

REFORMATTED PACKING INSTRUCTIONS
(Effective 1 January 2011)

Reformatted Packing Instructions

The ICAO Dangerous Goods Panel (DGP) at the 21st meeting of the Panel (DGP/21) in November 2007 agreed to adopt the reformatted packing instructions for Classes 3, 4, 5, Division 6.1, Class 8 and Class 9 into the 2011-2012 edition of the ICAO Technical Instructions for the Safe Transport of Dangerous Goods by Air "Technical Instructions", which will come into force 1 January 2011.

The draft reformatted packing instructions approved by the ICAO DGP are included below for information to shippers, dangerous goods training providers and operators. The presentation of the reformatted packing instructions has been revised to align with the IATA packing instruction format.

To assist shippers and others in the transport chain to identify which substances and articles have been assigned to the new packing instructions a table has been included in that shows by UN number and packing group the existing packing instruction numbers for Limited Quantity, passenger aircraft and Cargo Aircraft Only and the packing numbers assigned in the reformatted packing instructions to each of those categories.

To assist shippers that may have commodities packaged for transport stored in warehouses prior to transport, the ICAO DGP agreed to a transition period for the reformatted packing instructions. Therefore shipments prepared for transport on or before 31 December 2010 in accordance with the existing packing instructions may be presented for transport until 31 March 2011.

The packing instructions provided below have also been included in the 50th edition of the Dangerous Goods Regulations in Appendix H.

Comments on the format and contents of the reformatted packing instructions are invited and all comments should be sent by e-mail to: dangood@iata.org with the subject line "Reformatted packing instructions".

For information, the equivalent ICAO reformatted packing instructions can be found at: <http://www.icao.int/anb/FLS/DangerousGoods/PackingInstructions/>

Packing Instructions — Class 3 — Flammable liquids

PACKING INSTRUCTION Y340

This instruction applies to Limited Quantities of flammable liquids with a corrosive or corrosive and toxic subsidiary risk in Packing Group II. The General Packing Requirements of Subsection 5.0.2 (with the exception of 5.0.2.3, 5.0.2.5, 5.0.2.11(f), 5.0.2.11(g) and 5.0.2.14) must be met except that the packagings do not have to meet the marking and testing requirements of 6.0.4 and Subsection 6.3. Packagings must meet the construction criteria specified in Subsections 6.1 and 6.2 and the test criteria specified in Subsection 6.6.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6
- Metal packagings must be corrosion resistant or with protection against corrosion for substances with a Class 8 subsidiary risk.

Closure Requirements

Closures must meet the requirements of 5.0.2.7

Limited Quantity Requirements

The requirements of Subsection 2.8 must be met including:

- ♦ the capability of the package to pass a drop test of 1.2m;
- ♦ a 24 hour stacking test;
- ♦ inner packagings for liquids must be capable of passing a pressure differential test (5.0.2.9);
- ♦ the gross weight of the completed package must not exceed 30 kg.

Single packagings are not permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	0.5 L	0.5 L
Metal	0.5 L	
Plastic	0.5 L	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic

PACKING INSTRUCTION Y341

This instruction applies to Limited Quantities of flammable liquids with a toxic, or no subsidiary risk in Packing Group II.

The General Packing Requirements of Subsection 5.0.2 (with the exception of 5.0.2.3, 5.0.2.5, 5.0.2.11(f), 5.0.2.11(g) and 5.0.2.14) must be met except that the packagings do not have to meet the marking and testing requirements of 6.0.4 and Subsection 6.3. Packagings must meet the construction criteria specified in Subsections 6.1 and 6.2 and the test criteria specified in Subsection 6.6.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6

Closure Requirements

Closures must meet the requirements of 5.0.2.7

Limited Quantity Requirements

The requirements of Subsection 2.8 must be met including:

- the capability of the package to pass a drop test of 1.2m;
- a 24 hour stacking test;
- inner packagings for liquids must be capable of passing a pressure differential test (5.0.2.9);
- the gross weight of the completed package must not exceed 30 kg.

Single packagings are not permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	0.5 L	1.0 L
Metal	0.5 L	
Plastic	0.5 L	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic

PACKING INSTRUCTION Y342

This instruction applies to Limited Quantities of flammable liquids with a corrosive subsidiary risk in Packing Group III.

The General Packing Requirements of Subsection 5.0.2 (with the exception of 5.0.2.3, 5.0.2.5, 5.0.2.11(f), 5.0.2.11(g) and 5.0.2.14) must be met except that the packagings do not have to meet the marking and testing requirements of 6.0.4 and Subsection 6.3. Packagings must meet the construction criteria specified in Subsections 6.1 and 6.2 and the test criteria specified in Subsection 6.6.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6
- Metal packagings must be corrosion resistant or with protection against corrosion for substances with a Class 8 subsidiary risk.

Closure Requirements

Closures must meet the requirements of 5.0.2.7

Limited Quantity Requirements

The requirements of Subsection 2.8 must be met including:

- ♦ the capability of the package to pass a drop test of 1.2m;
- ♦ a 24 hour stacking test;
- ♦ inner packagings for liquids must be capable of passing a pressure differential test (5.0.2.9);
- ♦ the gross weight of the completed package must not exceed 30 kg.

Single packagings are not permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	1.0 L	1.0 L
Metal	1.0 L	
Plastic	1.0 L	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic

PACKING INSTRUCTION Y343

This instruction applies to Limited Quantities of flammable liquids with a toxic subsidiary risk in Packing Group III.

The General Packing Requirements of Subsection 5.0.2 (with the exception of 5.0.2.3, 5.0.2.5, 5.0.2.11(f), 5.0.2.11(g) and 5.0.2.14) must be met except that the packagings do not have to meet the marking and testing requirements of 6.0.4 and Subsection 6.3. Packagings must meet the construction criteria specified in Subsections 6.1 and 6.2 and the test criteria specified in Subsection 6.6.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6

Closure Requirements

Closures must meet the requirements of 5.0.2.7

Limited Quantity Requirements

The requirements of Subsection 2.8 must be met including:

- the capability of the package to pass a drop test of 1.2m;
- a 24 hour stacking test;
- inner packagings for liquids must be capable of passing a pressure differential test (5.0.2.9);
- the gross weight of the completed package must not exceed 30 kg.

Single packagings are not permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	1.0 L	2.0 L
Metal	1.0 L	
Plastic	1.0 L	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic

PACKING INSTRUCTION Y344

This instruction applies to Limited Quantities of flammable liquids with no subsidiary risk in Packing Group III.

The General Packing Requirements of Subsection 5.0.2 (with the exception of 5.0.2.3, 5.0.2.5, 5.0.2.11(f), 5.0.2.11(g) and 5.0.2.14) must be met except that the packagings do not have to meet the marking and testing requirements of 6.0.4 and Subsection 6.3. Packagings must meet the construction criteria specified in Subsections 6.1 and 6.2 and the test criteria specified in Subsection 6.6.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6

Closure Requirements

Closures must meet the requirements of 5.0.2.7

Limited Quantity Requirements

The requirements of Subsection 2.8 must be met including:

- the capability of the package to pass a drop test of 1.2m;
- a 24 hour stacking test;
- inner packagings for liquids must be capable of passing a pressure differential test (5.0.2.9);
- the gross weight of the completed package must not exceed 30 kg.

Single packagings are not permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	2.5 L	10.0 L
Metal	5.0 L	
Plastic	5.0 L	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic

PACKING INSTRUCTION 350

This instruction applies to flammable liquids with a Class 8 subsidiary risk in Packing Group I on passenger aircraft.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;
- Metal packagings must be corrosion resistant or with protection against corrosion.

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Additional Packing Requirements

Inner packagings must be packed with absorbent material and placed in a rigid leakproof receptacle before packing in outer packagings.

Single packagings are not permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	0.5 L	0.5 L
Metal	0.5 L	
Plastic	Forbidden	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

PACKING INSTRUCTION 351

This instruction applies to flammable liquids in Packing Group I on passenger aircraft.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6

Closure Requirements

Closures must meet the requirements of 5.0.2.7

Additional Packing Requirements

Inner packagings must be packed with absorbent material and placed in a rigid leakproof receptacle before packing in outer packagings.

Single packagings are not permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	0.5 L	1.0 L
Metal	1.0 L	
Plastic	Forbidden	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

PACKING INSTRUCTION 352

This instruction applies to flammable liquids with a corrosive and/or toxic subsidiary risk in Packing Group II on passenger aircraft. The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6
- Metal packagings must be corrosion resistant or with protection against corrosion for substances with a Class 8 subsidiary risk.

Closure Requirements

Closures must meet the requirements of 5.0.2.7

Single packagings are not permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	1.0 L	1.0 L
Metal	1.0 L	
Plastic	1.0 L	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Aluminium	Plywood	Fibre	Plastic	Other metal	Steel	Aluminium	Plastic	Steel	Aluminium	Wood	Plywood	Reconstituted wood	Fibre-board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

PACKING INSTRUCTION 353

This instruction applies to flammable liquids in Packing Group II without a subsidiary risk on passenger aircraft. The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6

Closure Requirements

Closures must meet the requirements of 5.0.2.7

Single packagings are not permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	1.0 L	5.0 L
Metal	5.0 L	
Plastic	5.0 L	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Aluminium	Plywood	Fibre	Plastic	Other metal	Steel	Aluminium	Plastic	Steel	Aluminium	Wood	Plywood	Reconstituted wood	Fibre-board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

PACKING INSTRUCTION 354

This instruction applies to flammable liquids with a Class 8 subsidiary risk in Packing Group III on passenger aircraft.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6
- Metal packagings must be corrosion resistant or with protection against corrosion.

Closure Requirements

Closures must meet the requirements of 5.0.2.7

Additional Packing Requirements

All packagings must meet Packing Group II performance standards.

Combination and single packagings are permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	2.5 L	5.0 L
Metal	5.0 L	
Plastic	5.0 L	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

SINGLE PACKAGINGS

Type	Drums				Jerricans			Composites	Cylinders
Desc	Steel	Aluminium	Plastic	Other metal	Steel	Aluminium	Plastic	Plastic	
Spec	1A1 1A2	1B1 1B2	1H1 1H2	1N1 1N2	3A1 3A2	3B1 3B2	3H1 3H2	All	As permitted in 5.0.6.6

PACKING INSTRUCTION 355

This instruction applies to flammable liquids with a toxic, or no subsidiary risk in Packing Group III on passenger aircraft.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6

Closure Requirements

Closures must meet the requirements of 5.0.2.7

Combination and single packagings are permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	2.5 L	60.0 L
Metal	10.0 L	
Plastic	10.0 L	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Aluminium	Plywood	Fibre	Plastic	Other metal	Steel	Aluminium	Plastic	Steel	Aluminium	Wood	Plywood	Reconstituted wood	Fibre-board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

SINGLE PACKAGINGS

Type	Drums				Jerricans			Composites	Cylinders
Desc	Steel	Aluminium	Plastic	Other metal	Steel	Aluminium	Plastic	Plastic	
Spec	1A1 1A2	1B1 1B2	1H1 1H2	1N1 1N2	3A1 3A2	3B1 3B2	3H1 3H2	All	As permitted in 5.0.6.6

PACKING INSTRUCTION 360

This instruction applies to flammable liquids with a Class 8 subsidiary risk in Packing Group I on Cargo Aircraft Only.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6
- Metal packagings must be corrosion resistant or with protection against corrosion

Closure Requirements

Closures must meet the requirements of 5.0.2.7

Additional Packing Requirements

Inner packagings must be packed with absorbent material and placed in a rigid leakproof receptacle before packing in outer packagings.

