



Secretariat

Distr.
GENERAL

ST/SG/AC.10/C.3/2005/18
18 April 2005

ORIGINAL: ENGLISH

**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

Twenty-seventh session, 4-8 July 2005
Item 6 of the provisional agenda

LISTING, CLASSIFICATION AND PACKING

Miscellaneous proposals

Medicines UN 1851, UN 3248 and UN 3249

Transmitted by the expert from the United Kingdom

1. The expert from the United Kingdom draws the attention of the Sub-Committee to certain inconsistencies he has noted in the Model Regulations concerning these three substances in the Dangerous Goods List. He is aware that discussions have also taken place within the modal bodies on problems with these UN numbers. Papers to resolve individual modal issues have been considered at the RID/ADR/ADN Joint Meeting, see TRANS/WP.15/AC.1/2003/59 from Belgium, and also at IMO's Sub-Committee on Dangerous Goods, Solid Cargoes and Containers (DSC). The work currently being undertaken at the ICAO's Dangerous Goods Panel to rationalise and update the packing instructions has also identified that there is a problem.
2. UN 1851 appeared in the 2nd edition of the Recommendations before the introduction of the concept of Limited Quantities. UN 3248 and UN3249 appeared in the 7th edition presumably to "fill the gaps" for the other types of medicine.

When these UN numbers were introduced into the Model Regulations SP221 was placed against each one. This stated:

221 Substances included under this entry shall not be of Packing Group I and shall have a maximum net quantity per package of 5 litres or 5 kg.

In the 11th edition (see Annex) of the Recommendations SP221 was amended to read:

221 Substances included under this entry shall not be of Packing Group I.

The UN numbers were allocated to P001 and P002 respectively but PP6 was added which states:

P001 For UN1851 and UN3248 the maximum net quantity per package shall be 5 litres,
or

P002 For UN3249 the maximum net quantity per package shall be 5 kg

3. All three substances have been permitted as Limited Quantities since these provisions were introduced. The expert from the United Kingdom notes in passing that for RID/ADR/ADN UN3248 PG II has an entry LQ 0 although there is no equivalent restriction in the air or sea modes. It is difficult to understand the reasoning behind the restrictions in RID/ADR/ADN.

For the 10th and 11th editions of the UN Model Regulations, the limited quantity limits per receptacle was either:

100ml/500g/1L for packing group II.

1L/3kg for packing group III.

The attached tables at Appendices 1 and 2 show the levels for the 10th edition, the 12th edition, where some changes were made, and the 13th edition.

4. With limited quantities the maximum total quantity per package is 30kg but presumably the original SP221 took precedence. Since the 11th edition the mass/volume limit in SP221 has moved to PP6 of P001/P002. The effect of this change is that:

For limited quantities the inner receptacle sizes have not changed but the 30kg gross mass is now applicable. Thus for UN3249 it is possible to have a 30kg gross package which could contain at least 28kg of a PGIII solid. If the same medicine is placed in a UN package in accordance with P002 the limit is 5kg net with approximately a 6kg gross mass package.

5. The end result is that the contents of a Limited Quantity package could exceed a fully tested, marked and labelled UN package by a factor of 5. Was this the intention of the Sub-Committee? The expert from the United Kingdom doubts that it was. In his opinion UN1851 was introduced to provide a “limited quantity” type provision before Chapter 15 (now Chapter 3.4) on Limited Quantities was introduced.

The UN numbers are clearly useful and the United Kingdom would not wish to see them removed. However, it is his view that the use of these numbers in the regulations should be clarified. Below the expert from the United Kingdom puts forward a proposal for consideration by the Sub-Committee.

6. Proposal

1. Retain the current entries for the limited quantity thresholds for these 3 UN Nos.

2. Amend PP6 in P001 and P002 to read;

“For UN 1851 and UN 3248 and UN 3249 only combination packagings shall be used with a maximum net mass per inner packaging of 5L/5kg and maximum net mass per outer packaging of 40 kgs.”

