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**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

Forty-first Session

Geneva, 25 June– 4 July 2012

Item 3 (a) of the provisional agenda

Listing, classification and packing:

proposals of amendments to the list of dangerous goods of Chapter 3.2

**Proposal for a new UN number and special provision for a
new type of confetti-shooters**

Transmitted by the expert from Germany¹

Background

1. In document ST/SRG/AC.10/C.3/2010/64, the expert from Germany presented a proposal to assign a new UN number to articles containing a small gas receptacle and intended to function as confetti-shooters. A revised document was presented to the Sub-Committee at its fortieth session in December 2011 (see informal document SCETDG/40/INF.23).
2. Some support was expressed to include provisions on such articles in the Model Regulations and the experts provided detailed comments during the discussion and afterwards in writing.
3. The proposal of amendments is reproduced in annex I to this document. Annex II contains the same proposed amendments and shows the changes brought to the last discussed proposal in informal document SCETDG/40/INF.23.

¹ In accordance with the programme of work of the Sub-Committee for 2011-2012 approved by the Committee at its fifth session (refer to ST/SRG/AC.10/C.3/76, para. 116 and ST/SRG/AC.10/38, para. 16).

4. As several comments referred to the name and description, two options are presented for the entry in column 2:

Option 1: "ARTICLES, CONTAINING SMALL GAS RECEPTACLES with non-flammable gas, intended to function as confetti-shooters."

Option 2: "CONFETTI-SHOOTERS, articles containing small pressure receptacles with non-flammable gas."

There are also confetti-shooters functioning with class 1 substances which are transported under the entry UN 0432 ARTICLES, PYROTECHNIC for technical purposes. Therefore option 1 might be preferable to avoid any confusion with the 1.4S articles.

5. The Sub-Committee is invited to discuss the proposal and decide on its adoption as appropriate.

Annex I

Proposal

1. Create a new entry (UN 3XXX) in Class 2:

(a) Add a new entry to the Dangerous Goods List, as follows:

UN No.	Name and description	Class or Division	Subsidiary risk	UN Packing group	Special provisions	Limited and excepted quantities	Packagings and IBCs			Portable tanks and bulk containers	
							Packing instructions	Special packing provisions	Instructions	Special provisions	
(1)	(2)	(3)	(4)	(5)	(6)	(7a)	(7b)	(8)	(9)	(10)	(11)
3XXX	[ARTICLES, CONTAINING SMALL GAS RECEPTACLES with non-flammable gas, intended to function as confetti-shooters]		2.2		3XX	0	E0	P003			
or											
[CONFETTI-SHOOTERS, articles containing small pressure receptacles with non-flammable gas]											

(b) Add a new Special Provision 3XX in Chapter 3.3:

“3XX (1) [Articles, containing small gas receptacles, intended to function as confetti-shooters,] [Confetti-Shooters are articles, containing small pressure pressurized receptacles, intended to function as confetti-shooters. They] shall comply with the following requirements:

- (a) The pressure receptacle shall be filled with compressed air or compressed nitrogen only;
- (b) The water capacity of the pressure receptacle shall not exceed 0.5 litres and the working pressure shall not exceed 25 bar at 20 °C;
- (c) The minimum burst pressure of the pressure receptacle shall be at least four times the pressure of the gas at 20 °C;
- (d) Each article shall be manufactured in such a way that unintentional firing or release is avoided under normal conditions of handling, packing,

transport and use. This may be fulfilled by an additional locking device linked to the usual activator;

(e) Each article shall be manufactured in such a way to prevent the pressure receptacle from rocketing backwards through the bottom of the article and preventing the metal flap or fragments of the pressure receptacle from catapulting during the activation of the article;

(f) Each pressure receptacle shall be manufactured from material which will not fragment upon rupture;

(g) The design type of the article shall be subjected to a fire test . For this test, the provisions of paragraphs 16.6.1.2, 16.6.1.3.1 to 16.6.1.3.6, 16.6.1.3.7 b) and 16.6.1.3.8 of the UN Manual of Tests and Criteria shall be applied. It shall be demonstrated that the article relieves its pressure by means of a fire degradable seal or other pressure relief device, in such a way that the pressure receptacle will not fragment and that the article or fragments do not rocket more than 10 metres; and

(h) The design type of the article shall be subjected to a single package test. For this test, the provisions of section 16.7.1 of the Manual of Tests and Criteria shall be applied with the following modifications: instead of a detonator or igniter according to 16.7.1.2 a) and b) and 16.7.1.3.2, a stimulating mechanism shall be used to initiate one confetti shooter in the middle of the packaging to function; instead of 16.7.1.3.4 first sentence the donor article should be initiated and observations made on the following: denting or perforation of the witness plate beneath the package, initiation of adjacent shooters, disruption of the package causing projection of the contents or fragments of the article or full perforation of the packaging by a projection; all other provisions of 16.7.1.3.4 shall be applied; 16.7.1.4. b) shall not be applied and c) should be understood as meaning the content of the shooter or its fragments; 16.7.1.5 is not relevant for confetti-shooters. There shall be no hazardous effects outside the package from accidental activation of one article. Evidence of hazardous effects outside the package includes the disruption of the package, metal fragments or the pressure receptacle passing through the packaging.