Combination and single packagings are permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	1.0 L	2.5 L
Metal	2.5 L	
Plastic	Forbidden	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

SINGLE PACKAGINGS

Type	Drums			Jerricans			Composites	Cylinders
Desc	Steel	Aluminium	Other metal	Steel	Aluminium	Plastic		
Spec	1A1	1B1	1N1	3A1	3B1	All	As permitted in 5.0.6.6	

PACKING INSTRUCTION 361

This instruction applies to flammable liquids with a toxic, or no subsidiary risk in Packing Group I on Cargo Aircraft Only.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6

Closure Requirements

Closures must meet the requirements of 5.0.2.7

Additional Packing Requirements

Inner packagings must be packed with absorbent material and placed in a rigid leakproof receptacle before packing in outer packagings.

Combination and single packagings are permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	1.0 L	30.0 L
Metal	5.0 L	
Plastic	Forbidden	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
	Steel	Aluminium	Plywood	Fibre	Plastic	Other metal	Steel	Aluminium	Plastic	Steel	Aluminium	Wood	Plywood	Reconstituted wood	Fibre-board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

SINGLE PACKAGINGS

Type	Drums			Jerricans			Composites	Cylinders
Desc	Steel	Aluminium	Other metal	Steel	Aluminium	Plastic		
Spec	1A1	1B1	1N1	3A1	3B1	All	As permitted in 5.0.6.6	

PACKING INSTRUCTION 362

This instruction applies to flammable liquids with a Class 8 subsidiary risk in Packing Group II on Cargo Aircraft Only.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6
- Metal packagings must be corrosion resistant or with protection against corrosion

Closure Requirements

Closures must meet the requirements of 5.0.2.7

Combination and single packagings are permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	1.0 L	5.0 L
Metal	1.0 L	
Plastic	1.0 L	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
	Steel	Aluminium	Plywood	Fibre	Plastic	Other metal	Steel	Aluminium	Plastic	Steel	Aluminium	Wood	Plywood	Reconstituted wood	Fibre-board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

SINGLE PACKAGINGS

Type	Drums				Jerricans			Composites	Cylinders
Desc	Steel	Aluminium	Plastic	Other metal	Steel	Aluminium	Plastic	Plastic	
Spec	1A1	1B1	1H1	1N1	3A1	3B1	3H1	All	As permitted in 5.0.6.6

PACKING INSTRUCTION 363

This instruction applies to flammable liquids with a corrosive or corrosive and toxic subsidiary risk in Packing Group II on Cargo Aircraft Only.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6
- Metal packagings must be corrosion resistant or with protection against corrosion for substances with a Class 8 subsidiary risk.

Closure Requirements

Closures must meet the requirements of 5.0.2.7

Combination and single packagings are permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	2.5 L	30.0 L
Metal	5.0 L	
Plastic	2.5 L	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
	Steel	Aluminium	Plywood	Fibre	Plastic	Other metal	Steel	Aluminium	Plastic	Steel	Aluminium	Wood	Plywood	Reconstituted wood	Fibre-board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

SINGLE PACKAGINGS

Type	Drums				Jerricans			Composites	Cylinders
Desc	Steel	Aluminium	Plastic	Other metal	Steel	Aluminium	Plastic	Plastic	
Spec	1A1	1B1	1H1	1N1	3A1	3B1	3H1	All	As permitted in 5.0.6.6

PACKING INSTRUCTION 364

This instruction applies to flammable liquids with a toxic, or no subsidiary risk in Packing Group II on Cargo Aircraft Only.
The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6

Closure Requirements

Closures must meet the requirements of 5.0.2.7

Combination and single packagings are permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	2.5 L	60.0 L
Metal	10.0 L	
Plastic	5.0 L	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
	Steel	Aluminium	Plywood	Fibre	Plastic	Other metal	Steel	Aluminium	Plastic	Steel	Aluminium	Wood	Plywood	Reconstituted wood	Fibreboard	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

SINGLE PACKAGINGS

Type	Drums				Jerricans			Composites	Cylinders
Desc	Steel	Aluminium	Plastic	Other metal	Steel	Aluminium	Plastic	Plastic	
Spec	1A1	1B1	1H1	1N1	3A1	3B1	3H1	All	As permitted in 5.0.6.6

PACKING INSTRUCTION 365

This instruction applies to flammable liquids with a corrosive, or no subsidiary risk in Packing Group III on Cargo Aircraft Only.
The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6
- Metal packagings must be corrosion resistant or with protection against corrosion for substances with a Class 8 subsidiary risk.

Closure Requirements

Closures must meet the requirements of 5.0.2.7

Additional Packing Requirements

Packagings must meet Packing Group II performance standards if the substance has a Class 8 subsidiary risk.

Combination and single packagings are permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	5.0 L	60.0 L
Metal	25.0 L	
Plastic	10.0 L	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

SINGLE PACKAGINGS

Type	Drums				Jerricans			Composites	Cylinders
Desc	Steel	Aluminium	Plastic	Other metal	Steel	Aluminium	Plastic	Plastic	
Spec	1A1 1A2	1B1 1B2	1H1 1H2	1N1 1N2	3A1 3A2	3B1 3B2	3H1 3H2	All	As permitted in 5.0.6.6

PACKING INSTRUCTION 366

This instruction applies to flammable liquids with a toxic, or no subsidiary risk in Packing Group III on Cargo Aircraft Only.
The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6

Closure Requirements

Closures must meet the requirements of 5.0.2.7

Combination and single packagings are permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	5.0 L	220.0 L
Metal	25.0 L	
Plastic	10.0 L	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
	Steel	Aluminium	Plywood	Fibre	Plastic	Other metal	Steel	Aluminium	Plastic	Steel	Aluminium	Wood	Plywood	Reconstituted wood	Fibreboard	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

SINGLE PACKAGINGS

Type	Drums				Jerricans			Composites	Cylinders
Desc	Steel	Aluminium	Plastic	Other metal	Steel	Aluminium	Plastic	Plastic	
Spec	1A1 1A2	1B1 1B2	1H1 1H2	1N1 1N2	3A1 3A2	3B1 3B2	3H1 3H2	All	As permitted in 5.0.6.6

PACKING INSTRUCTION 370

This instruction applies to UN 3269, Polyester resin kit on passenger aircraft and Cargo Aircraft Only.

The General Packing Requirements of Subsection 5.0.2 must be met.

Polyester resin kits and fibreglass repair kits consist of two components: a base material in Class 3, Packing Group II or III, and an activator (organic peroxide).

The maximum net quantity of organic peroxide per package must not exceed 500 g or 125 mL.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6

Closure Requirements

Closures must meet the requirements of 5.0.2.7

Additional Packing Requirements

Outer packagings must be Packing Group II or III according to the criteria for Class 3, applied to the base material.

Single packagings are not permitted.

COMBINATION PACKAGINGS

Polyester resin kits	Inner Packaging (see 6.1)	Net quantity per inner packaging (LIQUID ACTIVATOR)	Net quantity per inner packaging (SOLID ACTIVATOR)	Total net quantity per package
Activator (organic peroxide)	Metal *	125 mL	500 g	5.0 kg
	Plastic *	125 mL	500 g	
Base material (Class3, PG II or III)	Glass	1.0 L	1.0 L	
	Metal	5.0 L	5.0 L	
	Plastic	5.0 L	5.0 L	

* Including tubes

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

PACKING INSTRUCTION Y370

For Limited Quantities of flammable liquid and organic peroxide in polyester resin kits.

The General Packing Requirements of Subsection 5.0.2 (with the exception of 5.0.2.3, 5.0.2.5, 5.0.2.11(f), 5.0.2.11(g) and 5.0.2.14) must be met except that the packagings do not have to meet the marking and testing requirements of 6.0.4 and Subsection 6.3. Packagings must meet the construction criteria specified in Subsections 6.1 and 6.2 and the test criteria specified in Subsection 6.7.

Polyester resin kits and fibreglass repair kits consist of two components: a base material in Class 3, Packing Group II or III, and an activator (organic peroxide).

The maximum net quantity of organic peroxide per package must not exceed 125 mL or 0.5 kg.

Limited Quantity Requirements

The requirements of Subsection 2.8 must be met including:

- ◆ the capability of the package to pass a drop test of 1.2m;
- ◆ a 24 hour stacking test;
- ◆ inner packagings for liquids must be capable of passing a pressure differential test (5.0.2.9);
- ◆ the gross weight of the completed package must not exceed 30 kg.

Single packagings are not permitted.

COMBINATION PACKAGINGS

Polyester resin kits	Inner Packaging (see 6.1)	Net quantity per inner packaging (LIQUID ACTIVATOR)	Net quantity per inner packaging (SOLID ACTIVATOR)	Total net quantity per package
Activator (organic peroxide)	Metal *	30 mL	100 g	1.0 kg
	Plastic *	30 mL	100 g	
Base material (Class3, PG II or III)	Glass	1.0 L	1.0 L	
	Metal	1.0 L	1.0 L	
	Plastic	1.0 L	1.0 L	

* Including tubes

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic

PACKING INSTRUCTION 371

This instruction applies to UN 1204 and UN 3064, Nitroglycerin solution on passenger aircraft and Cargo Aircraft Only.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6

Closure Requirements

- Closures must meet the requirements of 5.0.2.7

Additional Packing Requirements

- Inner packagings must be packed with absorbent material and placed in a rigid leakproof receptacle before packing in outer packagings;
- UN 3064** must be packed in wooden boxes (4C1, 4C2, 4D or 4F) as the outer packaging and must be completely lined with a suitable material impervious to water, alcohol and nitroglycerin.

Single packagings are not permitted.

