

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

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Sub-Committee of Experts on the Transport of Dangerous Goods

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Item 2 (j) of the provisional agenda

Explosives and related matters: miscellaneous

**A method for transporting controlled shipments of explosives
that are not classified (≤ 25 grams)**

**Transmitted by the Sporting Arms and Ammunition Manufacturers'
Institute (SAAMI)**

Introduction

1. This informal paper is supplemental to working paper ST/SG/AC.10/C.3/2018/53. This paper provides the proposals for including this special shipping container and the associated provisions/specifications into the various applicable sections of the UN Model Regulations. All recommendations previously offered by the Explosives Working Group are addressed in this proposal.

Proposal

2. Modify 2.1.3.4 “Assignment to hazard division” to include a new paragraph at the end:

“2.1.3.4.4 The competent authority may waive the tests for small amounts of explosives not exceeding 25 grams PETN or equivalent energy, and assign them to UN XXXX for solids or UN YYYY for liquids. The competent authority approval is based on the specialized packing instruction PXXX or PYYY and is not specific to the type of explosive.”

3. Create two new UN Numbers:

UN No.	Name and description	Class or division	Subsidiary hazard	UN packing group	Special provisions	Limited and excepted quantities		Packagings and IBCs		Portable tanks and bulk containers	
						(7a)	(7b)	Packing instruction	Special packing provisions	Instructions	Special provisions
(1)	(2)	(3)	(4)	(5)	(6)	(7a)	(7b)	(8)	(9)	(10)	(11)
-	3.1.2	2.0	2.0	2.0.1.3	3.3	3.4	3.5	4.1.4	4.1.4	4.2.5 / 4.3.2	4.2.5
XXXX	Explosive, Not Classified, Solid, N.O.S.	1.4S			ZZZ	0	E0	PXXX	PPAA		
YYYY	Explosive, Not Classified, Liquid, N.O.S.	1.4S			ZZZ	0	E0	PYYY	PPBB		

4. Create a new special provision ZZZ: “This designation shall only be used with the approval of the competent authority of the country of origin.”

5. Create the following packing instruction PXXX for UN XXXX:

PXXX	Packing instruction		PXXX
The following packagings are authorized, provided that the general packing provision of 4.1.1, 4.1.3, and special packing provisions of 4.1.5 are met:			
Inner Packagings	Intermediate Packagings	Outer Packagings	
Receptacles Plastics	Schedule 80 seamless steel pipe nipple (per ASTM A106 Grade B) closed at both ends with forged steel end caps (3,000 psi per ASTM A105)	Boxes Steel (4A) Aluminum (4B) Natural wood, ordinary (4C1) Plywood (4D) Reconstituted wood (4F) Fibreboard (4G) Drums Steel (1A1, 1A2) Aluminum (1B1, 1B3)	
Special packing provisions: AA For UN XXXX <ul style="list-style-type: none"> - Include the following inner packagings: <ul style="list-style-type: none"> (a) Design Type 1: A 4-inch (10.16 cm) diameter x 14-inch (35.56 cm) long Schedule 80 seamless steel pipe nipple (per ASTM A106 Grade B) closed at both ends with 4-inch (10.16 cm) diameter forged steel end caps (3,000 psi (2.07 x 10⁷ Pa) per ASTM A105); or (b) Design Type 2: A 6-inch (15.24 cm) diameter x 12 to 14-inch (30.48 to 35.56 cm) long Schedule 80 seamless steel pipe nipple (per ASTM A106 Grade B) closed at both ends with 6-inch (15.24 cm) diameter forged steel end caps (3,000 psi (2.07 x 10⁷ Pa) per ASTM A105); or - The explosive is sealed in a bag or other leak-proof receptacle and centered inside the container using packaging materials (which are comparable with the explosive) or other designed packaging so as to not be next to the walls or caps. - The container is then placed in an outer package comprised of fiberboard, plywood, or metal. The outer package is to facilitate handling and has no bearing on the containment of an explosive event in the container. 			

6. Include the following packing instruction PYYY for UN YYYYY

PYYY	Packing instruction		PYYY
The following packagings are authorized, provided that the general packing provision of 4.1.1, 4.1.3, and special packing provisions of 4.1.5 are met:			
Inner Packagings	Intermediate Packagings	Outer Packagings	
Receptacles Plastics Hard rubber Glass	Not less than 4-inch (10.16 cm) diameter flanged Schedule 80 seamless carbon steel pipe section not less than 15 inches (38.1 cm) in length, capped on both ends with 8-bolt 150 psi ANSI B 16.5, ASTM A105 flange plates which are sealed with high temperature resistant graphite gaskets, each containing one intermediate packaging.	Boxes Steel (4A) Aluminum (4B) Natural wood, ordinary (4C1) Plywood (4D) Reconstituted wood (4F) Fibreboard (4G) Drums Steel (1A1, 1A2) Aluminum (1B1, 1B3)	

Special packing provisions:**BB For UN YYYY:**

- Put the receptacle (sealed with a suitable method of closure containing the liquid explosive in a plastic, wide mouth bottle which is centered inside the container using packaging materials or other designed packaging so as to not be next to the walls or caps.
 - The packaging (e.g., sawdust, vermiculite or cellulosic materials) surrounding the wide mouth bottle should be compatible with the explosive and provide sufficient cushioning material to absorb all free liquid in the inner packaging.
 - The container is then placed in an outer package comprised of fiberboard, plywood, or metal. The outer package is to facilitate handling and has no bearing on the containment of an explosive event in the container.
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