(i) Each article shall be marked with the name or another identification mark of the manufacturer and the date (YYYY-MM-DD) of manufacture.

2. The manufacturer shall produce technical documentation of the design type, manufacture as well as the tests and their results. The manufacturer shall apply procedures to ensure that shooters produced in series are made of good quality, conform to the design type and are able to meet the requirements in (1). The manufacturer shall provide such information to the Competent Authority on request.

3. Articles conforming to the requirements in (1) and (2) are not subject to further requirements of these Regulations if packed according to P 003 in packagings not exceeding 30 kg gross mass.”

Annex II

English only

Proposal on the basis of informal document SCETDG/40/INF.23 (new text underlined, deleted text stricken out)

1. Create a new entry (UN 3XXX) in Class 2:

- (a) Add a new entry to the Dangerous Goods List, as follows:

UN No.	Name and description	Class or Division	Subsidiary risk	UN Packing group	Special provisions	Limited and excepted quantities	Packagings and IBCs	Packing instructions	Special packing provisions	Instructions	Portable tanks and bulk containers	Special provisions
(1)	(2)	(3)	(4)	(5)	(6)	(7a)	(7b)	(8)	(9)	(10)	(11)	
	ARTICLES, CONTAINING SMALL GAS RECEPTACLES with non-flammable gas, intended to function as confetti- shooters		2.2			3XX	0	E0	P003			
3XXX	Or											
	<u>CONFETTI- SHOOTERS,</u> <u>articles containing</u> <u>small pressure</u> <u>receptacles with</u> <u>non-flammable gas</u>											

- (b) Add a new Special Provision 3XX in Chapter 3.3:

“3XX (1) [Articles, containing small pressure receptacles, intended to function as confetti-shooters,] [Confetti-Shooters are Aarticles, containing small pressure pressurized receptacles,intended to function as confetti shooters, They] shall comply with the following requirements are not subject to these Regulations provided:

- (a) The pressure receptacle shall be filled with compressed air or compressed nitrogen only;
- (b) The water capacity of the pressure receptacle shall not exceed 0.5 litres and the working pressure shall not exceed 25 bar at 1520 °C;

- (c) The minimum burst pressure of the pressure receptacle shall be at least four times the pressure of the gas at 1520 °C;
 - (d) Each article shall be manufactured in such a way that unintentional firing or release is avoided under normal conditions of handling, packing, transport and use. This may be fulfilled by an additional locking device linked to the usual activator;
 - (e) Each article shall be manufactured in such a way to prevent the pressure receptacle from rocketing backwards through the bottom of the article and preventing the metal flap or fragments of the pressure receptacle from catapulting during the activation of the article;
 - (f) Each pressurised receptacle shall be manufactured from material which will not fragment upon rupture;
 - (g) The design type of the article shall be subjected to a fire test (similar to UN test 6 (e)). For this test, the provisions of paragraphs 16.6.1.2 except letter g, 16.6.1.3.1 to 16.6.1.3.6, 16.6.1.3.7 b) and 16.6.1.3.8 of the Manual of Tests and Criteria shall be applied. It shall be demonstrated that the article relieves its pressure by means of a fire degradable seal or other pressure relief device, in such a way that the pressure receptacle will not fragment and that the article or fragments do not rocket more than 10 metres; and
 - (h) The design type of the article shall be subjected to a single package test. (similar to UN test 6 (d)). A stimulating mechanism shall be used to initiate one confetti shooter in the middle of the packaging. There shall be no hazardous effects outside the package from accidental activation of one article or initiation of the contents. Evidence of hazardous effects outside the package includes such as the disruption of the package, metal fragments or a receptacles which passes through the packaging.
 - (i) Each article shall be marked with the name or another identification mark of the manufacturer or the importer and the date (YYYY-MM-DD) of manufacture.
2. The manufacturer shall produce technical documentation of the design type, manufacture as well as the tests and their results. The manufacturer shall apply procedures to ensure that shooters produced in series are made of good quality, conform to the design type and are able to meet the requirements in (1). The manufacturer shall provide such information to the Competent Authority on request.
3. Articles conforming to the requirements in (1) and (2) are not subject to further requirements of these Regulations if packed according to P 003 in packagings not exceeding 30 kg gross mass.”