

DGP/23-WP/29 15/8/11 Addendum/Corrigendum 23/9/11

DANGEROUS GOODS PANEL (DGP)

TWENTY-THIRD MEETING

Montréal, 11 to 21 October 2011

Agenda Item 3: Development of recommendations for amendments to the Supplement to the Technical Instructions for the Safe Transport of Dangerous Goods by Air (Doc 9284SU) for incorporation in the 2013-2014 Edition

REVISIONS TO CLASS 1 DANGEROUS GOODS INFORMATION

(Presented by J. McLaughlin)

ADDENDUM/CORRIGENDUM

Replace "— END —" on page C-2 of DGP/23-WP/29 with "————————————————————————————————————	-".
Add Appendix D (attached) to DGP/23-WP/29.	

APPENDIX D

EXTRACT FROM THE 17TH EDITION OF THE UN MODEL REGULATIONS

I	PACKING INSTRUCTION	P099
P099	PAUNING INSTRUCTION	. 10//
111199	111012210000000000000000000000000000000	

Only packagings which are approved by the competent authority for these goods may be used (see 4.1.3.7). A copy of the competent authority approval shall accompany each consignment or the transport document shall include an indication that the packaging was approved by the competent authority.

P101 PACKING INSTRUCTION P101

Only packagings which are approved by the competent authority may be used. The State's distinguishing sign for motor vehicles in international traffic of the country for which the authority acts, shall be marked on the transport documents as follows:

"Packaging approved by the competent authority of..."

P110(a) PACKING INSTRUCTION P110(a) The following packagings are authorized, provided that the general packing provisions of 4.1.1, 4.1.3 and special packing provisions of 4.1.5 are met:

Inner packagings	Intermediate packagings	Outer packagings
Bags	Bags	Drums
plastics textile, plastic coated or lined	plastics textile, plastic coated or lined	steel (1A1, 1A2) metal, other than steel or aluminium (1N1, 1N2)
rubber textile, rubberised textile	rubber textile, rubberized Receptacles	plastics (1H1, 1H2)
Receptacles wood	plastics metal	
	wood	

Additional requirements:

- The intermediate packagings shall be filled with water saturated material such as an anti-freeze solution or wetted cushioning.
- Outer packagings shall be filled with water saturated material such as an anti-freeze solution or wetted cushioning. Outer packagings shall be constructed and sealed to prevent evaporation of the wetting solution, except for UN 0224 when carried dry.

P110(b) PACKING INSTRUCTION P110(b) The following packagings are authorized, provided that the general packing provisions of 4.1.1, 4.1.3 and special

packing provisions of 4.1.5 are met:

Inner packagings	Intermediate packagings	Outer packagings
Receptacles	Dividing partitions	Boxes
metal	metal	natural wood, sift-proof wall (4C2)
wood	wood	plywood (4D)
rubber, conductive	plastics	reconstituted wood (4F)
plastics, conductive	fibreboard	•
Bags		
rubber, conductive		·
plastics, conductive		

Special packing provision:

For UN Nos. 0074, 0113, 0114, 0129, 0130, 0135 and 0224, the following conditions shall be met:

- Inner packagings shall not contain more than 50 g of explosive substance (quantity corresponding to dry substance);
- Compartments between dividing partitions shall not contain more than one inner packaging, firmly fitted; and
- The outer packaging may be partitioned into up to 25 compartments.

P111	PACKING INSTRUCTION		
The following packagings are authorized, provided that the general packing provisions of 4.1.1, 4.1.3 and special packing provisions of 4.1.5 are met:			
gs	gings Ou	Intermediate packa	Inner packagings
	Box	Not necessary	Bags
	:	, i	paper, waterproofed
B)			plastics
IN)	(textile, rubberized
, ordinary (4C1)	1		Receptacles
, sift-proof (4C2)	1		wood
)	. 1		Sheets
wood (4F)	l j		plastics
G)			textile, rubberized
nded (4H1)	1		
(4H2)			
	Dru		•
A2)	 		
BI, 1B2)			
N1, 1N2)			
)	1		·
, 1H2)			
			Special packing provision:
1,	. 1	ngings are not required who	Special packing provision: PP43 For UN 0159, inner packag outer packagings.