COMBINATION PACKAGINGS

	Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package Passenger aircraft	Total net quantity per package Cargo Aircraft Only
UN 1204 Nitroglycerin solution in alcohol with 1% or less nitroglycerin	Glass	1.0 L	5.0 L	60.0 L
	Metal	1.0 L		
	Plastic	1.0 L		
UN 3064 Nitroglycerin solution in alcohol with 5% or less but more than 1% nitroglycerin	Metal	1.0 L	Forbidden	5.0 L

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

PACKING INSTRUCTION 372

This instruction applies to UN3165 Aircraft hydraulic power unit fuel tanks on Cargo Aircraft Only.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6

Closure Requirements

Closures must meet the requirements of 5.0.2.7

UN3165 Aircraft hydraulic power unit fuel tanks containing a mixture of anhydrous hydrazine and methyl hydrazine (M86 fuel) and designed for installation as complete units in aircraft are acceptable, subject to either of the following conditions:

- the unit must consist of an aluminium pressure vessel made from tubing and having welded heads. Primary containment of the fuel within this vessel must consist of a welded aluminium bladder having a maximum internal volume of 46 L. The outer vessel must have a minimum design gauge pressure of 1 275 kPa and a minimum burst gauge pressure of 2 755 kPa. Each vessel must be leak-checked during manufacture and before shipment and must be found leakproof. The complete inner unit must be securely packed in non-combustible cushioning material, such as vermiculite, in a strong outer tightly closed metal packaging which will adequately protect all fittings. Maximum quantity of fuel per unit and package is 42 L; or
- the unit must consist of an aluminium pressure vessel. Primary containment of the fuel within this vessel must consist of a welded hermetically sealed fuel compartment with an elastomeric bladder having a maximum internal volume of 46 L. The pressure vessel must have a minimum design gauge pressure of 2 860 kPa and a minimum burst gauge pressure of 5 170 kPa. Each vessel must be leak-checked during manufacture and before shipment and must be found leakproof. The complete inner unit must be securely packed in non-combustible cushioning material, such as vermiculite, in a strong outer tightly closed metal packaging which will adequately protect all fittings. Maximum quantity of fuel per unit and package is 42 L.

PACKING INSTRUCTION 373

This instruction applies to UN 1228, Mercaptans, liquid, flammable, toxic, n.o.s. in Packing Group II and III on passenger aircraft and Cargo Aircraft Only.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6

Closure Requirements

Closures must meet the requirements of 5.0.2.7

Additional Packing Requirements

- Glass inner packagings must be packed with absorbent material and placed in a rigid leakproof receptacle before packing in outer packagings.

Single packagings are permitted for Cargo Aircraft Only

COMBINATION PACKAGINGS

	Inner Packaging (see 6.1)	Net quantity per inner packaging Passenger Aircraft	Net quantity per inner packaging Cargo Aircraft Only	Total net quantity per package Passenger aircraft	Total net quantity per package Cargo Aircraft Only
UN 1228, Mercaptans, liquid, flammable, toxic, n.o.s. PG II	Glass	Forbidden	5.0 L	Forbidden	60.0 L
	Metal		5.0 L		
	Plastic		5.0 L		
UN 1228, Mercaptans, liquid, flammable, toxic, n.o.s. PGIII	Glass	1.0 L	5.0 L	5.0 L	220.0 L
	Metal	1.0 L	5.0 L		
	Plastic	1.0 L	5.0 L		

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

SINGLE PACKAGINGS CARGO AIRCRAFT ONLY

Type	Drums				Jerricans			Composites	Cylinders
Desc	Steel	Aluminium	Plastic	Other metal	Steel	Aluminium	Plastic	Plastic	
Spec	1A1 1A2	1B1 1B2	1H1 1H2	1N1 1N2	3A1 3A2	3B1 3B2	3H1 3H2	All	As permitted in 5.0.6.6

PACKING INSTRUCTION Y373

For Limited Quantities of UN 1228, Mercaptans, liquid, flammable, toxic, n.o.s. in Packing Group III.

The General Packing Requirements of Subsection 5.0.2 (with the exception of 5.0.2.3, 5.0.2.5, 5.0.2.11(f), 5.0.2.11(g) and 5.0.2.14) must be met except that the packagings do not have to meet the marking and testing requirements of 6.0.4 and Subsection 6.3. Packagings must meet the construction criteria specified in Subsections 6.1 and 6.2 and the test criteria specified in Subsection 6.6.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6

Closure Requirements

Closures must meet the requirements of 5.0.2.7

Limited Quantity Requirements

The requirements of Subsection 2.8 must be met including:

- the capability of the package to pass a drop test of 1.2m;
- a 24 hour stacking test;
- inner packagings for liquids must be capable of passing a pressure differential test (5.0.2.9);
- the gross weight of the completed package must not exceed 30 kg.

Single packagings are not permitted.

COMBINATION PACKAGINGS

	Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
UN 1228, Mercaptans, liquid, flammable, toxic, n.o.s. PGIII	Glass	0.5 L	1.0 L
	Metal	0.5 L	
	Plastic	0.5 L	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic

PACKING INSTRUCTION 374 – 376

Note: *Packing Instructions 374 to 376 are not included in this appendix as the content and format is the same as is shown in Section 5 of the 50th edition DGR.*

5.4 Packing Instructions — Class 4 — Flammable solids; Substances Liable to Spontaneous Combustion; Substances which, in Contact with Water, Emit Flammable Gases

Division 4.1

PACKING INSTRUCTION Y440

This instruction applies to Limited Quantities of flammable solids with a toxic subsidiary risk in Packing Group II.

The General Packing Requirements of Subsection 5.0.2 (with the exception of 5.0.2.3, 5.0.2.5, 5.0.2.11(f), 5.0.2.11(g) and 5.0.2.14) must be met except that the packagings do not have to meet the marking and testing requirements of 6.0.4 and Subsection 6.3. Packagings must meet the construction criteria specified in Subsections 6.1 and 6.2 and the test criteria specified in Subsection 6.6.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6

Closure Requirements

Closures must meet the requirements of 5.0.2.7

Limited Quantity Requirements

The requirements of Subsection 2.8 must be met including:

- ♦ the capability of the package to pass a drop test of 1.2m;
- ♦ a 24 hour stacking test;
- ♦ the gross weight of the completed package must not exceed 30 kg.

Single packagings are not permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	0.5 kg	1.0 kg
Metal	0.5 kg	
Plastic	0.5 kg	
Plastic bag	0.5 kg	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Desc																

PACKING INSTRUCTION Y441

This instruction applies to Limited Quantities of flammable solids with a corrosive, or no subsidiary risk in Packing Group II.

The General Packing Requirements of Subsection 5.0.2 (with the exception of 5.0.2.3, 5.0.2.5, 5.0.2.11(f), 5.0.2.11(g) and 5.0.2.14) must be met except that the packagings do not have to meet the marking and testing requirements of 6.0.4 and Subsection 6.3. Packagings must meet the construction criteria specified in Subsections 6.1 and 6.2 and the test criteria specified in Subsection 6.6.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6
- Metal packagings must be corrosion resistant or with protection against corrosion for substances with a Class 8 subsidiary risk.

Closure Requirements

Closures must meet the requirements of 5.0.2.7

Limited Quantity Requirements

The requirements of Subsection 2.8 must be met including:

- ◆ the capability of the package to pass a drop test of 1.2m;
- ◆ a 24 hour stacking test;
- ◆ the gross weight of the completed package must not exceed 30 kg.

Single packagings are not permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	0.5 kg	5.0 kg
Metal	0.5 kg	
Plastic	0.5 kg	
Plastic bag	0.5 kg	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Desc																

PACKING INSTRUCTION Y442

This instruction applies to Limited Quantities of flammable solids with a corrosive, or no subsidiary risk in Packing Group III.

The General Packing Requirements of Subsection 5.0.2 (with the exception of 5.0.2.3, 5.0.2.5, 5.0.2.11(f), 5.0.2.11(g) and 5.0.2.14) must be met except that the packagings do not have to meet the marking and testing requirements of 6.0.4 and Subsection 6.3. Packagings must meet the construction criteria specified in Subsections 6.1 and 6.2 and the test criteria specified in Subsection 6.6.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6
- Metal packagings must be corrosion resistant or with protection against corrosion for substances with a Class 8 subsidiary risk.

Closure Requirements

Closures must meet the requirements of 5.0.2.7

Limited Quantity Requirements

The requirements of Subsection 2.8 must be met including:

- ♦ the capability of the package to pass a drop test of 1.2m;
- ♦ a 24 hour stacking test;
- ♦ the gross weight of the completed package must not exceed 30 kg.

Single packagings are not permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	1.0 kg	5.0 kg
Metal	1.0 kg	
Plastic	1.0 kg	
Plastic bag	1.0 kg	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Desc																

PACKING INSTRUCTION Y443

This instruction applies to Limited Quantities of flammable solids with a toxic, or no subsidiary risk in Packing Group III.

The General Packing Requirements of Subsection 5.0.2 (with the exception of 5.0.2.3, 5.0.2.5, 5.0.2.11(f), 5.0.2.11(g) and 5.0.2.14) must be met except that the packagings do not have to meet the marking and testing requirements of 6.0.4 and Subsection 6.3. Packagings must meet the construction criteria specified in Subsections 6.1 and 6.2 and the test criteria specified in Subsection 6.6.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6

Closure Requirements

Closures must meet the requirements of 5.0.2.7

Limited Quantity Requirements

The requirements of Subsection 2.8 must be met including:

- the capability of the package to pass a drop test of 1.2m;
- a 24 hour stacking test;
- the gross weight of the completed package must not exceed 30 kg.

Single packagings are not permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	1.0 kg	10.0 kg
Metal	1.0 kg	
Plastic	1.0 kg	
Plastic bag	1.0 kg	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic

PACKING INSTRUCTION 445

This instruction applies to flammable solids in Packing Group II on passenger aircraft.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;
- Metal packagings must be corrosion resistant or with protection against corrosion for substances with a subsidiary risk of Class 8.

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Single packagings are not permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	1.0 kg	15 kg
Metal	2.5 kg	
Plastic	2.5 kg	
Plastic bag	1.0 kg	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

PACKING INSTRUCTION 446

This instruction applies to flammable solids in Packing Group III on passenger aircraft.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;
- Metal packagings must be corrosion resistant or with protection against corrosion for substances with a subsidiary risk of Class 8.

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Additional Packing Requirements

- ♦ Packagings must meet Packing Group II performance standards.

Single packagings are not permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	5.0 kg	25 kg
Metal	10.0 kg	
Plastic	10.0 kg	
Plastic bag	5.0 kg	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

PACKING INSTRUCTION 448

This instruction applies to flammable solids in Packing Group II on Cargo Aircraft Only.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;
- Metal packagings must be corrosion resistant or with protection against corrosion for substances with a subsidiary risk of Class 8.

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Additional Packing Requirements

- ♦ Fibre, wood and plywood single packagings must be fitted with a suitable liner
Combination and single packagings are permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	2.5 kg	50 kg
Metal	5.0 kg	
Plastic	5.0 kg	
Plastic bag	2.5 kg	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

SINGLE PACKAGINGS

Type	Drums						Jerricans			Boxes							Comp- sites	Cylinders
Desc	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic	Plastic	
Spec	1A1 1A2	1B1 1B2	1D	1G	1H1 1H2	1N1 1N2	3A1 3A2	3B1 3B2	3H1 3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2	All	As permitted in 5.0.6.6

PACKING INSTRUCTION 449

This instruction applies to flammable solids in Packing Group III on Cargo Aircraft Only.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;
- Metal packagings must be corrosion resistant or with protection against corrosion for substances with a subsidiary risk of Class 8.

