- if the goods to be consigned include an aggregate quantity of 2000 kg(L) or greater of any one UN Number, the UN number, proper shipping name and total aggregate quantity for that UN number.

- Two applicable placarding thresholds, depending on the makeup of the limited quantities/domestic consumables load

Table 5.3: Placard Load (Minimum Quantities) (A placard load is defined in 1.2.1.1)	
Dangerous Goods in Cargo Transport Unit	**Placard Load Quantity**
(e) Limited quantities dangerous goods and / or domestic consumable dangerous goods (defined as 1.2.1) - See Note 5	The load includes limited quantities dangerous goods and/or domestic consumable dangerous goods, from a single consignor, where the aggregate quantity of any one UN number is ≥ 2,000kg(L)
(f) Limited quantities dangerous goods and / or domestic consumable dangerous goods (defined as 1.2.1) to which (e) does not apply. See Note 5	≥ 8 tonnes Gross Mass

An assessment of the impact of the adoption of the ADR requirements is shown in appendix 1.

TRANSPORT OF AUTOMOTIVE BATTERIES

Special Provision AU08 has been simplified and amended to allow the acid volume to be used when calculating the aggregate quantity of dangerous goods in the load. Where the acid volume isn't known, a nominal figure of 25% of the gross weight of the battery may be used.

Packing Instruction 801 has been amended in line with amendments adopted in UN 21

ADDITIONAL REQUIREMENTS FOR INNER PACKAGINGS FILLED IN AUSTRALIA

6.1.4.21 - Additional requirements for inner packagings filled in Australia has been deleted. A review of the original introduction of the additional Australian specific requirements and current UN requirements showed that the Australian specific requirements were now redundant and created an unacceptable inconsistency that provided an advantage to overseas manufacturers.

UN construction, performance testing and approvals apply to all packagings in Australia, regardless of where they are manufactured or filled. These requirements include the need for inner packagings to be tested and approved as part of a combination package and to be manufactured under a quality assurance system. While there are some allowances for inner packaging that are different to those approved as part of the combination package UN approval, this can only be done if strict requirements are met. These requirements are identical to those in the UN Model Regulations.

Table 3.2.3: Dangerous Goods List

UN No.	Name and Description	Class or Division	Subsidiary Hazard	Packing Group	Special Provisions	Limited Quantities	Excepted Quantities	Packagings & IBCs: Packing Instruction	Packagings & IBCs: Special Packing Provisions	Portable Tanks & Bulk Containers: Instructions	Portable Tanks & Bulk Containers: Special Provisions [DK4]
(1)	(2)	(3)	(4)	(5)	(6)	(7a)	(7b)	(8)	(9)	(10)	(11)
Ref	*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*
	ACETIC ACID SOLUTION, more than 10% and less than 50% acid, by mass	8		III		5 L	E1	P001 IBC03 LP01		T4	TP1
2793	FERROUS METAL BORINGS, SHAVINGS, TURNINGS or CUTTINGS in a form liable to self-heating	4.2		III	223	0	E1	P003 IBC08 LP02	PP20 B3, B6	BK2	
2794	BATTERIES, WET, FILLED WITH ACID, electric storage	8			295 AU08	1 L	E0	P801			
2795	BATTERIES, WET, FILLED WITH ALKALI, electric storage	8			295	1 L	E0	P801			
2796	SULPHURIC ACID with not more than 51% acid or BATTERY FLUID, ACID	8		II		1 L	E2	P001 IBC02		T8	TP2
2797	BATTERY FLUID, ALKALI	8		II		1 L	E2	P001 IBC02		T7	TP2 TP28
2798	PHENYLPHOSPHORUS DICHLORIDE	8		II		1 L	E0	P001 IBC02		T7	TP2 TP28
2799	PHENYLPHOSPHORUS THIODICHLORIDE	8		II		1 L	E0	P001 IBC02		T7	TP2
2800	BATTERIES, WET, NON-SPILLABLE, electric storage	8			238	1 L	E0	P003	PP16		
2801	DYE, LIQUID, CORROSIVE, N.O.S. or DYE INTERMEDIATE, LIQUID, CORROSIVE, N.O.S.	8		I	274	0	E0	P001		T14	TP2 TP27

CHAPTER 5.3 - PLACARDING AND MARKING OF CARGO TRANSPORT UNITS, PLACARDABLE UNITS AND BULK CONTAINERS

Introductory Note

Section 5.3.1 Details the placarding requirements applicable to all cargo transport units, bulk containers and placardable units and provides the specifications for placards.