P112(a)	PACKING INSTRUCTION (Solid wetted, 1.1D)	V P112(a
The following packagings are packing provisions of 4.1.5 are r		acking provisions of 4.1.1, 4.1.3 and special
Inner packagings	Intermediate packagings	Outer packagings
Bags paper, multiwall, water resistant textile textile, rubberised woven plastics	Bags plastics textile, plastic coated or lined	Boxes steel (4A) aluminium (4B) other metal (4N) natural wood, ordinary (4C1) natural wood, sift-proof (4C2) plywood (4D) reconstituted wood (4F) fibreboard (4G) plastics, expanded (4H1) plastics, solid (4H2)
Receptacles	Receptacles	Drums
metal plastics wood	metal plastics wood	steel (1A1, 1A2) aluminium (1B1, 1B2) other metal (1N1, 1N2) plywood (1D) fibre (1G) plastics (1H1, 1H2)
Special packing provisions:	required if leakproof removable head dru 5, 0078, 0154, 0219 and 0394, packagings	ms are used as the outer packaging.

PP45 For UN 0072 and UN 0226, intermediate packagings are not required.

P112(b)	PACKING INSTRUCTI (Solid dry, other than powde		
The following packagings are authorized, provided that the general packing provisions of 4.1.1, 4.1.3 and special packing provisions of 4.1.5 are met:			
Inner packagings	Intermediate packagings	Outer packagings	
Bags	Bags (for UN 0150 only)	Bags	
paper, kraft	plastics	woven plastics, sift-proof (5H2)	
paper, multiwall, water resistant	textile, plastic coated or lined	woven plastics, water-resistant (5H3)	
plastics		plastics, film (5H4)	
textile		textile, sift-proof (5L2)	
textile, rubberised		textile, water resistant (5L3)	
woven plastics		paper, multiwall, water resistant (5M2)	
		Boxes	
		steel (4A)	
		aluminium (4B)	
÷		other metal (4N)	
		natural wood, ordinary (4C1)	
		natural wood, sift-proof (4C2)	
		plywood (4D)	
•		reconstituted wood (4F)	
		fibreboard (4G)	
		plastics, expanded (4H1)	
		plastics, solid (4H2)	
		Drums	
	,	steel (1A1, 1A2)	
		aluminium (1B1, 1B2)	
		` ' '	
		other metal (1N1, 1N2)	
•		plywood (1D)	
		fibre (1G)	
		plastics (1H1, 1H2)	
Special packing provisions: PP26 For UN Nos. 0004, 0076,	0078, 0154, 0216, 0219 and 0386, p	packagings shall be lead free.	
PP46 For UN 0209, bags, sift- maximum net mass of 30		flake or prilled TNT in the dry state and a	
	gings are not required when the oute	er packaging is a bag.	

PP26 PP46

PP48

maximum net mass of 30 kg.

For UN 0504, metal packagings shall not be used.

P112(c)	PACKING INSTRUCTION (Solid dry powder 1.1D)	P112(c
The following packagings are authoracking provisions of 4.1.5 are met:	orized, provided that the general packing	ng provisions of 4.1.1, 4.1.3 and special
Inner packagings	Intermediate packagings	Outer packagings
Bags	Bags	Boxes
paper, multiwall, water resistant	paper, multiwall, water resistant	steel (4A)
plastics	with inner lining plastics	aluminium (4B)
woven plastics	• •	other metal (4N)
	•	natural wood, ordinary (4C1)
Receptacles	Receptacles	natural wood, sift-proof (4C2)
fibreboard	metal	plywood (4D)
metal	plastics	reconstituted wood (4F)
plastics	wood	fibreboard (4G)
wood		plastics, solid (4H2)
		Drums
•		steel (1A1, 1A2)
•		aluminium (1B1, 1B2)
	•	other metal (1N1, 1N2)
		plywood (1D)
		fibre (1G)
		plastics (1H1, 1H2)
Additional requirements:		
1. Inner packagings are not required	if drums are used as the outer packaging	g.
2. The packaging shall be sift-proof	•	
Special packing provision:		

For UN Nos. 0004, 0076, 0078, 0154, 0216, 0219 and 0386, packagings shall be lead free.

