

P002 PACKING INSTRUCTION (SOLIDS) (continued) P002			
	Maximum net mass (see 4.1.3.3)		
	Packing group I	Packing group II	Packing group III
<b>Composite packagings</b>			
plastics receptacle in steel, aluminium, plywood, fibre or plastics drum (6HA1, 6HB1, 6HG1 <sup>(e)</sup> , 6HD1 <sup>(e)</sup> , or 6HH1)	400 kg	400 kg	400 kg
plastics receptacle in steel or aluminium crate or box, wooden box, plywood box, fibreboard box or solid plastics box (6HA2, 6HB2, 6HC, 6HD2 <sup>(e)</sup> , 6HG2 <sup>(e)</sup> or 6HH2)	75 kg	75 kg	75 kg
glass receptacle in steel, aluminium, plywood or fibre drum (6PA1, 6PB1, 6PD1 <sup>(e)</sup> or 6PG1 <sup>(e)</sup> ) or in steel, aluminium, wooden or fibreboard box or in wickerwork hamper (6PA2, 6PB2, 6PC, 6PG2 <sup>(e)</sup> , or 6PD2 <sup>(e)</sup> ) or in solid or expanded plastics packaging (6PH1 or 6PH2 <sup>(e)</sup> )	75 kg	75 kg	75 kg
<b>Pressure receptacles</b> , provided that the general provisions of 4.1.3.6 are met.			
<b>Special packing provisions</b>			
<b>PP7</b> For UN 2000, celluloid may be transported unpacked on pallets, wrapped in plastic film and secured by appropriate means, such as steel bands as a full load in closed transport units. Each pallet shall not exceed 1000 kg.			
<b>PP8</b> For UN 2002, packagings shall be so constructed that explosion is not possible by reason of increased internal pressure. Gas cylinders and gas receptacles shall not be used for these substances.			
<b>PP9</b> For UN 3175, UN 3243 and UN 3244, packagings shall conform to a design type that has passed a leakproofness test at the Packing Group II performance level. For UN 3175 the leakproofness test is not required when the liquids are fully absorbed in solid material contained in sealed bags.			
<b>PP11</b> For UN 1309, Packing Group III, and UN 1362, 5H1, 5L1 and 5M1 bags are allowed if they are overpacked in plastic bags and are wrapped in shrink or stretch wrap on pallets.			
<b>PP12</b> For UN 1361, UN 2213 and UN 3077, 5H1, 5L1 and 5M1 bags are allowed when transported in closed transport units.			
<b>PP13</b> For articles classified under UN 2870, only combination packagings meeting the Packing Group I performance level are authorised.			
<b>PP14</b> For UN 2211, UN 2698 and UN 3314, packagings are not required to meet the performance tests in Chapter 6.1.			
<b>PP15</b> For UN 1324 and UN 2623, packagings shall meet the Packing Group III performance level.			
NOTE –			
(e) These packagings shall not be used when substances being transported may become liquid during transport (see 4.1.3.4).			

P003	PACKING INSTRUCTION	P003
<p>Dangerous goods shall be placed in suitable outer packagings. The packagings shall meet the provisions of 4.1.1.1, 4.1.1.2, 4.1.1.4, 4.1.1.8 and 4.1.3 and be so designed that they meet the construction requirements of 6.1.4. Outer packagings constructed of suitable material of adequate strength and design in relation to the packaging capacity and its intended use shall be used. Where this packing instruction is used for the transport of articles or inner packagings of combination packagings the packaging shall be designed and constructed to prevent inadvertent discharge of articles during normal conditions of transport.</p>		
<p><b>Special packing provisions</b></p> <p><b>PP16</b> For UN 2800, batteries shall be protected from short circuit within the packagings.</p> <p><b>PP17</b> For UN nos. 1950 and 2037, packages shall not exceed 55 kg net mass for fibreboard packagings or 125 kg net mass for other packages.</p> <p><b>PP18</b> For UN 1845, packagings shall be designed and constructed to permit the release of carbon dioxide gas to prevent a build-up of pressure that could rupture the packagings.</p> <p><b>PP19</b> For UN nos. 1327, 1364, 1365, 1856 and 3360 transport as bales is authorised.</p> <p><b>PP20</b> For UN nos. 1363, 1386, 1408 and 2793 any sift-proof, tearproof receptacle may be used.</p> <p><b>PP32</b> UN nos. 2857 and 3358 may be transported unpackaged, in crates or in appropriate overpacks.</p> <p><b>PP87</b> For UN 1950 waste aerosols transported in accordance with special provision 327, the packagings shall have a means of retaining any free liquid that might escape during transport e.g. absorbent material. The packaging shall be adequately ventilated to prevent the creation of flammable atmosphere and the buildup of pressure.</p>		