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Additional Packing Requirements

- ♦ Packagings must meet Packing Group II performance standards.
- ♦ Fibre, wood and plywood single packagings must be fitted with a suitable liner

Combination and single packagings are permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	5.0 kg	100 kg
Metal	10.0 kg	
Plastic	10.0 kg	
Plastic bag	5.0 kg	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Aluminium	Plywood	Fibre	Plastic	Other metal	Steel	Aluminium	Plastic	Steel	Aluminium	Wood	Plywood	Reconstituted wood	Fibre-board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

SINGLE PACKAGINGS

Type	Drums						Jerricans			Boxes							Composites	Cylinders
Desc	Steel	Aluminium	Plywood	Fibre	Plastic	Other metal	Steel	Aluminium	Plastic	Steel	Aluminium	Wood	Plywood	Reconstituted wood	Fibre-board	Plastic	Plastic	
Spec	1A1 1A2	1B1 1B2	1D	1G	1H1 1H2	1N1 1N2	3A1 3A2	3B1 3B2	3H1 3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2	All	As permitted in 5.0.6.6

PACKING INSTRUCTION 451

This instruction applies to wetted explosives in Packing Group I on passenger aircraft and Cargo Aircraft Only.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Additional Packing Requirements

- Packagings must be designed and constructed to prevent the loss of water or alcohol content or the content of the phlegmatizer;
- Packagings must be so constructed and closed so as to avoid an explosive over pressure or pressure build-up of more than 300 kPa (3 bar);
- The type of packaging and maximum permitted quantity per packaging are limited by the provisions of 3.1.7 and may be less than the limits shown above;
- Plastic or glass inner packagings must be packed in tightly closed metal or rigid plastic receptacles before packing in outer packagings. Inner packagings must be packed with absorbent material in sufficient quantity to absorb the contents in the event of leakage.

Note 1. – UN 1310, UN 1349, UN 1320, UN 1321, UN 1322, UN 1344, UN 1348, UN 1517 & UN 3317 packagings must be lead free. Single packagings are not permitted.

COMBINATION PACKAGINGS

UN Number	Inner Packaging (see 6.1)	Net quantity per inner packaging	Quantity per package Passenger aircraft	Quantity per package Cargo Aircraft Only
UN1354, UN1355, UN1356, UN3364, UN3365, UN3366, UN3367, UN3368, UN3369, UN3370, UN 3474	Glass	0.5 kg	0.5 kg	0.5 kg
	Metal	0.5 kg		
	Plastic	0.5 kg		
	Plastic bag	0.5 kg		
UN1336, UN1337, UN1357	Glass	0.5 kg	1.0 kg	15 kg
	Metal	0.5 kg		
	Plastic	0.5 kg		
	Plastic bag	0.5 kg		
UN1310 Note 1	Glass	0.5 kg	0.5 kg	0.5 kg
	Metal	0.5 kg		
	Plastic	0.5 kg		
	Plastic bag	0.5 kg		
UN1349 Note 1	Glass	0.5 kg	Forbidden	15 kg
	Metal	0.5 kg		
	Plastic	0.5 kg		
	Plastic bag	0.5 kg		
UN1320, UN1321, UN1322, UN1344, UN1348, UN1517, UN3317 Note 1	Glass	0.5 kg	1.0 kg	15 kg
	Metal	0.5 kg		
	Plastic	0.5 kg		
	Plastic bag	0.5 kg		
UN 1571, UN2852	Glass	0.25 kg	Forbidden	0.5 kg
	Plastic	0.25 kg		

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

PACKING INSTRUCTION 452

This instruction applies to nitrocellulose (UN 2555, UN 2556 & UN 2557) on passenger aircraft.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Additional Packing Requirements

- Packagings must be designed and constructed to prevent the loss of water or alcohol content or the content of the phlegmatizer;
- Packagings must be so constructed and closed so as to avoid an explosive over pressure or pressure build-up of more than 300 kPa (3 bar).

Single packagings are not permitted.

COMBINATION PACKAGINGS

UN Number	Inner Packaging (see 6.1)	Net quantity per inner packaging	Quantity per package Passenger aircraft
UN 2555, Nitrocellulose with water	Glass	1.0 kg	15 kg
	Metal	1.0 kg	
	Plastic	1.0 kg	
	Plastic bag	1.0 kg	
UN 2556, Nitrocellulose with alcohol or UN2557, Nitrocellulose with or without plasticizer	Glass	1.0 kg	1.0 kg
	Metal	1.0 kg	
	Plastic	1.0 kg	
	Plastic bag	1.0 kg	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

PACKING INSTRUCTION 453

This instruction applies to nitrocellulose (UN 2555, UN 2556 & UN 2557) on Cargo Aircraft Only.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Additional Packing Requirements

- Packagings must be designed and constructed to prevent the loss of water or alcohol content or the content of the phlegmatizer;
- Packagings must be so constructed and closed so as to avoid an explosive over pressure or pressure build-up of more than 300 kPa (3 bar);
- Fibre, wood and plywood single packagings must be fitted with a suitable liner.

Combination and single packagings are permitted.

COMBINATION PACKAGINGS

UN Number	Inner Packaging (see 6.1)	Net quantity per inner packaging	Quantity per package Cargo Aircraft Only
UN 2555, Nitrocellulose with water	Glass	1.0 kg	50 kg
	Metal	1.0 kg	
	Plastic	1.0 kg	
	Plastic bag	1.0 kg	
UN 2556, Nitrocellulose with alcohol or UN2557, Nitrocellulose with or without plasticizer	Glass	1.0 kg	15 kg
	Metal	1.0 kg	
	Plastic	1.0 kg	
	Plastic bag	1.0 kg	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

SINGLE PACKAGINGS

Type	Drums						Jerricans			Boxes							Comp- sites	Cylinders
Desc	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic	Plastic	
Spec	1A1 1A2	1B1 1B2	1D	1G	1H1 1H2	1N1 1N2	3A1 3A2	3B1 3B2	3H1 3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2	All	As permitted in 5.0.6.6

PACKING INSTRUCTION 454

This instruction applies to Films, nitrocellulose base (UN1324) on passenger aircraft and Cargo Aircraft Only.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Additional Packing Requirements

- Packagings must meet Packing Group II performance standards;
- Fibre drums (1G) are limited to 600 m of film.

Single packagings are not permitted.

COMBINATION PACKAGINGS

UN Number	Quantity per package Passenger aircraft	Quantity per package Cargo Aircraft Only
UN 1324, Films, nitrocellulose base	25 kg	100 kg

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

PACKING INSTRUCTION Y454

This instruction applies to Films, nitrocellulose base (UN1324) packed in Limited Quantity.

The General Packing Requirements of Subsection 5.0.2 (with the exception of 5.0.2.3, 5.0.2.5, 5.0.2.11(f), 5.0.2.11(g) and 5.0.2.14) must be met except that the packagings do not have to meet the marking and testing requirements of 6.0.4 and Subsection 6.3. Packagings must meet the construction criteria specified in Subsections 6.1 and 6.2 and the test criteria specified in Subsection 6.6.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6

Closure Requirements

Closures must meet the requirements of 5.0.2.7

Limited Quantity Requirements

The requirements of Subsection 2.8 must be met including:

- the capability of the package to pass a drop test of 1.2m;
- a 24 hour stacking test.
- the gross weight of the completed package must not exceed 30 kg.

Single packagings are not permitted.

COMBINATION PACKAGINGS

UN Number	Quantity per package
UN 1324, Films, nitrocellulose base	10 kg

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Spec																

PACKING INSTRUCTION 455

This instruction applies to Matches, safety (UN 1944) and matches, wax vesta (UN 1945) on passenger aircraft and Cargo Aircraft Only. The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Additional Packing Requirements

- ◆ Packagings must meet Packing Group II performance standards;
- ◆ matches, safety (book, card or strike on box) must be of a type that will not ignite spontaneously under normal conditions of air transport and can be readily ignited by friction only by striking on the manufacturer's box, book or card;
- ◆ matches must be tightly packed to prevent movement within the package and ignition by rubbing against adjoining box, book or card; they must be securely wrapped in paper or foil, or packed in tightly closed inner packagings;
- ◆ not more than 50 books of matches may be packed in one inner packaging.

Single packagings are not permitted.

COMBINATION PACKAGINGS

UN Number	Quantity per package Passenger aircraft	Quantity per package Cargo Aircraft Only
UN 1944, Matches, safety UN 1945, Matches, wax vesta	25 kg	100 kg

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

PACKING INSTRUCTION Y455

This instruction applies to Matches, safety (UN 1944) and matches, wax vesta (UN 1945) packed in Limited Quantity.

The General Packing Requirements of Subsection 5.0.2 (with the exception of 5.0.2.3, 5.0.2.5, 5.0.2.11(f), 5.0.2.11(g) and 5.0.2.14) must be met except that the packagings do not have to meet the marking and testing requirements of 6.0.4 and Subsection 6.3. Packagings must meet the construction criteria specified in Subsections 6.1 and 6.2 and the test criteria specified in Subsection 6.6.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6

Closure Requirements

Closures must meet the requirements of 5.0.2.7

Limited Quantity Requirements

The requirements of Subsection 2.8 must be met including:

- the capability of the package to pass a drop test of 1.2m;
- a 24 hour stacking test.
- the gross weight of the completed package must not exceed 30 kg.

Additional Packing Requirements

- matches, safety (book, card or strike on box) must be of a type that will not ignite spontaneously under normal conditions of air transport and can be readily ignited by friction only by striking on the manufacturer's box, book or card;
- matches must be tightly packed to prevent movement within the package and ignition by rubbing against adjoining box, book or card; they must be securely wrapped in paper or foil, or packed in tightly closed inner packagings;
- not more than 50 books of matches may be packed in one inner packaging.

Single packagings are not permitted.

COMBINATION PACKAGINGS

INNER PACKAGINGS

UN Number	Quantity per package
UN 1944, Matches, safety UN 1945, Matches, wax vesta	10 kg

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Desc																

PACKING INSTRUCTION 456

This instruction applies to Celluloid (UN 2000) on passenger aircraft and Cargo Aircraft Only.

The General Packing Requirements of Subsection 5.0.2 must be met.

UN Number	Quantity per package Passenger aircraft	Quantity per package Cargo Aircraft Only
UN 2000, Celluloid	25 kg	100 kg

PACKING INSTRUCTION 457

This instruction applies to 2-Bromo-2-Nitropropane-1, 3-diol (UN 3241) on passenger aircraft and Cargo Aircraft Only.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Additional Packing Requirements

- Packagings must meet Packing Group II performance standards;

Combination and single packagings are permitted.