For UN 0209, bags, sift-proof (5H2) are recommended for flake or prilled TNT in the dry state and a

P113	PACKING INSTRUCTION	
The following packagings are a packing provisions of 4.1.5 are r		packing provisions of 4.1.1, 4.1.3 and special
Inner packagings	Intermediate packagings	Outer packagings
Bags	Not necessary	Boxes
paper		steel (4A)
plastics		aluminium (4B)
textile, rubberised		other metal (4N)
•	·	natural wood, ordinary (4C1)
Receptacles		natural wood, sift-proof walls (4C2)
fibreboard	·	plywood (4D)
metal		reconstituted wood (4F)
plastics		fibreboard (4G)
wood	· ·	plastics, solid (4H2)
		Drums
		steel (1A1, 1A2)
		aluminium (1B1, 1B2)
	·	other metal (1N1, 1N2)
		plywood (1D)
		fibre (1G)
	· ·	plastics (1H1, 1H2)
Additional requirement:		
The packaging shall be sift-proo	f.	
Special packing provisions:		
	305, no more than 50 g of substance sh	all be packed in an inner packaging.
	kagings are not necessary when drums	·
, ·	ft or waxed paper sheets may be used a	

P114(a)	PACKING INSTRUC (Solid wetted)	
The following packagin packing provisions of 4.1		eral packing provisions of 4.1.1, 4.1.3 and special
Inner packagings	Intermediate packagings	Outer packagings
Bags	Bags	Boxes
plastics	plastics	steel (4A)
woven plastics		metal, other than steel or aluminium (4N)
•	Receptacles	natural wood, ordinary (4C1)
Receptacles	metal	natural wood, sift-proof walls (4C2)
metal	plastics	plywood (4D)
plastics		reconstituted wood (4F)
wood	Dividing partitions	fibreboard (4G)
	wood	plastics, solid (4H2)
		Drums
,		steel (1A1, 1A2)
		aluminium (1B1, 1B2)
		other metal (1N1, 1N2)
	.	fibre (1G)
•		plastics (1H1, 1H2)

Additional requirement:

Intermediate packagings are not required if leakproof removable head drums are used as the outer packaging.

Special packing provisions:

PP26 For UN Nos. 0077, 0132, 0234, 0235 and 0236, packagings shall be lead free.

PP43 For UN 0342, inner packagings are not required when metal (1A2, 1B2 or 1N2) or plastics (1H2) drums are used as outer packagings.

P114(b)	PACKING INSTRUCTION (Solid dry)	N P114(b)
The fol packing	flowing packagings are aug provisions of 4.1.5 are me	thorized, provided that the general paet:	acking provisions of 4.1.1, 4.1.3 and special
Inner p	oackagings	Intermediate packagings	Outer packagings
Bags		Not necessary	Boxes
paper,	, kraft	·	natural wood, ordinary (4C1)
plastic	es		natural wood, sift-proof walls (4C2)
textile	, sift-proof		plywood (4D)
wover	plastics, sift-proof		reconstituted wood (4F)
			fibreboard (4G)
Recept	acles		Drums
fibreb	oard		steel (1A1, 1A2)
metal			aluminium (1B1, 1B2)
paper			other metal (1N1, 1N2)
woven	plastics, sift-proof		plywood (1D)
wood			fibre (1G)
			plastics (1H1, 1H2)
Special	packing provisions:		•
PP26	For UN Nos. 0077, 0132	2, 0234, 0235 and 0236, packagings sha	ll be lead free.
PP48	For UN Nos. 0508 and 0509, metal packagings shall not be used.		
PP50	For UN Nos. 0160, 0161 and 0508, inner packagings are not necessary if drums are used as the outer packaging.		
PP52	For UN 0160 and UN 0161, when metal drums (1A1, 1A2, 1B1, 1B2, 1N1 or 1N2) are used as the outer packaging, metal packagings shall be so constructed that the risk of explosion, by reason of increase internal pressure from internal or external causes is prevented.		