Section 5.3.2 Specifies additional marking that is required on some cargo transport units, bulk containers or placardable units when they contain particular loads of dangerous goods.

Sections 5.3.3–5.3.9 Specify detailed placarding requirements for different types of cargo transport units, bulk containers, placardable units and loads.

5.3.1 GENERAL PLACARDING REQUIREMENTS

5.3.1.1 Placarding Principles

5.3.1.1.1[3] Placards must be affixed to the exterior surface of cargo transport units that contain a placard load of dangerous goods as determined from Table 5.3, and to bulk containers and [DK14]placardable units. A placard warns others that the cargo transport unit contains dangerous goods and it presents risks.

Table 5.3: Placard Load (Minimum Quantities)
(A placard load is defined in 1.2.1.1)

Dangerous Goods in Cargo Transport Unit		Placard Load Quantity
(a)	Any dangerous goods in a receptacle (other than an article) with a: • capacity > 500 L; or • net mass> 500 kg	One or more such receptacles (i.e. one or more placardable units)
(b)	Any quantity of: • Division 2.1 (except Aerosols); or • Division 2.3; or • Packing group I of any Class or Division	Aggregate quantity of all dangerous goods in the cargo transport unit ≥ 250 kg(L)
(c)	Division 6.2 Category A	All quantities
(d)	Division 6.2 (other than Category A)	≥ 10 kg(L)
(e)	Limited quantities dangerous goods and / or domestic	The load includes limited quantities dangerous goods and/or domestic consumable dangerous goods, from a

[3] The terms 'placardable unit' and 'transport unit' used throughout this Chapter are defined in 1.2.1.1 and 1.2.1.2.10 respectively.

	consumable dangerous goods (defined as 1.2.1) - See Note 5	single consignor, where the aggregate quantity of any one UN number is ≥ 2,000kg(L)
(f)	Limited quantities dangerous goods and / or domestic consumable dangerous goods (defined as 1.2.1) to which (e) does not apply. See Note 5	> 8 tonnes Gross Mass
(g)	Loads where (a) – (f) do not apply	Aggregate quantity of dangerous goods ≥ 1,000 kg(L) - unless the load is a Fumigated Unit (UN 3359 –see Note 3),

Table notes:

NOTE 1: For placarding quantities of Class 1, see the Australian Explosives Code.

NOTE 2: For placarding quantities of Class 7, see the Codes of Practice for the Safe Transport of Radioactive Substances.

NOTE 3: A Fumigated Unit (UN 3359) complying with Chapter 5.5 that does not contain any other dangerous goods is not a placard load, and should not be included in the aggregate quantity of dangerous goods when determining a placard load.

NOTE 4: For land transport wholly within Australia, this Code requires placards to be displayed on cargo transport units if they contain a placard load, as determined from Table 5.3. It should be noted that cargo transport units containing lesser quantities may need to be placarded in accordance with the IMDG Code before they are acceptable for transport by sea, even within Australian waters.

NOTE 5: When transporting a load of limited quantities dangerous goods and/or domestic consumer commodities (defined in 1.2.1) with other dangerous goods the quantity of dangerous goods packed in limited quantities does not need to be included when calculating the aggregate quantity of the load. The applicable placard load quantity applies to the most stringent requirement.

~~**Table 5.3: Placard Load (Minimum Quantities)**~~

~~A placard load is defined as a load in a cargo transport unit, as defined in 1.2.1, with either:~~

~~Dangerous Goods in Cargo Transport Unit~~	~~Placard Load Quantity~~
~~(a) Any dangerous goods in a receptacle (other than an article) with a:~~ ~~• capacity > 500 L; or~~ ~~• net mass> 500 kg~~	~~One or more such receptacles (i.e. one or more placardable units~~
~~(b) Any quantity of:~~ ~~• Division 2.1 (except Aerosols); or~~ ~~• Division 2.3; or~~ ~~• Packing group I of any Class or Division~~	~~Aggregate quantity of all dangerous goods in the cargo transport unit ≥ 250 kg(L)~~
~~(c) Division 6.2 Category A~~	~~All quantities~~
~~(d) Division 6.2 (other than Category A)~~	~~≥ 10 kg(L)~~
~~(e) Limited quantities dangerous goods and / or domestic consumer commodities (defined as 1.2.1) - See Note 5~~	~~≥ 2,000kg(L)~~
~~(f) Loads where a – e do not apply~~	~~Aggregate quantity of dangerous goods ≥ 1,000 kg(L) - unless the load is:~~ ~~(ii)a Fumigated Unit (UN 3359 –see Note 3),~~

risk of bursting or cracking of the pressure retaining components during normal conditions of transport. Refrigerating machines and refrigerating-machine components are considered not subject to this Code if they contain less than 12 kg of gas.