P004	PACKING INSTRUCTION	P004
<p>This instruction applies to UN nos. 3473, 3476, 3477, 3478 and 3479.</p>		
<p>The following packagings are authorised provided that the general provisions of 4.1.1.1, 4.1.1.2, 4.1.1.3, 4.1.1.6 and 4.1.3 are met:</p> <ol style="list-style-type: none"> <li>(1) For fuel cell cartridges, packagings conforming to the Packing Group II performance level.</li> <li>(2) For fuel cell cartridges contained in equipment or packed with equipment, strong outer packagings. Large robust equipment (see 4.1.3.8) containing fuel cell cartridges may be transported unpackaged. When fuel cell cartridges are packed with equipment, they shall be packed in inner packagings or placed in the outer packaging with cushioning material or divider(s) so that the fuel cell cartridges are protected against damage that may be caused by the movement or placement of the contents within the outer packaging. Fuel cell cartridges which are installed in equipment shall be protected against short circuit and the entire system shall be protected against inadvertent operation.</li> </ol>		

P010		PACKING INSTRUCTION	P010
The following packagings are authorised, provided that the general provisions of 4.1.1 and 4.1.3 are met:			
<b>Combination packagings</b>			
Inner packagings		Outer packagings	Maximum net mass (see 4.1.3.3)
glass	1 L	<b>Drums</b>	
steel	40 L	steel (1A2)	400 kg
		plastics (1H2)	400 kg
		plywood (1D)	400 kg
		fibre (1G)	400 kg
		<b>Boxes</b>	
		steel (4A)	400 kg
		natural wood (4C1, 4C2)	400 kg
		plywood (4D)	400 kg
		reconstituted wood (4F)	400 kg
		fibreboard (4G)	400 kg
		expanded plastics (4H1)	60 kg
		solid plastics (4H2)	400 kg
Single packagings			Maximum capacity (see 4.1.3.3)
<b>Drums</b>			
steel, non-removable head (1A1)			450 L
<b>Jerricans</b>			
steel, non-removable head (3A1)			60 L
<b>Composite packagings</b>			
plastics receptacle in steel drums (6HA1)			250 L

P099	PACKING INSTRUCTION	P099
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 (or country'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 authorised, 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
<b>Bags</b> plastics textile, plastic coated or lined rubber textile, rubberised textile	<b>Bags</b> plastics textile, plastic coated or lined rubber textile, rubberised  <b>Receptacles</b> plastics metal	<b>Drums</b> steel, removable head (1A2) plastics, removable head (1H2)
<b>Additional requirements:</b> (1) The intermediate packagings shall be filled with water-saturated material such as an anti-freeze solution or wetted cushioning. (2) 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 authorised, 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
<b>Receptacles</b> metal wood rubber, conductive plastics, conductive  <b>Bags</b> rubber, conductive plastics, conductive	<b>Dividing partitions</b> metal wood plastics fibreboard	<b>Boxes</b> natural wood, sift-proof wall (4C2) plywood (4D) reconstituted wood (4F)
<b>Special packing provision:</b> <b>PP42</b> For UN nos. 0074, 0113, 0114, 0129, 0130, 0135 and 0224, the following conditions shall be met: (a) Inner packagings shall not contain more than 50 g of explosive substance (quantity corresponding to dry substance); (b) Compartments between dividing partitions shall not contain more than one inner packaging, firmly fitted; and (c) The outer packaging may be partitioned into up to 25 compartments.		

P111	PACKING INSTRUCTION	P111
The following packagings are authorised, 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
<b>Bags</b> paper, waterproofed plastics textile, rubberised  <b>Sheets</b> plastics textile, rubberised	Not necessary	<b>Boxes</b> steel (4A) aluminium (4B) natural wood, ordinary (4C1) natural wood, sift-proof (4C2) plywood (4D) reconstituted wood (4F) fibreboard (4G) plastics, expanded (4H1) plastics, solid (4H2)  <b>Drums</b> steel, removable head (1A2) aluminium, removable head (1B2) plywood (1D) fibreboard (1G) plastics, removable head (1H2)
<b>Special packing provision:</b> <b>PP43</b> For UN 0159, inner packagings are not required when metal (1A2 or 1B2) or plastics (1H2) drums are used as outer packagings.		

P112(a)	PACKING INSTRUCTION (Solid wetted, 1.1D)		P112(a)
The following packagings are authorised, 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	
<b>Bags</b> paper, multiwall, water resistant plastics textile textile, rubberised woven plastics  <b>Receptacles</b> metal plastics	<b>Bags</b> plastics textile, plastic coated or lined  <b>Receptacles</b> metal plastics	<b>Boxes</b> steel (4A) aluminium (4B) natural wood, ordinary (4C1) natural wood, sift-proof (4C2) plywood (4D) reconstituted wood (4F) fibreboard (4G) plastics, expanded (4H1) plastics, solid (4H2)  <b>Drums</b> steel, removable head (1A2) aluminium, removable head (1B2) fibre (1G) plastics, removable head (1H2) plywood (1D)	
<b>Additional requirement</b> Intermediate packagings are not required if leakproof removable head drums are used as the outer packaging.			
<b>Special packing provisions</b> <b>PP26</b> For UN nos. 0004, 0076, 0078, 0154, 0219 and 0394, packagings shall be lead free. <b>PP45</b> For UN 0072 and UN 0226, intermediate packagings are not required.			