P115	PACKING INSTRUCTION P115		
The fol packing	lowing packagings are author provisions of 4.1.5 are met:	orized, provided that the general pac	cking provisions of 4.1.1, 4.1.3 and special
Inner p	ackagings	Intermediate packagings	Outer packagings
Recept	acles	Bags	Boxes
plastic	es	plastics in metal receptacles	natural wood, ordinary (4C1)
wood	-		natural wood, sift-proof walls (4C2)
	•	Drums	plywood (4D)
		metal	reconstituted wood (4F)
	•	* .	Drums
	•	Receptacles	steel (1A1, 1A2)
		wood .	aluminium (1B1, 1B2)
			other metal (1N1, 1N2)
			plywood (1D)
l ,	•		fibre (1G)
	·		plastics (1H1, 1H2)
Special	packing provisions:		
PP45	For UN 0144, intermediate	packagings are not required.	
PP53	For UN Nos. 0075, 0143, 0495 and 0497, when boxes are used as the outer packaging, inner packagings shall have taped screw cap closures and be not more than 5 litres capacity each. Inner packagings shall be surrounded with non-combustible absorbent cushioning materials. The amount of absorbent cushioning material shall be sufficient to absorb the liquid contents. Metal receptacles shall be cushioned from each other. Net mass of propellant is a limited to 30 kg for each package when outer packagings are boxes.		
PP54	For UN Nos. 0075, 0143, 0495 and 0497, when drums are used as the outer packaging and when intermediate packagings are drums, they shall be surrounded with non-combustible cushioning material in a quantity sufficient to absorb the liquid contents. A composite packaging consisting of a plastic receptacle in a metal drum may be used instead of the inner and intermediate packagings. The net volume of propellant in each package shall not exceed 120 litres.		
PP55	For UN 0144, absorbent cu	shioning material shall be inserted.	
PP56	For UN 0144, metal recept	acles may be used as inner packaging	s.
PP57	used as outer packagings.	•	as intermediate packagings when boxes are
PP58	For UN Nos. 0075, 0143, used as outer packagings.	0495 and 0497, drums shall be used a	as intermediate packagings when drums are
PP59		oxes (4G) may be used as outer packa	
PP60	For UN 0144, aluminium of 1N2) shall not be used.	frums (1B1 and 1B2) and metal, other	er than steel or aluminium, drums (1N1 and

P116	PACKING INSTRUCTION	ON P11
The following packagings are authorize packing provisions of 4.1.5 are met:	d, provided that the general p	packing provisions of 4.1.1, 4.1.3 and special
Inner packagings	Intermediate packagings	Outer packagings
Bags	Not necessary	Bags
paper, water and oil resistant		woven plastics (5H1)
plastics		paper, multiwall, water resistant (5M2)
textile, plastic coated or lined		plastics, film (5H4)
woven plastics, sift-proof		textile, sift-proof (5L2)
Receptacles		textile, water resistant (5L3)
fibreboard, water resistant		Boxes
metal		steel (4A)
plastics		aluminium (4B)
Sheets		other metal (4N)
paper, water resistant		natural wood, ordinary (4C1)
paper, waxed		natural wood, sift-proof walls (4C2)
plastics		plywood (4D)
		reconstituted wood (4F)
		fibreboard (4G)
		plastics, solid (4H2)
	* -	Drums
and the second second		steel (1A1, 1A2)
		aluminium (1B1, 1B2)
	,	other metal (1N1, 1N2)
·		plywood (1D)
	`	fibre (1G)
		plastics (1H1, 1H2)
-		Jerricans
		steel (3A1, 3A2)
		plastics (3H1, 3H2)
Special packing provisions:		
PP61 For UN Nos. 0082, 0241, 0331 drums are used as the outer pacl	l and 0332, inner packagings kaging.	are not required if leakproof removable head
PP62 For UN Nos. 0082, 0241, 03 contained in a material impervious	For UN Nos. 0082, 0241, 0331 and 0332, inner packagings are not required when the explosive is contained in a material impervious to liquid.	
PP63 For UN 0081, inner packaging nitric esters.	For UN 0081, inner packagings are not required when contained in rigid plastics which is impervious to	
·	For UN 0331, inner packagings are not required when bags (5H2), (5H3) or (5H4) are used as outer	
, , ,		
PP65 For UN Nos. 0082, 0241, 0331	and 0332, bags (5H2 or 5H3)	may be used as outer packagings.

