whether or not the latter goods are enclosed in one or more other containers.”

Option 2

“7.5.2.3 For Class 1 explosives only, Nevertheless, the mixed loading prohibitions ~~laid down in 7.5.2.1 concerning mixed loading of packages bearing labels conforming to model Nos. 1, 1.4, 1.5 or 1.6 with other packages,~~ and in ~~7.5.2.2 concerning mixed loading of explosives of different compatibility groups~~ shall also apply between dangerous goods contained in container and the other dangerous goods loaded on the same vehicle, whether or not the latter goods are enclosed in one or more other containers.”

NOTE: In ADR, UN Nos. 2211 and 3314 have ‘None’ for the Labels in Column 5 of Table A. These items have a Special Provision, the SP 675 (‘For packages containing these dangerous goods, mixed loading with substances and articles of Class 1, with the exception of 1.4S, shall be prohibited.’). So, in this case, mixed loading prohibition relates to Class 1 only, and not for explosives that are also self-reactive or organic peroxides.

Figure 1

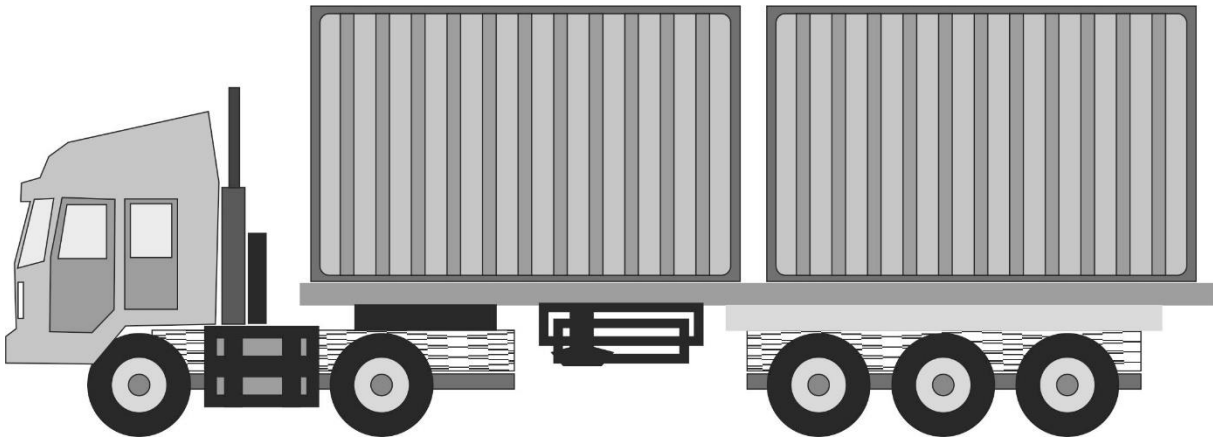


Figure 2

Labels Nos	1	1.4	1.5	1.6	2.1, 2.2, 2.3	3	4.1	4.1 +1	4.2	4.3	5.1	5.2	5.2 +1	6.1	6.2	7 A, B, C	8	9, 9A			
1	See 7.5.2.2										d							b			
1.4					a	a	a		a	a	a	a		a	a	a	a	a	a	a	a b c
1.5																					b
1.6																					
2.1, 2.2, 2.3		a			X	X	X		X	X	X	X		X	X	X	X	X			
3		a			X	X	X		X	X	X	X		X	X	X	X	X			
4.1		a			X	X	X		X	X	X	X		X	X	X	X	X			
4.1 +1								X													
4.2		a			X	X	X		X	X	X	X		X	X	X	X	X			
4.3		a			X	X	X		X	X	X	X		X	X	X	X	X			
5.1	d	a			X	X	X		X	X	X	X		X	X	X	X	X			
5.2		a			X	X	X		X	X	X	X	X	X	X	X	X	X			
5.2 +1												X	X								
6.1		a			X	X	X		X	X	X	X		X	X	X	X	X			
6.2		a			X	X	X		X	X	X	X		X	X	X	X	X			
7A, B, C		a			X	X	X		X	X	X	X		X	X	X	X	X			
8		a			X	X	X		X	X	X	X		X	X	X	X	X			
9, 9A	b	a b c	b	b	X	X	X		X	X	X	X		X	X	X	X	X			

Figure 3

Compatibility Group	A	B	C	D	E	F	G	H	J	L	N	S
A	X											
B		X		a								X
C			X	X	X		X				b c	X
D		a	X	X	X		X				b c	X
E			X	X	X		X				b c	X
F						X						X
G			X	X	X		X					X
H								X				X
J									X			X
L										d		
N			b c	b c	b c						b	X
S		X	X	X	X	X	X	X	X		X	X