COMBINATION PACKAGINGS

UN Number	Inner Packaging (see 6.1)	Net quantity per inner packaging	Quantity per package passenger aircraft	Quantity per package Cargo Aircraft Only
UN 3241, 2-Bromo-2-Nitropropane-1, 3-diol	Glass	0.5 kg	25 kg	50 kg
	Plastic	1.0 kg		
	Plastic bag	1.0 kg		

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Aluminium	Plywood	Fibre	Plastic	Other metal	Steel	Aluminium	Plastic	Steel	Aluminium	Wood	Plywood	Reconstituted wood	Fibre-board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

SINGLE PACKAGINGS

Type	Drums						Jerricans			Composites
Desc	Steel	Aluminium	Plywood	Fibre	Plastic	Other metal	Steel	Aluminium	Plastic	Plastic
Spec	1A1 1A2	1B1 1B2	1D	1G	1H1 1H2	1N1 1N2	3A1 3A2	3B1 3B2	3H1 3H2	All

PACKING INSTRUCTION Y457

This instruction applies to 2-Bromo-2-Nitropropane-1, 3-diol (UN 3241) packed in Limited Quantity.

The General Packing Requirements of Subsection 5.0.2 must be met.

The General Packing Requirements of Subsection 5.0.2 (with the exception of 5.0.2.3, 5.0.2.5, 5.0.2.11(f), 5.0.2.11(g) and 5.0.2.14) must be met except that the packagings do not have to meet the marking and testing requirements of 6.0.4 and Subsection 6.3. Packagings must meet the construction criteria specified in Subsections 6.1 and 6.2 and the test criteria specified in Subsection 6.6.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6

Closure Requirements

Closures must meet the requirements of 5.0.2.7

Limited Quantity Requirements

The requirements of Subsection 2.8 must be met including:

- ♦ the capability of the package to pass a drop test of 1.2m;
- ♦ a 24 hour stacking test.
- ♦ the gross weight of the completed package must not exceed 30 kg.

Single packagings are not permitted.

COMBINATION PACKAGINGS

UN Number	Inner Packaging (see 6.1)	Net quantity per inner packaging	Quantity per package
UN 3241, 2-Bromo-2-Nitropropane-1, 3-diol	Glass	0.5 kg	5 kg
	Plastic	0.5 kg	
	Plastic bag	0.5 kg	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic

PACKING INSTRUCTION 458

This instruction applies to Nitrocellulose membrane filters (UN 3270) on passenger aircraft and Cargo Aircraft Only.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Additional Packing Requirements

- Packagings must meet Packing Group II performance standards.

Single packagings are not permitted.

COMBINATION PACKAGINGS

UN Number	Quantity per package Passenger aircraft	Quantity per package Cargo Aircraft Only
UN 3270, Nitrocellulose membrane filters	1 kg	15 kg

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

PACKING INSTRUCTION Y458

This instruction applies to Nitrocellulose membrane filters (UN 3270) packed in Limited Quantity.

The General Packing Requirements of Subsection 5.0.2 (with the exception of 5.0.2.3, 5.0.2.5, 5.0.2.11(f), 5.0.2.11(g) and 5.0.2.14) must be met except that the packagings do not have to meet the marking and testing requirements of 6.0.4 and Subsection 6.3. Packagings must meet the construction criteria specified in Subsections 6.1 and 6.2 and the test criteria specified in Subsection 6.6.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6

Closure Requirements

Closures must meet the requirements of 5.0.2.7

Limited Quantity Requirements

The requirements of Subsection 2.8 must be met including:

- the capability of the package to pass a drop test of 1.2m;
- a 24 hour stacking test.
- the gross weight of the completed package must not exceed 30 kg.

Single packagings are not permitted.

COMBINATION PACKAGINGS

UN Number	Quantity per package
UN 3270, Nitrocellulose membrane filters	1 kg

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic

PACKING INSTRUCTION 459

This instruction applies to Self-reactive substances on passenger aircraft and Cargo Aircraft Only.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6
- Metal packagings must be corrosion resistant or with protection against corrosion for substances with a Class 8 subsidiary risk.

Closure Requirements

Closures must meet the requirements of 5.0.2.7

Additional Packing Requirements

- ◆ Packagings must meet Packing Group II performance standards;
- ◆ Cushioning materials must not be readily combustible.

Single packagings are not permitted.

COMBINATION PACKAGINGS

LIQUIDS	Inner Packaging (see 6.1)	Net quantity per inner packaging Passenger Aircraft	Net quantity per inner packaging Cargo Aircraft Only	Total net quantity per package Passenger aircraft	Total net quantity per package Cargo Aircraft Only
UN 3223	Plastic	0.5 L	5.0 L	1.0 L	10.0 L
UN 3225	Plastic	0.5 L	5.0 L		
UN 3227	Plastic	1.0 L	10.0 L	2.5 L	25.0 L
UN 3229	Plastic	1.0 L	10.0 L		
SOLIDS					
UN 3224	Plastic	0.5 kg	5.0 kg	1.0 kg	10.0 kg
UN 3226	Plastic	0.5 kg	5.0 kg		
UN 3228	Plastic	1.0 kg	10.0 kg	2.5 kg	25.0 kg
UN 3230	Plastic	1.0 kg	10.0 kg		

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

Division 4.2

PACKING INSTRUCTION 462

This instruction applies to Division 4.2 liquids in Packing Group II on passenger aircraft.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;
- Metal packagings must be corrosion resistant or with protection against corrosion for substances with a subsidiary risk of Class 8.

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Single packagings are not permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	1.0 L	1.0 L
Metal	1.0 L	
Plastic	1.0 L	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Aluminium	Plywood	Fibre	Plastic	Other metal	Steel	Aluminium	Plastic	Steel	Aluminium	Wood	Plywood	Reconstituted wood	Fibre-board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

PACKING INSTRUCTION 463

This instruction applies to Division 4.2 liquids in Packing Group III on passenger aircraft.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;
- Metal packagings must be corrosion resistant or with protection against corrosion for substances with a subsidiary risk of Class 8.

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Additional Packing Requirements

- ♦ Packagings must meet Packing Group II performance standards.

Combination and single packagings are permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	2.5 L	5.0 L
Metal	5.0 L	
Plastic	2.5 L	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Aluminium	Plywood	Fibre	Plastic	Other metal	Steel	Aluminium	Plastic	Steel	Aluminium	Wood	Plywood	Reconstituted wood	Fibre-board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

SINGLE PACKAGINGS

Type	Drums				Jerricans			Composites	Cylinders
Desc	Steel	Aluminium	Plastic	Other metal	Steel	Aluminium	Plastic	Plastic	
Spec	1A1	1B1	1H1	1N1	3A1	3B1	3H1	All	As permitted in 5.0.6.6

PACKING INSTRUCTION 464

This instruction applies to Division 4.2 liquids in Packing Group II on Cargo Aircraft Only.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;
- Metal packagings must be corrosion resistant or with protection against corrosion for substances with a subsidiary risk of Class 8.

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Single packagings are not permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	2.5 L	5.0 L
Metal	5.0 L	
Plastic	2.5 L	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

PACKING INSTRUCTION 465

This instruction applies to Division 4.2 liquids in Packing Group III on Cargo Aircraft Only.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;
- Metal packagings must be corrosion resistant or with protection against corrosion for substances with a subsidiary risk of Class 8.

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Additional Packing Requirements

- ♦ Packagings must meet Packing Group II performance standards.

Combination and single packagings are permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	5.0 L	60.0 L
Metal	10.0 L	
Plastic	5.0 L	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

SINGLE PACKAGINGS

Type	Drums				Jerricans			Composites	Cylinders
Desc	Steel	Aluminium	Plastic	Other metal	Steel	Aluminium	Plastic	Plastic	
Spec	1A1	1B1	1H1	1N1	3A1	3B1	3H1	All	As permitted in 5.0.6.6

PACKING INSTRUCTION 466

This instruction applies to Division 4.2 solids with a corrosive or toxic subsidiary risk in Packing Group II on passenger aircraft. The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;
- Metal packagings must be corrosion resistant or with protection against corrosion for substances with a subsidiary risk of Class 8.

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Single packagings are not permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	1.0 kg	15 kg
Metal	1.0 kg	
Plastic	1.0 kg	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

PACKING INSTRUCTION 467

This instruction applies to Division 4.2 solids without a subsidiary risk in Packing Group II on passenger aircraft. The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Single packagings are not permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	1.0 kg	15 kg
Metal	2.5 kg	
Plastic	2.5 kg	
Plastic bag	1.0 kg	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

PACKING INSTRUCTION 468

This instruction applies to Division 4.2 solids with subsidiary risks in Packing Group III on passenger aircraft.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;
- Metal packagings must be corrosion resistant or with protection against corrosion for substances with a subsidiary risk of Class 8.

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Additional Packing Requirements

- ♦ Packagings must meet Packing Group II performance standards.

Single packagings are not permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	2.5 kg	25 kg
Metal	5.0 kg	
Plastic	2.5 kg	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

PACKING INSTRUCTION 469

This instruction applies to Division 4.2 solids without a subsidiary in Packing Group III on passenger aircraft.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Additional Packing Requirements

- ♦ Packagings must meet Packing Group II performance standards.

Single packagings are not permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	5.0 kg	25 kg
Metal	10.0 kg	
Plastic	10.0 kg	
Plastic bag	5.0 kg	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

PACKING INSTRUCTION 470

This instruction applies to Division 4.2 solids in Packing Group II on Cargo Aircraft Only.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;
- Metal packagings must be corrosion resistant or with protection against corrosion for substances with a subsidiary risk of Class 8.

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Additional Packing Requirements

- ♦ Fibre, wood and plywood single packagings must be fitted with a suitable liner
Combination and single packagings are permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	2.5 kg	50 kg
Metal	5.0 kg	
Plastic	5.0 kg	
Plastic bag	2.5 kg	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Aluminium	Plywood	Fibre	Plastic	Other metal	Steel	Aluminium	Plastic	Steel	Aluminium	Wood	Plywood	Reconstituted wood	Fibre-board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

SINGLE PACKAGINGS

Type	Drums				Jerricans			Boxes							Composites	Cylinders
Desc	Steel	Aluminium	Plastic	Other metal	Steel	Aluminium	Plastic	Steel	Aluminium	Wood	Plywood	Reconstituted wood	Fibre-board	Plastic	Plastic	
Spec	1A1 1A2	1B1 1B2	1H1 1H2	1N1 1N2	3A1 3A2	3B1 3B2	3H1 3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2	All	As permitted in 5.0.6.6

PACKING INSTRUCTION 471

This instruction applies to Division 4.2 solids in Packing Group III on Cargo Aircraft Only.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;
- Metal packagings must be corrosion resistant or with protection against corrosion for substances with a subsidiary risk of Class 8.