292 <Deleted>

293 The following definitions apply to matches:

(a) Fusee matches are matches the heads of which are prepared with a friction-sensitive igniter composition and a pyrotechnic composition which burns with little or no flame, but with intense heat;

(b) Safety matches are matches that combined with or attached to the box, book or card that can be ignited by friction only on a prepared surface;

(c) Strike anywhere matches are matches that can be ignited by friction on a solid surface;

(d) Wax Vesta matches are matches that can be ignited by friction either on a prepared surface or on a solid surface.

294 Safety matches and wax "Vesta" matches in outer packagings not exceeding 25 kg net mass are not subject to any other requirement (except marking) of this Code when packaged in accordance with packing instruction P407.

295 Batteries need not be individually marked and labelled if the pallet bears the appropriate mark and label.

296 These entries apply for life-saving appliances such as life rafts, personal flotation devices and self-inflating slides. UN 2990 applies for self-inflating appliances and UN 3072 applies for life-saving appliances that are not self-inflating. Life-saving appliances may contain:

(a) Signal devices (Class 1) which may include smoke and illumination signal flares packed in packagings that prevent them from being inadvertently activated;

(b) for UN 2990 only, cartridges, power device of Division 1.4, compatibility group S, may be contained for purposes of the self-inflating mechanism and provided that the quantity of explosives per appliance does not exceed 3.2 g;

(c) Division 2.2 compressed or liquefied gases;

(d) Electric storage batteries (Class 8) and lithium batteries (Class 9);

(e) First aid kits or repair kits containing small quantities of dangerous goods (e.g.: Class 3, Division 4.1, Division 5.2, Class 8 or Class 9 substances); or

(f) "Strike anywhere" matches packed in packagings that prevent them from being inadvertently activated.

Life-saving appliances packed in strong rigid outer packagings with a total maximum gross mass of 40 kg, containing no dangerous goods other than Division 2.2 compressed or liquefied gases with no subsidiary hazard in receptacles with a capacity not exceeding 120 ml, installed solely for the purpose of the activation of the appliance, are not subject to this Code.

297 <Deleted>

AU07 UN 1017 CHLORINE has a subsidiary hazard 5.1, as well as 8. Despite this, when transported in cylinders, pressure drums, MEGCs or tanks, chlorine gas is not considered incompatible with dangerous goods of Class 8 or 9, or Division 6.1, or combustible liquids.

AU08 For automotive batteries, the acid volume may be used when calculating the aggregate quantity of dangerous goods in the load.
If the acid ~~quantitiy~~volume is not known, a nominal figure of ~~30~~25% of the gross weight of the battery may be used.

~~A placard is not required for a load of automotive batteries where the load has:~~
~~no more than 300 automotive batteries and~~
~~no single battery weighs more than 65kg and~~
~~the total battery acid volume is less than 1000 litres.~~

~~Where a load includes automotive batteries and other dangerous goods the aggregate automotive battery acid volume must be used in the calculation of the dangerous goods placard load quantity in Table 5.3.~~ [DK83]

~~P801~~	~~PACKING INSTRUCTION – P801 (Table 4.1.4.1)~~	~~P801~~
~~This instruction applies to new and used batteries assigned to UN Nos. 2794, 2795 or 3028.~~		
~~The following packagings are authorised, provided the general provisions of 4.1.1, except 4.1.1.3, and 4.1.3 are met:~~ ~~(1) Rigid outer packagings;~~ ~~(2) Wooden slatted crates;~~ ~~(3) Pallets.~~ ~~Used storage batteries may also be transported loose in stainless steel or plastics battery boxes capable of containing any free liquid.~~		
~~**Additional requirements:**~~ ~~1. Batteries must be protected against short circuits.~~ ~~2. Batteries stacked must be adequately secured in tiers separated by a layer of electrically non-conductive material.~~ ~~3. Battery terminals must not support the weight of other superimposed elements.~~ ~~4. Batteries must be packaged or secured to prevent inadvertent movement.~~		
~~**Special Packing Provision:**~~ ~~**PP1A** For road or rail transport only within Australia:, it is permissible to dispense with outer packagings for batteries provided the provisions of the above 'additional requirements' are met.~~		