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P130	PACKING INSTRUCTION	ON P130	
The following packagings are authorized, provided that the general packing provisions of 4.1.1 , 4.1.3 and special packing provisions of 4.1.5 are met:			
Inner packagings	Intermediate packagings	Outer packagings	
Not necessary	Not necessary	Boxes	
		steel (4A)	
		aluminium (4B)	
		other metal (4N)	
	·	natural wood, ordinary (4C1)	
		natural wood, sift-proof walls (4C2)	
4		plywood (4D)	
		reconstituted wood (4F)	
	·	fibreboard (4G)	
		plastics, expanded (4H1)	
•		plastics, solid (4H2)	
		Drums	
		steel (1A1, 1A2)	
		aluminium (1B1, 1B2)	
		other metal (1N1, 1N2)	
		plywood (1D)	
4		fibre (1G)	
•	ľ	plastics (1H1, 1H2)	

Special packing provision:

PP67 The following applies to UN Nos. 0006, 0009, 0010, 0015, 0016, 0018, 0019, 0034, 0035, 0038, 0039, 0048, 0056, 0137, 0138, 0168, 0169, 0171, 0181, 0182, 0183, 0186, 0221, 0243, 0244, 0245, 0246, 0254, 0280, 0281, 0286, 0287, 0297, 0299, 0300, 0301, 0303, 0321, 0328, 0329, 0344, 0345, 0346, 0347, 0362, 0363, 0370, 0412, 0424, 0425, 0434, 0435, 0436, 0437, 0438, 0451, 0488 and 0502: Large and robust explosives articles, normally intended for military use, without their means of initiation or with their means of initiation containing at least two effective protective features, may be carried unpackaged. When such articles have propelling charges or are self-propelled, their ignition systems shall be protected against stimuli encountered during normal conditions of transport. A negative result in Test Series 4 on an unpackaged article indicates that the article can be considered for transport unpackaged. Such unpackaged articles may be fixed to cradles or contained in crates or other suitable handling devices.

rized, provided that the general p	acking provisions of 4.1.1, 4.1.3 and specia
Intermediate packagings	Outer packagings
Not necessary	Boxes
	steel (4A)
	aluminium (4B)
	other metal (4N)
·	natural wood, ordinary (4C1)
	natural wood, sift-proof walls (4C2)
	pływood (4D)
	reconstituted wood (4F)
	fibreboard (4G)
	Drums
	steel (1A1, 1A2)
·	aluminium (1B1, 1B2)
	other metal (1N1, 1N2)
	plywood (1D)
	fibre (1G)
	plastics (1H1, 1H2)

detonati	PACKING INSTRUCTION P132(a (Articles consisting of closed metal, plastics or fibreboard casings that contain a detonating explosive, or consisting of plastics-bonded detonating explosives)		
The following packagings packing provisions of 4.1.5	are authorized, provided that the genera are met:	I packing provisions of 4.1.1, 4.1.3 and special	
Inner packagings	Intermediate packagings	Outer packagings	
Not necessary	Not necessary	steel (4A) aluminium (4B) other metal (4N) wood, natural, ordinary (4C1) wood, natural, sift-proof walls (4C2) plywood (4D) reconstituted wood (4F) fibreboard (4G) plastics, solid (4H2)	

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P132(b)	PACKING INSTRUCTION P1 (Articles without closed casings)			
The following packagings are authorized, provided that the general packing provisions of 4.1.1 , 4.1.3 and special packing provisions of 4.1.5 are met:				
Inner packagings	Intermediate packagings	Outer packagings		
Receptacles	Not necessary	Boxes		
fibreboard	·	steel (4A)		
metal		aluminium (4B)		
plastics		other metal (4N)		
wood		natural wood, ordinary (4C1)		
		natural wood, sift-proof walls (4C2)		
Sheets		plywood (4D)		
paper		reconstituted wood (4F)		
plastics		fibreboard (4G)		
		plastics, solid (4H2)		