P112(b)	PACKING INSTRUCTION		P112(b)
(Solid dry, other than powder 1.1D)			
The following packagings are authorised, 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	
<b>Bags</b> paper, kraft paper, multiwall, water resistant plastics textile textile, rubberised woven plastics	<b>Bags (for UN 0150 only)</b> plastics textile, plastic coated or lined	<b>Bags</b> woven plastics, sift-proof (5H2) woven plastics, water-resistant (5H3) plastics, film (5H4) textile, sift-proof (5L2) textile, water resistant (5L3) paper, multiwall, water resistant (5M2)  <b>Boxes</b> steel (4A) aluminium (4B) natural wood, ordinary (4C1) natural wood, sift-proof (4C2) plywood (4D) reconstituted wood (4F) fibreboard (4G) plastics, expanded (4H1) plastics, solid (4H2)  <b>Drums</b> steel, removable head (1A2) aluminium, removable head (1B2) fibre (1G) plastics, removable head (1H2) plywood (1D)	
<b>Special packing provisions</b> <b>PP26</b> For UN nos. 0004, 0076, 0078, 0154, 0216, 0219 and 0386, packagings shall be lead free. <b>PP46</b> For UN 0209, bags, sift-proof (5H2) are recommended for flake or prilled TNT in the dry state and a maximum net mass of 30 kg. <b>PP47</b> For UN 0222 inner packagings are not required when the outer packaging is a bag.			

P112(c)	PACKING INSTRUCTION (Solid dry powder 1.1D)		P112(c)
The following packagings are authorised, 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	
<b>Bags</b> paper, multiwall, water resistant plastics woven plastics  <b>Receptacles</b> fibreboard metal plastics wood	<b>Bags</b> paper, multiwall, water resistant with inner lining plastics  <b>Receptacles</b> metal plastics	<b>Boxes</b> steel (4A) natural wood, ordinary (4C1) natural wood, sift-proof (4C2) plywood (4D) reconstituted wood (4F) fibreboard (4G) plastics, solid (4H2) aluminium (4B)  <b>Drums</b> steel, removable head (1A2) aluminium, removable head (1B2) fibre (1G) plywood (1D) plastics, removable head (1H2)	
<b>Additional requirements</b> (1) Inner packagings are not required if drums are used as the outer packaging. (2) The packaging shall be sift-proof.			
<b>Special packing provisions</b> <b>PP26</b> For UN nos. 0004, 0076, 0078, 0154, 0216, 0219 and 0386, packagings shall be lead free. <b>PP46</b> For UN 0209, bags, sift-proof (5H2) are recommended for flake or prilled TNT in the dry state and a maximum net mass of 30 kg. <b>PP48</b> For UN 0504, metal packagings shall not be used.			



P113	PACKING INSTRUCTION	P113
The following packagings are authorised, 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
<b>Bags</b> paper plastics textile, rubberised  <b>Receptacles</b> fibreboard metal plastics wood	Not necessary	<b>Boxes</b> steel (4A) natural wood, ordinary (4C1) natural wood, sift-proof walls (4C2) plywood (4D) reconstituted wood (4F) fibreboard (4G) plastics, solid (4H2) aluminium (4B)  <b>Drums</b> steel, removable head (1A2) aluminium, removable head (1B2) fibre (1G) plywood (1D) plastics, removable head (1H2)
<b>Additional requirement</b> The packaging shall be sift-proof.		
<b>Special packing provisions</b> <b>PP49</b> For UN 0094 and UN 0305, no more than 50 g of substance shall be packed in an inner packaging. <b>PP50</b> For UN 0027, inner packagings are not necessary when drums are used as the outer packaging. <b>PP51</b> For UN 0028, paper kraft or waxed paper sheets may be used as inner packagings.		

P114(a)	PACKING INSTRUCTION		P114(a)
(Solid wetted)			
The following packagings are authorised, 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	
<b>Bags</b>  plastics  textile  woven plastics  <b>Receptacles</b>  metal  plastics	<b>Bags</b>  plastics  textile, plastic coated or lined  <b>Receptacles</b>  metal  plastics	<b>Boxes</b>  steel (4A)  natural wood, ordinary (4C1)  natural wood, sift-proof walls (4C2)  plywood (4D)  reconstituted wood (4F)  fibreboard (4G)  plastics, solid (4H2)  <b>Drums</b>  steel, removable head (1A2)  aluminium, removable head (1B2)  fibre (1G)  plastics, removable head (1H2)	
<b>Additional requirement</b> Intermediate packagings are not required if leakproof removable head drums are used as the outer packaging.			
<b>Special packing provisions</b> <b>PP26</b> For UN nos. 0077, 0132, 0234, 0235 and 0236, packagings shall be lead free. <b>PP43</b> For UN 0342, inner packagings are not required when metal (1A2 or 1B2) or plastics (1H2) drums are used as outer packagings.			