P801	PACKING INSTRUCTION	P801
This instruction applies to UN Nos. 2794, 2795 or 3028.		
The following packagings are authorized, provided that the provisions of **4.1.1.1, 4.1.1.2, 4.1.1.6**, and **4.1.3** are met: (1) Rigid outer packagings, wooden slatted crates or pallets. Additionally, the following conditions must be met: (a) Batteries stacks must be in tiers separated by a layer of electrically non-conductive material; (b) Battery terminals must not support the weight of other superimposed elements; (c) Batteries must be packaged or secured to prevent inadvertent movement; (d) Batteries must not leak under normal conditions of transport or appropriate measures must be taken to prevent the release of electrolyte from the package (e.g. individually packaging batteries or other equally effective methods); and (e) Batteries must be protected against short circuits. (2) Stainless steel or plastics bins may also be used to transport used batteries. Additionally, the following conditions must be met: (a) The bins must be resistant to the electrolyte that was contained in the batteries; (b) The bins must not be filled to a height greater than the height of their sides; (c) The outside of the bins must be free of residues of electrolyte contained in the batteries; (d) Under normal conditions of transport, no electrolyte may leak from the bins; (e) Measures must be taken to ensure that filled bins cannot lose their content; and (f) Measures must be taken to prevent short circuits (e.g. batteries are discharged, individual protection of the battery terminals, etc.).[DK27]		

P802	PACKING INSTRUCTION	P802
The following packagings are authorised, provided the general provisions of 4.1.1 and 4.1.3 are met:		

CHAPTER 2.9 - CLASS 9 - MISCELLANEOUS DANGEROUS SUBSTANCES AND ARTICLES, INCLUDING ENVIRONMENTALLY HAZARDOUS SUBSTANCES

2.9.1 DEFINITIONS

2.9.1.1 Class 9 substances and articles (miscellaneous dangerous substances and articles) are substances and articles which, during transport present a danger not covered by other classes.

2.9.1.2 Deleted.

2.9.2 ASSIGNMENT TO CLASS 9

The substances and articles of Class 9 are subdivided as follows:

Substances which, on inhalation as fine dust, may endanger health

2212	ASBESTOS, AMPHIBOLE (amosite, tremolite, actinolite, anthophylite, crocidolite)
2590	ASBESTOS, CHRYSOTILE

Substances evolving flammable vapour

2211	POLYMERIC BEADS, EXPANDABLE, evolving flammable vapour
3314	PLASTICS MOULDING COMPOUND in dough, sheet or extruded rope form evolving flammable vapour

Lithium batteries

3090	LITHIUM METAL BATTERIES (including lithium alloy batteries)
3091	LITHIUM METAL BATTERIES CONTAINED IN EQUIPMENT (including lithium alloy batteries) or
3091	LITHIUM METAL BATTERIES PACKED WITH EQUIPMENT (including lithium alloy batteries)
3480	LITHIUM ION BATTERIES (including lithium ion polymer batteries)
3481	LITHIUM ION BATTERIES CONTAINED IN EQUIPMENT (including lithium ion polymer batteries) or
3481	LITHIUM ION BATTERIES PACKED WITH EQUIPMENT (including lithium ion polymer batteries)
3536	LITHIUM BATTERIES INSTALLED IN CARGO TRANSPORT UNIT

NOTE: See 2.9.4.

Capacitors

3499	CAPACITOR, ELECTRIC DOUBLE LAYER (with an energy storage capacity greater than 0.3 Wh)

Table 2.9.5: Multiplying factors for highly toxic ingredients of mixtures

Acute toxicity	M factor	Chronic toxicity	M factor	
L(E)C_{50} value		**NOEC value**	**NRD[a] ingredients**	**RD[b] ingredients**
0.1 < L(E)C_{50} ≤ 1	1	0.01 < NOEC ≤ 0.1	1	-
0.01 < L(E)C_{50} ≤ 0.1	10	0.001 < NOEC ≤ 0.01	10	1
0.001 < L(E)C_{50} ≤ 0.01	100	0.0001 < NOEC ≤ 0.001	100	10
0.0001 < L(E)C_{50} ≤ 0.001	1 000	0.00001 < NOEC ≤ 0.0001	1 000	100
0.00001 < L(E)C_{50} ≤ 0.0001	10 000	0.000001 < NOEC ≤ 0.00001	10 000	1 000
(continue in factor 10 intervals)		(continue in factor 10 intervals)		
Table notes: **a** Non-rapidly degradable. **b** Rapidly degradable.				

2.9.3.4.6.5 Classification of mixtures with ingredients without any useable information

2.9.3.4.6.5.1 In the event that no useable information on acute and/or chronic aquatic toxicity is available for one or more relevant ingredients, it is concluded that the mixture cannot be attributed (a) definitive hazard category(ies). In this situation the mixture must be classified based on the known ingredients only.