P133 PACKING INSTRUCTION			
The following packagings are authorized, provided that the general packing provisions of 4.1.1 , 4.1.3 and special packing provisions of 4.1.5 are met:			
Inner packagings	Intermediate packagings	Outer packagings	
Receptacles	Receptacles	Boxes	
fibreboard	fibreboard	steel (4A)	
metal	metal	aluminium (4B)	
plastics	plastics	other metal (4N)	
wood	·wood	natural wood, ordinary (4C1)	
Frays, fitted with dividing partitions		natural wood, sift-proof walls (4C2)	
fibreboard		plywood (4D)	
plastics		reconstituted wood (4F)	
wood		fibreboard (4G)	
		plastics, solid (4H2)	
Additional requirement:			
Receptacles are only required as interme	diate packagings when the inner	r packagings are trays.	
Special packing provision:	ŧ		
PP69 For UN Nos. 0043, 0212, 0225,	0268 and 0306, trays shall not b	be used as inner packagings.	

P134	PACKING INSTRUCTION	DN P134	
The following packagings are authorized, provided that the general packing provisions of 4.1.1, 4.1.3 and special packing provisions of 4.1.5 are met:			
Inner packagings	Intermediate packagings	Outer packagings	
Bags	Not necessary	Boxes	
water resistant		steel (4A)	
Receptacles	·	aluminium (4B)	
metal		other metal (4N)	
plastics	•	natural wood, ordinary (4C1)	
wood		natural wood, sift-proof walls (4C2)	
Sheets		plywood (4D)	
fibreboard, corrugated	·	reconstituted wood (4F)	
Tubes		fibreboard (4G)	
fibreboard		plastics, expanded (4H1)	
		plastics, solid (4H2)	
	·	Drums	
		steel (1A1, 1A2)	
		aluminium (IB1, IB2)	
		other metal (1N1, 1N2)	
•		plywood (1D)	
		fibre (1G)	
		plastics (1H1, 1H2)	

P135	PACKING INSTRUCTION	DN P135		
The following packagings are authorized, provided that the general packing provisions of 4.1.1, 4.1.3 and special packing provisions of 4.1.5 are met:				
Inner packagings	Intermediate packagings	Outer packagings		
Bags	Not necessary	Boxes		
paper		steel (4A)		
plastics	·	aluminium (4B)		
fibreboard		other metal (4N)		
metal		natural wood, ordinary (4C1)		
plastics		natural wood, sift-proof walls (4C2)		
wood		plywood (4D)		
Sheets		reconstituted wood (4F)		
paper	·	fibreboard (4G)		
plastics		plastics, expanded (4H1)		
·		plastics, solid (4H2)		
	· ·	Drums		
		steel (1A1, 1A2)		
		aluminium (1B1, 1B2)		
		other metal (1N1, 1N2)		
		plywood (1D)		
		fibre (1G)		
]	plastics (1H1, 1H2)		

P136	PACKING INSTRUCTION	N P136		
The following packagings are authorized, provided that the general packing provisions of 4.1.1, 4.1.3 and special packing provisions of 4.1.5 are met:				
Inner packagings	Intermediate packagings	Outer packagings		
Bags	Not necessary	Boxes		
plastics		steel (4A)		
textile		aluminium (4B)		
fibreboard	•	other metal (4N)		
plastics		natural wood, ordinary (4C1)		
wood		natural wood, sift-proof walls (4C2)		
		plywood (4D)		
Dividing portions in the outer		reconstituted wood (4F)		
packagings		fibreboard (4G)		
•		plastics, solid (4H2)		
•		Drums		
		steel (1A1, 1A2)		
		aluminium (1B1, 1B2)		
- -		other metal (1N1, 1N2)		
		plywood (1D)		
		fibre (1G)		
•		plastics (1H1, 1H2)		