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Additional Packing Requirements

- ♦ Packagings must meet Packing Group II performance standards.
- ♦ Fibre, wood and plywood single packagings must be fitted with a suitable liner

Combination and single packagings are permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	5.0 kg	100 kg
Metal	10.0 kg	
Plastic	10.0 kg	
Plastic bag	5.0 kg	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

SINGLE PACKAGINGS

Type	Drums				Jerricans			Boxes							Comp- sites	Cylinders
Desc	Steel	Alum- inium	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic	Plastic	
Spec	1A1 1A2	1B1 1B2	1H1 1H2	1N1 1N2	3A1 3A2	3B1 3B2	3H1 3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2	All	As permitted in 5.0.6.6

PACKING INSTRUCTION 472

This instruction applies to Carbon, activated (UN 1362) on passenger aircraft and Cargo Aircraft Only.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Single packagings are not permitted.

COMBINATION PACKAGINGS

UN Number	Inner Packaging (see 6.1)	Net quantity per inner packaging	Quantity per package
UN 1362, Carbon, activated	Plastic	0.1 kg	0.5 kg

OUTER PACKAGINGS

Type	Drums		Jerricans		Boxes	
	Steel	Aluminium	Steel	Aluminium	Steel	Aluminium
Spec	1A2	1B2	3A2	3B2	4A	4B

PACKING INSTRUCTION 473

This instruction applies to UN 1378 in Packing Group II and UN 2881 in Packing Group II and III on passenger aircraft and Cargo Aircraft Only.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6

Closure Requirements

Closures must meet the requirements of 5.0.2.7

Additional Packing Requirements

- All packagings for UN 2881 in Packing Group III must meet Packing Group II performance standards.

Single packagings are only permitted for UN 2881 in Packing Group III on Cargo Aircraft Only;

COMBINATION PACKAGINGS

	Inner Packaging (see 6.1)	Net quantity per inner packaging Passenger Aircraft	Net quantity per inner packaging Cargo Aircraft Only	Total net quantity per package Passenger aircraft	Total net quantity per package Cargo Aircraft Only
UN 1378, Metal catalyst, wetted , PG II	Glass	Forbidden	1.0 kg	Forbidden	50.0 kg
	Metal		1.0 kg		
UN 2881, Metal catalyst, dry , PG II	Glass	Forbidden	1.0 kg	Forbidden	50.0 kg
	Metal		1.0 kg		
UN 2881, Metal catalyst, dry , PG III	Glass	1.0 kg	2.5 kg	25.0 kg	100.0 kg
	Metal	1.0 kg	5.0 kg		

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

SINGLE PACKAGINGS – PG III Cargo Aircraft Only

Type	Drums	Jerricans
Desc	Steel	Steel
Spec	1A1, 1A2	3A1, 3A2

Division 4.3

PACKING INSTRUCTION Y474

This instruction applies to Limited Quantities of Division 4.3 solids with a toxic subsidiary risk in Packing Group II.

The General Packing Requirements of Subsection 5.0.2 (with the exception of 5.0.2.3, 5.0.2.5, 5.0.2.11(f), 5.0.2.11(g) and 5.0.2.14) must be met except that the packagings do not have to meet the marking and testing requirements of 6.0.4 and Subsection 6.3. Packagings must meet the construction criteria specified in Subsections 6.1 and 6.2 and the test criteria specified in Subsection 6.6.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6

Closure Requirements

Closures must meet the requirements of 5.0.2.7

Limited Quantity Requirements

The requirements of Subsection 2.8 must be met including:

- the capability of the package to pass a drop test of 1.2m;
- a 24 hour stacking test.
- the gross weight of the completed package must not exceed 30 kg.

Additional Packing Requirements

- for wetted substances where the outer packaging is not leakproof, a leakproof liner or equally effective means for intermediate containment must be provided.

Single packagings are not permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	0.5 kg	1.0 kg
Metal	0.5 kg	
Plastic	0.5 kg	
Plastic bag	0.5 kg	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Desc																

PACKING INSTRUCTION Y475

This instruction applies to Limited Quantities of Division 4.3 solids in Packing Group II.

The General Packing Requirements of Subsection 5.0.2 (with the exception of 5.0.2.3, 5.0.2.5, 5.0.2.11(f), 5.0.2.11(g) and 5.0.2.14) must be met except that the packagings do not have to meet the marking and testing requirements of 6.0.4 and Subsection 6.3. Packagings must meet the construction criteria specified in Subsections 6.1 and 6.2 and the test criteria specified in Subsection 6.6.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6
- Metal packagings must be corrosion resistant or with protection against corrosion for substances with a Class 8 subsidiary risk.

Closure Requirements

Closures must meet the requirements of 5.0.2.7

Limited Quantity Requirements

The requirements of Subsection 2.8 must be met including:

- ♦ the capability of the package to pass a drop test of 1.2m;
- ♦ a 24 hour stacking test.
- ♦ the gross weight of the completed package must not exceed 30 kg.

Additional Packing Requirements

- ♦ for wetted substances where the outer packaging is not leakproof, a leakproof liner or equally effective means for intermediate containment must be provided.

Single packagings are not permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	0.5 kg	5.0 kg
Metal	0.5 kg	
Plastic	0.5 kg	
Plastic bag	0.5 kg	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Desc																

PACKING INSTRUCTION Y476

This instruction applies to Limited Quantities of Division 4.3 solids in Packing Group III.

The General Packing Requirements of Subsection 5.0.2 (with the exception of 5.0.2.3, 5.0.2.5, 5.0.2.11(f), 5.0.2.11(g) and 5.0.2.14) must be met except that the packagings do not have to meet the marking and testing requirements of 6.0.4 and Subsection 6.3. Packagings must meet the construction criteria specified in Subsections 6.1 and 6.2 and the test criteria specified in Subsection 6.6.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6
- Metal packagings must be corrosion resistant or with protection against corrosion for substances with a Class 8 subsidiary risk.

Closure Requirements

Closures must meet the requirements of 5.0.2.7

Limited Quantity Requirements

The requirements of Subsection 2.8 must be met including:

- ♦ the capability of the package to pass a drop test of 1.2m;
- ♦ a 24 hour stacking test.
- ♦ the gross weight of the completed package must not exceed 30 kg.

Additional Packing Requirements

- ♦ for wetted substances where the outer packaging is not leakproof, a leakproof liner or equally effective means for intermediate containment must be provided.

Single packagings are not permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	1.0 kg	5.0 kg
Metal	1.0 kg	
Plastic	1.0 kg	
Plastic bag	1.0 kg	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Desc																

PACKING INSTRUCTION Y477

This instruction applies to Limited Quantities of Division 4.3 solids in Packing Group III.

The General Packing Requirements of Subsection 5.0.2 (with the exception of 5.0.2.3, 5.0.2.5, 5.0.2.11(f), 5.0.2.11(g) and 5.0.2.14) must be met except that the packagings do not have to meet the marking and testing requirements of 6.0.4 and Subsection 6.3. Packagings must meet the construction criteria specified in Subsections 6.1 and 6.2 and the test criteria specified in Subsection 6.6.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6

Closure Requirements

Closures must meet the requirements of 5.0.2.7

Limited Quantity Requirements

The requirements of Subsection 2.8 must be met including:

- the capability of the package to pass a drop test of 1.2m;
- a 24 hour stacking test.
- the gross weight of the completed package must not exceed 30 kg.

Additional Packing Requirements

- for wetted substances where the outer packaging is not leakproof, a leakproof liner or equally effective means for intermediate containment must be provided.

Single packagings are not permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	1.0 kg	10.0 kg
Metal	1.0 kg	
Plastic	1.0 kg	
Plastic bag	1.0 kg	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic

PACKING INSTRUCTION 478

This instruction applies to Division 4.3 liquids in Packing Group II on passenger aircraft.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Additional Packing Requirements

- ♦ inner packagings must have threaded enclosures and must be surrounded in inert cushioning and absorbent material in a quantity sufficient to absorb the entire contents then enclosed in a leakproof liner, plastic bag or other equally effective means of intermediate leakproof containment.

Single packagings are not permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	1.0 L	1.0 L
Metal	1.0 L	
Plastic	1.0 L	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

PACKING INSTRUCTION 479

This instruction applies to Division 4.3 liquids in Packing Group III on passenger aircraft.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;
- Metal packagings must be corrosion resistant or with protection against corrosion for substances with a subsidiary risk of Class 8.

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Additional Packing Requirements

- ♦ Packagings must meet Packing Group II performance standards.

Combination and single packagings are permitted.

COMBINATION PACKAGINGS

INNER PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	2.5 L	5.0 L
Metal	5.0 L	
Plastic	2.5 L	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Aluminium	Plywood	Fibre	Plastic	Other metal	Steel	Aluminium	Plastic	Steel	Aluminium	Wood	Plywood	Reconstituted wood	Fibreboard	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

SINGLE PACKAGINGS

Type	Drums				Jerricans			Composites	Cylinders
Desc	Steel	Aluminium	Plastic	Other metal	Steel	Aluminium	Plastic	Plastic	
Spec	1A1	1B1	1H1	1N1	3A1	3B1	3H1	All	As permitted in 5.0.6.6

PACKING INSTRUCTION 480

This instruction applies to Division 4.3 liquids in Packing Group I on Cargo Aircraft Only.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;
- Metal packagings must be corrosion resistant or with protection against corrosion for substances with a subsidiary risk of Class 8.

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Additional Packing Requirements

- ♦ inner packagings must have threaded enclosures and must be surrounded in inert cushioning and absorbent material in a quantity sufficient to absorb the entire contents then enclosed in a leakproof liner, plastic bag or other equally effective means of intermediate leakproof containment.

Combination and single packagings are permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	1.0 L	1.0 L
Metal	1.0 L	
Plastic	Forbidden	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

SINGLE PACKAGINGS

Cylinders: provided that the general provisions of 5.0.6.6 are met. Cylinders must be made of steel and subjected to an initial test and period tests every 10 years at a pressure of not less than 0.6 Mpa (6 bar) (gauge pressure). During transport, the liquid must be under a layer of inert gas with a gauge pressure of not less than 20 kPa (0.2 bar).

PACKING INSTRUCTION 481

This instruction applies to Division 4.3 liquids in Packing Group II on Cargo Aircraft Only.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;
- Metal packagings must be corrosion resistant or with protection against corrosion for substances with a subsidiary risk of Class 8.

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Additional Packing Requirements

- Inner packagings must have threaded enclosures and must be surrounded in inert cushioning and absorbent material in a quantity sufficient to absorb the entire contents.

Combination and single packagings are permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	2.5 L	5.0 L
Metal	5.0 L	
Plastic	2.5 L	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

SINGLE PACKAGINGS

Cylinders: provided that the general provisions of 5.0.6.6 are met. Cylinders must be made of steel and subjected to an initial test and period tests every 10 years at a pressure of not less than 0.6 Mpa (6 bar) (gauge pressure). During transport, the liquid must be under a layer of inert gas with a gauge pressure of not less than 20 kPa (0.2 bar).

PACKING INSTRUCTION 482

This instruction applies to Division 4.3 liquids in Packing Group III on Cargo Aircraft Only.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;
- Metal packagings must be corrosion resistant or with protection against corrosion for substances with a subsidiary risk of Class 8.

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Additional Packing Requirements

- Packagings must meet Packing Group II performance standards.