2.9.4 LITHIUM BATTERIES

Cells and batteries, cells and batteries contained in equipment, or cells and batteries packed with equipment, containing lithium in any form must be assigned to UN Nos. 3090, 3091, 3480 or 3481 as appropriate. They may be transported under these entries if they meet the following provisions:

(a) Each cell or battery is of the type proved to meet the requirements of each test of the Manual of Tests and Criteria, Part III, sub-section 38.3; Cells and batteries manufactured according to a type meeting the requirements of sub-section 38.3 of the Manual of Tests and Criteria, Revision 3, Amendment 1 or any subsequent revision and amendment applicable at the date of the type testing may continue to be transported, unless otherwise provided in this Code. Cell and battery types only meeting the requirements of the Manual of Tests and Criteria, Revision 3, are no longer valid. However, cells and batteries manufactured in conformity with such types before 1 July 2003 may continue to be transported if all other applicable requirements are fulfilled.

NOTE: *Batteries are to be of a type proved to meet the testing requirements of the Manual of Tests and Criteria, part III, sub-section 38.3, irrespective of whether the cells of which they are composed are of a tested type.*

(b) Each cell and battery incorporates a safety venting device or is designed to preclude a violent rupture under conditions normally incident to transport;

(c) Each cell and battery is equipped with an effective means of preventing external short circuits;

(d) Each battery containing cells or series of cells connected in parallel is equipped with effective means as necessary to prevent dangerous reverse current flow (e.g., diodes, fuses, etc.);

(e) Cells and batteries must be manufactured under a quality management programme that includes:

(i) A description of the organisational structure and responsibilities of personnel with regard to design and product quality;

(ii) The relevant inspection and test, quality control, quality assurance, and process operation instructions that will be used;

(iii) Process controls that should include relevant activities to prevent and detect internal short circuit failure during manufacture of cells;

(iv) Quality records, such as inspection reports, test data, calibration data and certificates. Test data must be kept and made available to the competent authority upon request;

(v) Management reviews to ensure the effective operation of the quality management programme;

(vi) A process for control of documents and their revision;

(vii) A means for control of cells or batteries that are not conforming to the type tested as mentioned in (a) above;

(viii) Training programmes and qualification procedures for relevant personnel; and

(ix) Procedures to ensure that there is no damage to the final product.

NOTE: *In house quality management programmes may be accepted. Third party certification is not required, but the procedures listed in (i) to (ix) above must be properly recorded and traceable. A copy of the quality management programme must be made available to the competent authority upon request.*

(f) Lithium batteries, containing both primary lithium metal cells and rechargeable lithium ion cells, that are not designed to be externally charged (see special provision 387 of Chapter 3.3) shall meet the following conditions:

(i) The rechargeable lithium ion cells can only be charged from the primary lithium metal cells;

(ii) Overcharge of the rechargeable lithium ion cells is precluded by design;

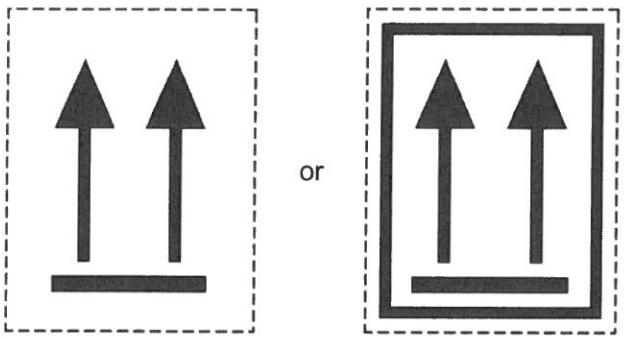
(iii) The battery has been tested as a lithium primary battery;

(iv) Component cells of the battery shall be of a type proved to meet the respective testing requirements of the Manual of Tests and Criteria, part III, sub-section 38.3.

(g) Manufactureres and subsequent distributors of cells or batteries manufactured after 30 June 2003 shall make available the test summary as specified in the Manual of Tests and Criteria, Part III, sub-section 38.3, paragraph 38.3.5.

Figures 5.2.3 and 5.2.4: Orientation arrows

Two black or red arrows on white or suitable contrasting background



or

The rectangular border is optional

All features must be in approximate proportions shown.