P137	PACKING INSTRUCTION			
The following packagings are authorized, provided that the general packing provisions of 4.1.1 , 4.1.3 and special packing provisions of 4.1.5 are met:				
Inner packagings	Intermediate packagings	Outer packagings		
Bags	Not necessary	Boxes		
plastics		steel (4A)		
Boxes		aluminium (4B)		
fibreboard		other metal (4N)		
wood		natural wood, ordinary (4C1)		
Tubes		natural wood, sift-proof walls (4C2)		
fibreboard		plywood (4D)		
metal		reconstituted wood (4F)		
plastics		fibreboard (4G)		
Dividing partitions in the outer		Drums		
packagings		steel (1A1, 1A2)		
		aluminium (1B1, 1B2)		
		other metal (1N1, 1N2)		
•		plywood (1D)		
		fibre (1G)		
		plastics (1H1, 1H2)		

PP70 For UN Nos. 0059, 0439, 0440 and 0441, when the shaped charges are packed singly, the conical cavity shall face downwards and the package marked "THIS SIDE UP". When the shaped charges are packed in pairs, the conical cavities shall face inwards to minimize the jetting effect in the event of accidental initiation.

P138	PACKING INSTRUCTION	ON P138
The following packagings are authorized, provided that the general packing provisions of 4.1.1 , 4.1.3 and special packing provisions of 4.1.5 are met:		
Inner packagings	Intermediate packagings	Outer packagings
Bags	Not necessary	Boxes
plastics	·	steel (4A)
		aluminium (4B)
		other metal (4N)
		natural wood, ordinary (4C1)
		natural wood, sift-proof walls (4C2)
	· · ·	plywood (4D)
		reconstituted wood (4F)
		fibreboard (4G)
		plastics, solid (4H2)
	·	Drums
	1	steel (1A1, 1A2)
		aluminium (1B1, 1B2)
		other metal (1N1, 1N2)
	·	plywood (1D)
		fibre (1G)
		plastics (1H1, 1H2)
Additional requirement:		
-	ealed, inner packagings are not necessary.	

P139	PACKING INSTRUCTION	ON P13
The following packagings are authorized, provided that the general packing provisions of 4.1.1 , 4.1.3 and special packing provisions of 4.1.5 are met:		
Inner packagings	Intermediate packagings	Outer packagings
Bags	Not necessary	Boxes
plastics	*	steel (4A)
Receptacles		aluminium (4B)
metal		other metal (4N)
plastics		natural wood, ordinary (4C1)
wood		natural wood, sift-proof walls (4C2)
Reels		plywood (4D)
Sheets		reconstituted wood (4F)
paper		fibreboard (4G)
plastics		plastics, solid (4H2)
		Drums
		steel (1A1, 1A2)
	·	aluminium (1B1, 1B2)
		other metal (1N1, 1N2)
	·	plywood (1D)
	·	fibre (1G)
		plastics (1H1, 1H2)

For UN Nos. 0065, 0102, 0104, 0289 and 0290, the ends of the detonating cord shall be sealed, for example, by a plug firmly fixed so that the explosive cannot escape. The ends of flexible detonating cord shall be fastened securely.

For UN 0065 and UN 0289, inner packagings are not required when they are in coils.

P140	PACKING INSTRUCTION	ON P140
The following packagings are authorized, provided that the general packing provisions of 4.1.1, 4.1.3 and special packing provisions of 4.1.5 are met:		
Inner packagings	Intermediate packagings	Outer packagings
Bags	Not necessary	Boxes
plastics		steel (4A)
Receptacles		aluminium (4B)
wood	·	other metal (4N)
Reels		natural wood, ordinary (4C1)
Sheets		natural wood, sift-proof walls (4C2)
paper, kraft		plywood (4D)
plastics		reconstituted wood (4F)
·		fibreboard (4G)
		plastics, solid (4H2)
		Drums
		steel (1A1, 1A2)
		aluminium (1B1, 1B2)
		other metal (1N1, 1N2)
		plywood (1D)
	•	fibre (1G)
		plastics (1H1, 1H2)
Special packing provisions:	`	•
PP73 For UN 0105, no inner packa	gings are required if the ends are	sealed.
PP74 For UN 0101, the packaging ends of the tube are covered v		the fuse is covered by a paper tube and both
PP75 For UN 0101, steel, aluminiu	m or other metal boxes or drums	shall not be used.