Combination and single packagings are permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	5.0 L	60.0 L
Metal	10.0 L	
Plastic	5.0 L	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

SINGLE PACKAGINGS

Type	Drums				Jerricans			Composites	Cylinders
Desc	Steel	Aluminium	Plastic	Other metal	Steel	Aluminium	Plastic	Plastic	
Spec	1A1	1B1	1H1	1N1	3A1	3B1	3H1	All	As permitted in 5.0.6.6

PACKING INSTRUCTION 483

This instruction applies to Division 4.3 solids in Packing Group II on passenger aircraft.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;
- Metal packagings must be corrosion resistant or with protection against corrosion for substances with a subsidiary risk of Class 8.

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Single packagings are not permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	1.0 kg	15 kg
Metal	1.0 kg	
Plastic	1.0 kg	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
	Steel	Aluminium	Plywood	Fibre	Plastic	Other metal	Steel	Aluminium	Plastic	Steel	Aluminium	Wood	Plywood	Reconstituted wood	Fibre-board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

PACKING INSTRUCTION 484

This instruction applies to Division 4.3 solids without a subsidiary risk in Packing Group II on passenger aircraft.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Single packagings are not permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	1.0 kg	15 kg
Metal	2.5 kg	
Plastic	2.5 kg	
Plastic bag	1.0 kg	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
	Steel	Aluminium	Plywood	Fibre	Plastic	Other metal	Steel	Aluminium	Plastic	Steel	Aluminium	Wood	Plywood	Reconstituted wood	Fibre-board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

PACKING INSTRUCTION 485

This instruction applies to Division 4.3 solids in Packing Group III on passenger aircraft.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;
- Metal packagings must be corrosion resistant or with protection against corrosion for substances with a subsidiary risk of Class 8.

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Additional Packing Requirements

- Packagings must meet Packing Group II performance standards.
- For wetted substances where the outer packaging is not leakproof, a leakproof liner or equally effective means of intermediate containment must be provided.

Single packagings are not permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	2.5 kg	25 kg
Metal	5.0 kg	
Plastic	2.5 kg	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

PACKING INSTRUCTION 486

This instruction applies to Division 4.3 solids in Packing Group III on passenger aircraft.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;
- Metal packagings must be corrosion resistant or with protection against corrosion for substances with a subsidiary risk of Class 8.

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Additional Packing Requirements

- Packagings must meet Packing Group II performance standards.
- For wetted substances where the outer packaging is not leakproof, a leakproof liner or equally effective means of intermediate containment must be provided.

Single packagings are not permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	5.0 kg	25 kg
Metal	10.0 kg	
Plastic	10.0 kg	
Plastic bag	5.0 kg	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

PACKING INSTRUCTION 487

This instruction applies to Division 4.3 solids in Packing Group I on Cargo Aircraft Only.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Additional Packing Requirements

- inner packagings must be hermetically sealed, e.g. by taping or by threaded closures.
- for wetted substances where the outer packaging is not leakproof, a leakproof liner or equally effective means of intermediate containment must be provided.

Combination and single packagings are permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	1.0 kg	15 kg
Metal	1.0 kg	
Plastic	1.0 kg	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
	Steel	Aluminium	Plywood	Fibre	Plastic	Other metal	Steel	Aluminium	Plastic	Steel	Aluminium	Wood	Plywood	Reconstituted wood	Fibre-board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

SINGLE PACKAGINGS

Type	Drums				Jerricans			Composites	Cylinders
Desc	Steel	Aluminium	Plastic	Other metal	Steel	Aluminium	Plastic	Plastic	
Spec	1A1	1B1	1H1	1N1	3A1	3B1	3H1	All	As permitted in 5.0.6.6

PACKING INSTRUCTION 488

This instruction applies to Division 4.3 solids in Packing Group I on Cargo Aircraft Only.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;
- Metal packagings must be corrosion resistant or with protection against corrosion for substances with a subsidiary risk of Class 8.

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Additional Packing Requirements

- inner packagings must be hermetically sealed, e.g. by taping or by threaded closures.
- for wetted substances where the outer packaging is not leakproof, a leakproof liner or equally effective means of intermediate containment must be provided.

Combination and single packagings are permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	1.0 kg	15 kg
Metal	2.5 kg	
Plastic	2.5 kg	
Plastic bag	2.5 kg	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

SINGLE PACKAGINGS

Type	Drums				Jerricans			Composites	Cylinders
Desc	Steel	Aluminium	Plastic	Other metal	Steel	Aluminium	Plastic	Plastic	
Spec	1A1	1B1	1H1	1N1	3A1	3B1	3H1	All	As permitted in 5.0.6.6

PACKING INSTRUCTION 489

This instruction applies to Division 4.3 solids in Packing Group II on Cargo Aircraft Only.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Additional Packing Requirements

- for wetted substances where the outer packaging is not leakproof, a leakproof liner or equally effective means of intermediate containment must be provided.
- fibre, wood and plywood single packagings must be fitted with a suitable liner

Combination and single packagings are permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	2.5 kg	50 kg
Metal	5.0 kg	
Plastic	2.5 kg	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

SINGLE PACKAGINGS

Type	Drums				Jerricans			Boxes							Comp- sites	Cylinders
	Steel	Alum- inium	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic		
Spec	1A1 1A2	1B1 1B2	1H1 1H2	1N1 1N2	3A1 3A2	3B1 3B2	3H1 3H2	4A	4B	4C1 4C2	4D	4F	4G	4H2	All	As permitted in 5.0.6.6

PACKING INSTRUCTION 490

This instruction applies to Division 4.3 solids in Packing Group II on Cargo Aircraft Only.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;
- Metal packagings must be corrosion resistant or with protection against corrosion for substances with a subsidiary risk of Class 8.

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Additional Packing Requirements

- for wetted substances where the outer packaging is not leakproof, a leakproof liner or equally effective means of intermediate containment must be provided.
- fibre, wood and plywood single packagings must be fitted with a suitable liner

Combination and single packagings are permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	2.5 kg	50 kg
Metal	5.0 kg	
Plastic	5.0 kg	
Plastic bag	2.5 kg	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

SINGLE PACKAGINGS

Type	Drums				Jerricans			Boxes							Comp- sites	Cylinders
Desc	Steel	Alum- inium	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic	Plastic	
Spec	1A1 1A2	1B1 1B2	1H1 1H2	1N1 1N2	3A1 3A2	3B1 3B2	3H1 3H2	4A	4B	4C1 4C2	4D	4F	4G	4H2	All	As permitted in 5.0.6.6

PACKING INSTRUCTION 491

This instruction applies to Division 4.3 solids in Packing Group III on Cargo Aircraft Only.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;
- Metal packagings must be corrosion resistant or with protection against corrosion for substances with a subsidiary risk of Class 8.

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Additional Packing Requirements

- Packagings must meet Packing Group II performance standards.
- For wetted substances where the outer packaging is not leakproof, a leakproof liner or equally effective means of intermediate containment must be provided.
- Fibre, wood and plywood single packagings must be fitted with a suitable liner

Combination and single packagings are permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	5.0 kg	100 kg
Metal	10.0 kg	
Plastic	10.0 kg	
Plastic bag	5.0 kg	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

SINGLE PACKAGINGS

Type	Drums				Jerricans			Boxes							Comp- sites	Cylinders
	Steel	Alum- inium	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic		
Spec	1A1 1A2	1B1 1B2	1H1 1H2	1N1 1N2	3A1 3A2	3B1 3B2	3H1 3H2	4A	4B	4C1 4C2	4D	4F	4G	4H2	All	As permitted in 5.0.6.6

PACKING INSTRUCTION 492

This instruction applies to Cells, containing sodium and Batteries, containing sodium (UN 3292) on passenger aircraft and Cargo Aircraft Only.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Additional Packaging Requirements

- ◆ Packagings must meet Packing Group II performance standards;
- ◆ Cells must be packed in outer packagings with sufficient cushioning material to prevent contact between cells and between cells and the internal surfaces of the outer packaging and to ensure that no dangerous movement of the cells within the outer packaging occurs in transport;
- ◆ Batteries must be protected against short circuit and must be isolated in such a manner as to prevent short circuits.

Single packagings are not permitted.

COMBINATION PACKAGINGS

INNER PACKAGINGS

UN Number		Quantity per package passenger aircraft	Quantity per package Cargo Aircraft Only
UN 3292, Cells, containing sodium		25 kg	25 kg
UN 3292, Batteries, containing sodium	Batteries may be offered for transport and transported unpacked or in protective enclosures such as fully enclosed or wooden slatted crates that are not subject to the requirements of Section 6	Forbidden	No limit

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

PACKING INSTRUCTION 493

This instruction applies to Organometallic substance, liquid, water reactive, flammable (UN3399) on passenger aircraft.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Additional Packaging Requirements

- ♦ Glass inner packagings must be packed with absorbent material and placed in a rigid leakproof receptacle before packing in outer packagings.
- ♦ Packagings must meet Packing Group II performance standards.

Single packagings are not permitted.

COMBINATION PACKAGINGS

INNER PACKAGINGS

UN Number	Inner Packaging (see 6.1)	Net quantity per inner packaging	Quantity per package
UN 3399, Organometallic substance, liquid, water reactive, flammable , PG II	Cylinders (see 5.0.6.6)	1.0 L	1.0 L
	Glass	1.0 L	
UN 3399, Organometallic substance, liquid, water reactive, flammable , PG III	Cylinders (see 5.0.6.6)	5.0 L	5.0 L
	Glass	5.0 L	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

PACKING INSTRUCTION 494

This instruction applies to Organometallic substance, liquid, water reactive, flammable (UN3399) on Cargo Aircraft Only.
The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Additional Packaging Requirements

Packing Group I

- Inner packagings must have threaded enclosures and must be surrounded in inert cushioning and absorbent material in a quantity sufficient to absorb the entire contents and enclosed in a leakproof liner, plastic bag or other equally effective means of intermediate leakproof containment.

Packing Group II

- Glass inner packagings must be packed with absorbent material and placed in a rigid leakproof receptacle before packing in outer packagings.

Packing Group III

- Cylinders, as provided in 5.0.6.6, may be used as single packagings.
- Packagings must meet Packing Group II performance standards.

Single packagings are not permitted for PG I and PG II.

COMBINATION PACKAGINGS

INNER PACKAGINGS

UN Number	Inner Packaging (see 6.1)	Net quantity per inner packaging	Quantity per package
UN 3399, Organometallic substance, liquid, water reactive, flammable, PG I	Cylinders (see 5.0.6.6)	1.0 L	1.0 L
	Glass	1.0 L	
UN 3399, Organometallic substance, liquid, water reactive, flammable, PG II	Cylinders (see 5.0.6.6)	2.5 L	5.0 L
	Glass	2.5 L	
UN 3399, Organometallic substance, liquid, water reactive, flammable, PG III	Cylinders (see 5.0.6.6)	5.0 L	60.0 L
	Glass	5.0 L	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

SINGLE PACKAGINGS – Packing Group III only

Cylinders: provided that the general provisions of 5.0.6.6 are met.