5.2.1.7.2 Orientation arrows are not required on:

(a) Outer packagings containing pressure receptacles except cryogenic receptacles;

(b) Outer packagings containing dangerous goods in inner packagings each containing not more than 120 ml, with sufficient absorbent material between the inner and outer packagings to completely absorb the liquid contents;

(c) Outer packagings containing Division 6.2 infectious substances in primary receptacles each containing not more than 50 ml;

(d) Type IP-2, type IP-3, type A, type B(U), type B(M) or type C packages containing Class 7 radioactive material;

(e) Outer packagings containing articles which are leak-tight in all orientations (e.g. alcohol or mercury in thermometers, aerosols, etc.); or

(f) Outer packagings containing dangerous goods in hermetically sealed inner packagings each containing not more than 500 ml.

5.2.1.7.3 Arrows for purposes other than indicating proper package orientation must not be displayed on a package marked in accordance with this sub-section.

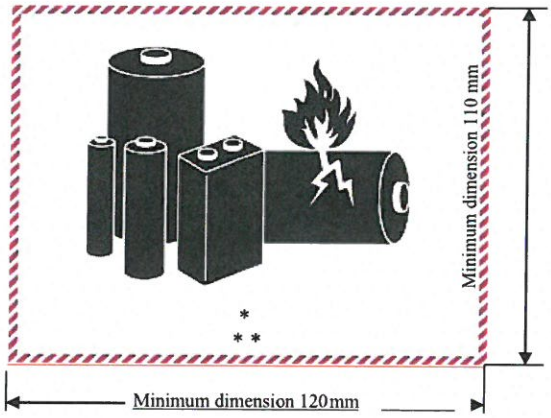
5.2.1.8 <Reserved>

5.2.1.9 *Lithium battery mark*

5.2.1.9.1 Packages containing lithium cells or batteries prepared in accordance with special provision 188 shall be marked as shown in Figure 5.2.5.

5.2.1.9.2 The mark must indicate the UN number preceded by the letters "UN", i.e. 'UN 3090' for lithium metal cells or batteries or 'UN 3480' for lithium ion cells or batteries. Where the lithium cells or batteries are contained in, or packed with, equipment, the UN number, preceded by the letters "UN", i.e. 'UN 3091' or 'UN 3481' as appropriate shall be indicated. Where a package contains lithium cells or batteries assigned to different UN numbers, all applicable UN numbers shall be indicated on one or more marks.

Figure 5.2.5, Lithium battery mark



* *Place for UN number(s)*

** *Place for telephone number for additional information*

The mark shall be in the form of a rectangle or a square with hatched edging. The dimensions shall be a minimum of 1200 mm wide x 1100 mm high and the minimum width of the hatching shall be 5 mm. The symbol (group of batteries, one damaged and emitting flame, above the UN number for lithium ion or lithium metal batteries or cells) shall be black on white or suitable contrasting background. The hatching shall be red. If the size of the package so requires, the dimensions~~/line thickness~~ may be reduced to not less than 1005 mm wide x 740 mm high. Where dimensions are not specified, all features shall be in approximate [DK4]proportion to those shown.

5.2.2 LABELLING

5.2.2.1 Labelling provisions

NOTE: These provisions relate essentially to danger labels. However, additional marks or symbols indicating precautions to be taken in handling or storing a package (e.g. a symbol representing an umbrella indicating that a package must be kept dry) may be displayed on a package if appropriate.

5.2.2.1.1 All dangerous goods packages, cylinders, pressure drums, tubes, MEGCs, IBCs, overpacks and unpackaged articles that are subject to this Code must have a label that identifies the primary and subsidiary hazards of the dangerous goods and that conforms to models Nos. 1 to 9 illustrated in 5.2.2.2.2, except:

(a) those IBCs, pressure drums, tubes, MEGCs and articles which are placardable units that are placarded with emergency information panels in accordance with Chapter 5.3; or

(b) where there is an exemption from labelling in an applicable Special Provision in Chapter 3.3; or

(c) for dangerous goods in limited quantities that are packed and marked in accordance with Chapter 3.4; or

7E	Fissile material	-	White	7 (black)		Text (mandatory), black in upper half of label: 'FISSILE' In a black outlined box in the lower half of label: 'CRITICALITY SAFETY INDEX'

Label model No.	Division or Category	Symbol and symbol colour	Background	Figure in bottom corner (and figure colour)	Specimen labels	Note
8	-	Liquids, spilling from two glass vessels and attacking a hand and a metal: black	Upper half white, lower half black with white border	8 (white)		-
Class 9: Miscellaneous dangerous substances and articles, including environmentally hazardous substances						
9	-	7 vertical stripes in upper half: black	White	9 underlined (black)		-
9A	-	7 vertical stripes in upper half: black; Battery group, one broken and emitting flame in lower half: black	White	9 underlined (black)		-