Annex 1

Limited Quantity Levels

Text from 10th and 12th editions of the Model Regulations

10th Edition

UN No.	Name and description	Class or division	Subsidiary risk	UN packing group	Special provisions	Limited quantities	Packagings and IBCs		Portable tanks	
							Packing instruction	Special provisions	Portable tank instruction	Portable tank special provisions
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1851	MEDICINE, LIQUID, TOXIC, N.O.S.	6.1		II	109, 221	100 ml				
		6.1		III	109, 221, 223	1 L				
3248	MEDICINE, LIQUID, FLAMMABLE, TOXIC, N.O.S.	3	6.1	II	109, 220, 221	1 L				
		3	6.1	III	109, 220, 221, 223	5 L				
3249	MEDICINE, SOLID, TOXIC, N.O.S.	6.1		II	109, 221	500 g				
		6.1		III	109, 221, 223	3 kg				

109 This substance shall be transported in accordance with the provisions of 3.1.1.2.

221 Substances included under this entry shall not be of Packing Group I and shall have a maximum net quantity per package of 5 litres or 5 kg.

223 If the chemical or physical properties of a substance covered by this description are such that when tested it does not meet the established defining criteria for the class or division listed in column (b1), or any other class or division, it is not subject to these Regulations.

12th Edition

UN No.	Name and description	Class or division	Subsidiary risk	UN packing group	Special provisions	Limited quantities	Packagings and IBCs		Portable tanks	
							Packing instruction	Special provisions	Portable tank instruction	Portable tank special provisions
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1851	MEDICINE, LIQUID, TOXIC, N.O.S.	6.1		II	221	100 ml	P001	PP6		
		6.1		III	221, 223	5 L	P001	PP6		
3248	MEDICINE, LIQUID, FLAMMABLE, TOXIC, N.O.S.	3	6.1	II	220, 221	1 L	P001	PP6		
		3	6.1	III	220, 221, 223	5 L	P001	PP6		
3249	MEDICINE, SOLID, TOXIC, N.O.S.	6.1		II	221	500 g	P002	PP6		
		6.1		III	221, 223	5 kg	P002	PP6		

- 221 Substances included under this entry shall not be of packing group I.
- 223 If the chemical or physical properties of a substance covered by this description are such that when tested it does not meet the established defining criteria for the class or division listed in column (3), or any other class or division, it is not subject to these Regulations.

Annex 2
Limited Quantity Levels
Text from 13th edition of the Model Regulations

UN NUMBER	NAME	CLASS	SUBSID RISK	PACKING GROUP	SPECIAL PROVISION	LQ REQUIREMENTS	PACKING INSTRUCTION	SPECIAL PACKING PROVISIONS
1851	Medicine liquid toxic NOS	6.1		II	221	100ml 30kg outer	P001	PP6 [1]
1851	Medicine liquid toxic NOS	6.1		III	221 223	5l 30kg outer	P001	PP6 [1]
3248	Medicine liquid flammable toxic NOS	3	6.1	II	220 221	1l 30kg outer	P001	PP6 [1]
3248	Medicine liquid flammable toxic NOS	3	6.1	III	220 221 223	5l 30kg outer	P001	PP6 [1]
3249	Medicine solid toxic NOS	6.1		II	221	500g outer 30kg	P002	PP6[2]
3249	Medicine solid toxic NOS	6.1		III	221 223	5kg outer 30kg	P002	PP6[2]

PP6 [1] For UN 1851 and UN 3248 the maximum net quantity per package shall be 5l

PP6 [2] For UN 3249, the maximum net mass per package shall be 5kg

221 Substances included under this entry shall not be of packing group 1

223 If the chemical or physical properties of a substance covered by this description are such that when tested it does not meet the established defining criteria for the class or division listed in column (3), or any other class or division, it is not subject to these Regulations.