P141	PACKING INSTRUCTION	DN P141
The following packagings are authorized, provided that the general packing provisions of 4.1.1 , 4.1.3 and special packing provisions of 4.1.5 are met:		
Inner packagings	Intermediate packagings	Outer packagings
Receptacles	Not necessary	Boxes
fibreboard	1	steel (4A)
metal		aluminium (4B)
plastics		other metal (4N)
wood	· · · · ·	natural wood, ordinary (4C1)
Trays, fitted with dividing partitions		natural wood, sift-proof walls (4C2)
plastics		plywood (4D)
wood		reconstituted wood (4F)
Dividing partitions in the outer		fibreboard (4G)
packagings		plastics, solid (4H2)
		Drums
		steel (1A1, 1A2)
		aluminium (1B1, 1B2)
		other metal (1N1, 1N2)
		plywood (1D)
		fibre (1G)
		plastics (1H1, 1H2)

P142	PACKING INSTRUCTION P14	
The following packagings are authorized, provided that the general packing provisions of 4.1.1, 4.1.3 and special packing provisions of 4.1.5 are met:		
Inner packagings	Intermediate packagings	Outer packagings
Bags	Not necessary	Boxes
paper		steel (4A)
plastics		aluminium (4B)
Receptacles		other metal (4N)
fibreboard		natural wood, ordinary (4C1)
metal		natural wood, sift-proof walls (4C2)
plastics		plywood (4D)
wood		reconstituted wood (4F)
Sheets	·	fibreboard (4G)
paper		plastics, solid (4H2)
Trays, fitted with dividing partitions		Drums
plastics		steel (1A1, 1A2)
		aluminium (1B1, 1B2)
•	,	other metal (1N1, 1N2)
		plywood (1D)
		fibre (1G)
·		plastics (1H1, 1H2)

P143	PACKING INSTRUCTION	ON P14	
The following packagings are authorized, provided that the general packing provisions of 4.1.1, 4.1.3 and special packing provisions of 4.1.5 are met:			
Inner packagings	Intermediate packagings	Outer packagings	
Bags	Not necessary	Boxes	
paper, kraft		steel (4A)	
plastics	1	aluminium (4B)	
textile		other metal (4N)	
textile, rubberized		natural wood, ordinary (4C1)	
Receptacles	·	natural wood, sift-proof walls (4C2)	
fibreboard		plywood (4D)	
metal	<u> </u>	reconstituted wood (4F)	
plastics		fibreboard (4G)	
wood		plastics, solid (4H2)	
Frays, fitted with dividing partitions		Drums	
plastics		steel (1A1, 1A2)	
•		aluminium (1B1, 1B2)	
•		other metal (1N1, 1N2)	
* -		plywood (1D)	
		fibre (1G)	
		plastics (1H1, 1H2)	

Instead of the above inner and outer packagings, composite packagings (6HH2) (plastic receptacle with outer solid box) may be used.

Special packing provision:

PP76

For UN Nos. 0271, 0272, 0415 and 0491, when metal packagings are used, metal packagings shall be so constructed that the risk of explosion, by reason of increase in internal pressure from internal or external causes is prevented.

P144	PACKING INSTRUCTION	
The following packagings are authorized, provided that the general packing provisions of 4.1.1 , 4.1.3 and special packing provisions of 4.1.5 are met:		
Inner packagings	Intermediate packagings	Outer packagings
Receptacles	Not necessary	Boxes
fibreboard		steel (4A)
metal		aluminium (4B)
wood		other metal (4N)
		natural wood, ordinary (4C1) with metal liner
Dividing partitions in the outer		plywood (4D) with metal liner
packagings		reconstituted wood (4F) with metal liner
		plastics, expanded (4H1)
		plastics, solid (4H2)
÷		Drums
		steel (1A1, 1A2)
•	,	aluminium (IB1, 1B2)
	·	other metal (1N1, 1N2)
		plastics (1H1, 1H2)

Special packing provision:

PP77

For UN Nos. 0248 and 0249, packagings shall be protected against the ingress of water. When water-activated contrivances are transported unpackaged, they shall be provided with at least two independent protective features which prevent the ingress of water.