Table 3.2.3: Dangerous Goods List

UN No.	Name and Description	Class or Division	Subsidiary Hazard	Packing Group	Special Provisions	Limited Quantities	Excepted Quantities	Packagings & IBCs		Portable Tanks & Bulk Containers	
								Packing Instruction	Special Packing Provisions	Instructions	Special Provisions [DK4]
(1)	(2)	(3)	(4)	(5)	(6)	(7a)	(7b)	(8)	(9)	(10)	(11)
Ref	*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*
		4.2		III	223 274	0	E1	P002 IBC08 LP02	B3	T1	TP33
3089	METAL POWDER, FLAMMABLE, N.O.S.	4.1		II		1 kg	E2	P002 IBC08	B2, B4	T3	TP33
		4.1		III	223	5 kg	E1	P002 IBC08	B2, B4	T1	TP33
3090	LITHIUM METAL BATTERIES (including lithium alloy batteries)	9			188 230 310 376 377 384 387	0	E0	P903 P908 P909 P910 P911 LP903 LP904 LP905 LP906 [DK18]			

Table 3.2.3: Dangerous Goods List

UN No.	Name and Description	Class or Division	Subsidiary Hazard	Packing Group	Special Provisions	Limited Quantities	Excepted Quantities	Packagings & IBCs		Portable Tanks & Bulk Containers	
								Packing Instruction	Special Packing Provisions	Instructions	Special Provisions [DK4]
(1)	(2)	(3)	(4)	(5)	(6)	(7a)	(7b)	(8)	(9)	(10)	(11)
Ref	*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*
3091	LITHIUM METALBATTERIES CONTAINED IN EQUIPMENT or LITHIUM METALBATTERIES PACKED WITH EQUIPMENT	9			188 230 310 360 376 377 384 387 390	0	E0	P903 P908 P909 P910 P911 LP903 LP904 LP905 LP906 [DK19]			
3092	1-METHOXY-2-PROPANOL	3		III		5 L	E1	P001 IBC03 LP01		T2	TP1
3093	CORROSIVE LIQUID, OXIDISING, N.O.S.	8	5.1	I	274	0	E0	P001			
		8	5.1	II	274	1 L	E2	P001 IBC02			
3094	CORROSIVE LIQUID, WATER-REACTIVE, N.O.S.	8	4.3	I	274	0	E0	P001			
		8	4.3	II	274	1 L	E2	P001			
3095	CORROSIVE SOLID, SELF-HEATING, N.O.S.	8	4.2	I	274	0	E0	P002		T6	TP33

Table 3.2.3: Dangerous Goods List

UN No.	Name and Description	Class or Division	Subsidiary Hazard	Packing Group	Special Provisions	Limited Quantities	Excepted Quantities	Packagings & IBCs		Portable Tanks & Bulk Containers	
								Packing Instruction	Special Packing Provisions	Instructions	Special Provisions [DK4]
(1)	(2)	(3)	(4)	(5)	(6)	(7a)	(7b)	(8)	(9)	(10)	(11)
Ref	*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*
3168	GAS SAMPLE, NON-PRESSURISED, TOXIC, FLAMMABLE, N.O.S., not refrigerated liquid	2.3	2.1		209	0	E0	P201			
3169	GAS SAMPLE, NON-PRESSURISED, TOXIC, N.O.S., not refrigerated liquid	2.3			209	0	E0	P201			
3170	ALUMINIUM SMELTING BY-PRODUCTS or ALUMINIUM REMELTING BY-PRODUCTS	4.3		II	244	500 g	E2	P410 IBC07	B2	T3 BK2	TP33
		4.3		III	223 244	1 kg	E1	P002 IBC08	B4	T1 BK2	TP33
3171	BATTERY-POWERED VEHICLE or BATTERY-POWERED EQUIPMENT Not subject to this Code (see SP 106)	9			123 388	0	E0	None			
3172	TOXINS, EXTRACTED FROM LIVING SOURCES, LIQUID, N.O.S.	6.1		I	210 274	0	E5	P001			
		6.1		II	210 274	100 ml	E4	P001 IBC02			
		6.1		III	210 223 274	5 L	E1	P001 IBC03 LP01			

Table 3.2.3: Dangerous Goods List

UN No.	Name and Description	Class or Division	Subsidiary Hazard	Packing Group	Special Provisions	Limited Quantities	Excepted Quantities	Packagings & IBCs: Packing Instruction	Packagings & IBCs: Special Packing Provisions	Portable Tanks & Bulk Containers: Instructions	Portable Tanks & Bulk Containers: Special Provisions [DK4]
(1)	(2)	(3)	(4)	(5)	(6)	(7a)	(7b)	(8)	(9)	(10)	(11)
Ref	*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*
3478	FUEL CELL CARTRIDGES or FUEL CELL CARTRIDGES CONTAINED IN EQUIPMENT or FUEL CELL CARTRIDGES PACKED WITH EQUIPMENT, containing liquefied flammable gas	2.1			328 338	120 ml	E0	P004			
3479	FUEL CELL CARTRIDGES or FUEL CELL CARTRIDGES CONTAINED IN EQUIPMENT or FUEL CELL CARTRIDGES PACKED WITH EQUIPMENT, containing hydrogen in metal hydride	2.1			328 339	120 ml	E0	P004			
3480	LITHIUM ION BATTERIES (including lithium ion polymer batteries)	9			188 230 310 348 376 377 384 387 390	0	E0	P903 P908 P909 P910 P911 LP903 LP904 LP905 LP906 [DK24]			

Table 3.2.3: Dangerous Goods List

UN No.	Name and Description	Class or Division	Subsidiary Hazard	Packing Group	Special Provisions	Limited Quantities	Excepted Quantities	Packagings & IBCs		Portable Tanks & Bulk Containers	
								Packing Instruction	Special Packing Provisions	Instructions	Special Provisions [DK4]
(1)	(2)	(3)	(4)	(5)	(6)	(7a)	(7b)	(8)	(9)	(10)	(11)
Ref	*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*
3481	LITHIUM ION BATTERIES CONTAINED IN EQUIPMENT or LITHIUM ION BATTERIES PACKED WITH EQUIPMENT	9			188 230 310 348 360 376 377 384 387	0	E0	P903 P908 P909 P910 P911 LP903 LP904 LP905 LP906 [DK25]			
3482	ALKALI METAL DISPERSION, FLAMMABLE or ALKALINE EARTH METAL DISPERSION, FLAMMABLE	4.3	3	I	182 183	0	E0	P402			
3483	MOTOR FUEL ANTI-KNOCK MIXTURE, FLAMMABLE	6.1	3	I		0	E0	P602		T14	TP2 TP13
3484	HYDRAZINE AQUEOUS SOLUTION, FLAMMABLE, with more than 37% hydrazine, by mass	8	3 6.1	I		0	E0	P001		T10	TP2 TP13
3485	CALCIUM HYPOCHLORITE, DRY, CORROSIVE or CALCIUM HYPOCHLORITE MIXTURE, DRY, CORROSIVE with more than 39% available chlorine (8.8% available oxygen)	5.1	8	II	314	1 kg	E2	P002 IBC08	PP85 B2, B4, B13		

Table 3.2.3: Dangerous Goods List

UN No.	Name and Description	Class or Division	Subsidiary Hazard	Packing Group	Special Provisions	Limited Quantities	Excepted Quantities	Packagings & IBCs		Portable Tanks & Bulk Containers	
								Packing Instruction	Special Packing Provisions	Instructions	Special Provisions [DK4]
(1)	(2)	(3)	(4)	(5)	(6)	(7a)	(7b)	(8)	(9)	(10)	(11)
Ref	*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*
3536	LITHIUM BATTERIES INSTALLED IN CARGO TRANSPORT UNIT lithium ion batteries or lithium metal batteries	9			3869 [DK26]	0	E0				
3537	ARTICLES CONTAINING FLAMMABLE GAS, N.O.S.	2.1	See 2.0.5.6		274 391	0	E0	P006 LP03			
3538	ARTICLES CONTAINING NON-FLAMMABLE, NON TOXIC GAS, N.O.S.	2.2	See 2.0.5.6		274 391	0	E0	P006 LP03			
3539	ARTICLES CONTAINING TOXIC GAS, N.O.S.	2.3	See 2.0.5.6		274 391	0	E0				
3540	ARTICLES CONTAINING FLAMMABLE LIQUID, N.O.S.	3	See 2.0.5.6		274 391	0	E0	P006 LP03			
3541	ARTICLES CONTAINING FLAMMABLE SOLID, N.O.S.	4.1	See 2.0.5.6		274 391	0	E0	P006 LP03			
3542	ARTICLES CONTAINING A SUBSTANCE LIABLE TO SPONTANEOUS COMBUSTION, N.O.S.	4.2	See 2.0.5.6		274 391	0	E0				