PACKING INSTRUCTION 495 – 497, 499

Note: Packing Instructions 495 to 497 and 499 are not included in this appendix as the content and format is the same as is shown in Section 5 of the 50th edition DGR.

5.5 Packing Instructions — Class 5 — Oxidizing Substances; Organic Peroxides

Division 5.1

PACKING INSTRUCTION Y540

This instruction applies to Limited Quantities of Division 5.1 liquids in Packing Group II.

The General Packing Requirements of Subsection 5.0.2 (with the exception of 5.0.2.3, 5.0.2.5, 5.0.2.11(f), 5.0.2.11(g) and 5.0.2.14) must be met except that the packagings do not have to meet the marking and testing requirements of 6.0.4 and Subsection 6.3. Packagings must meet the construction criteria specified in Subsections 6.1 and 6.2 and the test criteria specified in Subsection 6.6.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6
- Metal packagings must be corrosion resistant or with protection against corrosion for substances with a subsidiary risk of Class 8.

Closure Requirements

Closures must meet the requirements of 5.0.2.7

Limited Quantity Requirements

The requirements of Subsection 2.8 must be met including:

- ♦ the capability of the package to pass a drop test of 1.2m;
- ♦ a 24 hour stacking test.
- ♦ inner packagings for liquids must be capable of passing a pressure differential test (5.0.2.9);
- ♦ the gross weight of the completed package must not exceed 30 kg.

Single packagings are not permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	0.1 L	0.5 L
Metal	0.1 L	
Plastic	0.1 L	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic

PACKING INSTRUCTION Y541

This instruction applies to Limited Quantities of Division 5.1 liquids in Packing Group III.

The General Packing Requirements of Subsection 5.0.2 (with the exception of 5.0.2.3, 5.0.2.5, 5.0.2.11(f), 5.0.2.11(g) and 5.0.2.14) must be met except that the packagings do not have to meet the marking and testing requirements of 6.0.4 and Subsection 6.3. Packagings must meet the construction criteria specified in Subsections 6.1 and 6.2 and the test criteria specified in Subsection 6.6.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6
- Metal packagings must be corrosion resistant or with protection against corrosion for substances with a Class 8 subsidiary risk.

Closure Requirements

Closures must meet the requirements of 5.0.2.7

Limited Quantity Requirements

The requirements of Subsection 2.8 must be met including:

- ♦ the capability of the package to pass a drop test of 1.2m;
- ♦ a 24 hour stacking test.
- ♦ inner packagings for liquids must be capable of passing a pressure differential test (5.0.2.9);
- ♦ the gross weight of the completed package must not exceed 30 kg.

Single packagings are not permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	0.5 L	1.0 L
Metal	0.5 L	
Plastic	0.5 L	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic

PACKING INSTRUCTION Y543

This instruction applies to Limited Quantities of Division 5.1 solids with a Division 6.1 subsidiary risk in Packing Group II.

The General Packing Requirements of Subsection 5.0.2 (with the exception of 5.0.2.3, 5.0.2.5, 5.0.2.11(f), 5.0.2.11(g) and 5.0.2.14) must be met except that the packagings do not have to meet the marking and testing requirements of 6.0.4 and Subsection 6.3. Packagings must meet the construction criteria specified in Subsections 6.1 and 6.2 and the test criteria specified in Subsection 6.6.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6

Closure Requirements

Closures must meet the requirements of 5.0.2.7

Limited Quantity Requirements

The requirements of Subsection 2.8 must be met including:

- the capability of the package to pass a drop test of 1.2m;
- a 24 hour stacking test.
- the gross weight of the completed package must not exceed 30 kg.

Single packagings are not permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Fibre	0.5 kg	1.0 kg
Glass	0.5 kg	
Metal	0.5 kg	
Paper bag	0.5 kg	
Plastic	0.5 kg	
Plastic bag	0.5 kg	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic

PACKING INSTRUCTION Y544

This instruction applies to Limited Quantities of Division 5.1 solids with a corrosive, or no subsidiary risk in Packing Group II.

The General Packing Requirements of Subsection 5.0.2 (with the exception of 5.0.2.3, 5.0.2.5, 5.0.2.11(f), 5.0.2.11(g) and 5.0.2.14) must be met except that the packagings do not have to meet the marking and testing requirements of 6.0.4 and Subsection 6.3. Packagings must meet the construction criteria specified in Subsections 6.1 and 6.2 and the test criteria specified in Subsection 6.6.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6
- Metal packagings must be corrosion resistant or with protection against corrosion for substances with a Class 8 subsidiary risk.

Closure Requirements

Closures must meet the requirements of 5.0.2.7

Limited Quantity Requirements

The requirements of Subsection 2.8 must be met including:

- ♦ the capability of the package to pass a drop test of 1.2m;
- ♦ a 24 hour stacking test.
- ♦ the gross weight of the completed package must not exceed 30 kg.

Single packagings are not permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Fibre	0.5 kg	2.5 kg
Glass	0.5 kg	
Metal	0.5 kg	
Paper bag	0.5 kg	
Plastic	0.5 kg	
Plastic bag	0.5 kg	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic

PACKING INSTRUCTION Y545

This instruction applies to Limited Quantities of Division 5.1 solids with a corrosive subsidiary risk in Packing Group III.

The General Packing Requirements of Subsection 5.0.2 (with the exception of 5.0.2.3, 5.0.2.5, 5.0.2.11(f), 5.0.2.11(g) and 5.0.2.14) must be met except that the packagings do not have to meet the marking and testing requirements of 6.0.4 and Subsection 6.3. Packagings must meet the construction criteria specified in Subsections 6.1 and 6.2 and the test criteria specified in Subsection 6.6.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6
- Metal packagings must be corrosion resistant or with protection against corrosion for substances with a Class 8 subsidiary risk.

Closure Requirements

Closures must meet the requirements of 5.0.2.7

Limited Quantity Requirements

The requirements of Subsection 2.8 must be met including:

- ♦ the capability of the package to pass a drop test of 1.2m;
- ♦ a 24 hour stacking test.
- ♦ the gross weight of the completed package must not exceed 30 kg.

Single packagings are not permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Fibre	1.0 kg	5.0 kg
Glass	1.0 kg	
Metal	1.0 kg	
Paper bag	1.0 kg	
Plastic	1.0 kg	
Plastic bag	1.0 kg	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic

PACKING INSTRUCTION Y546

This instruction applies to Limited Quantities of Division 5.1 solids with a toxic, or no subsidiary risk in Packing Group III.

The General Packing Requirements of Subsection 5.0.2 (with the exception of 5.0.2.3, 5.0.2.5, 5.0.2.11(f), 5.0.2.11(g) and 5.0.2.14) must be met except that the packagings do not have to meet the marking and testing requirements of 6.0.4 and Subsection 6.3. Packagings must meet the construction criteria specified in Subsections 6.1 and 6.2 and the test criteria specified in Subsection 6.6.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6

Closure Requirements

Closures must meet the requirements of 5.0.2.7

Limited Quantity Requirements

The requirements of Subsection 2.8 must be met including:

- the capability of the package to pass a drop test of 1.2m;
- a 24 hour stacking test.
- the gross weight of the completed package must not exceed 30 kg.

Single packagings are not permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Fibre	1.0 kg	10.0 kg
Glass	1.0 kg	
Metal	1.0 kg	
Paper bag	1.0 kg	
Plastic	1.0 kg	
Plastic bag	1.0 kg	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic

PACKING INSTRUCTION 550

This instruction applies to Division 5.1 liquids in Packing Group II on passenger aircraft.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;
- Metal packagings must be corrosion resistant or with protection against corrosion for substances with a Class 8 subsidiary risk.

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Single packagings are not permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	1.0 L	1.0 L
Metal	1.0 L	
Plastic	1.0 L	

OUTER PACKAGINGS

Type	Drums						Boxes						
Desc	Steel	Alum- inium	Plywood	Fibre	Plastic	Other metal	Steel	Alum- inium	Wood	Plywood	Recon- stituted wood	Fibre- board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	4A	4B	4C1 4C2	4D	4F	4G	4H2

PACKING INSTRUCTION 551

This instruction applies to Division 5.1 liquids in Packing Group III on passenger aircraft.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;
- Metal packagings must be corrosion resistant or with protection against corrosion for substances with a subsidiary risk of Class 8.

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Additional Packing Requirements

- ♦ Packagings must meet Packing Group II performance standards.

Single packagings are not permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	2.5 L	2.5 L
Metal	2.5 L	
Plastic	2.5 L	

OUTER PACKAGINGS

Type	Drums						Boxes						
Desc	Steel	Alum- inium	Plywood	Fibre	Plastic	Other metal	Steel	Alum- inium	Wood	Plywood	Recon- stituted wood	Fibre- board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	4A	4B	4C1 4C2	4D	4F	4G	4H2

PACKING INSTRUCTION 553

This instruction applies to Division 5.1 liquids in Packing Group I on Cargo Aircraft Only.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;
- Metal packagings must be corrosion resistant or with protection against corrosion for substances with a subsidiary risk of Class 8.

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Additional Packing Requirements

- ◆ Inner packagings must be packed with absorbent material and placed in a rigid leakproof receptacle before packing in outer packagings.
- ◆ UN 1873 only glass inner packagings are permitted.

Single packagings are not permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	1.0 L	2.5 L
Metal	1.0 L	
Plastic	1.0 L	

OUTER PACKAGINGS

Type	Drums						Boxes						
Desc	Steel	Alum- inium	Plywood	Fibre	Plastic	Other metal	Steel	Alum- inium	Wood	Plywood	Recon- stituted wood	Fibre- board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	4A	4B	4C1 4C2	4D	4F	4G	4H2

PACKING INSTRUCTION 554

This instruction applies to Division 5.1 liquids in Packing Group II on Cargo Aircraft Only.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;
- Metal packagings must be corrosion resistant or with protection against corrosion for substances with a subsidiary risk of Class 8.

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Single packagings are not permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	2.5 L	5.0 L
Metal	2.5 L	
Plastic	2.5 L	

OUTER PACKAGINGS

Type	Drums						Boxes						
Desc	Steel	Alum- inium	Plywood	Fibre	Plastic	Other metal	Steel	Alum- inium	Wood	Plywood	Recon- stituted wood	Fibre- board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	4A	4B	4C1 4C2	4D	4F	4G	4H2

PACKING INSTRUCTION 555

This instruction applies to Division 5.1 liquids in Packing Group III on Cargo Aircraft Only.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;
- Metal packagings must be corrosion resistant or with protection against corrosion for substances with a subsidiary risk of Class 8.

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Additional Packing Requirements

- ◆ Packagings must meet Packing Group II performance standards.

Combination and single packagings are permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	5.0 L	30.0 L
Metal	5.0 L	
Plastic	5.0 L	

OUTER PACKAGINGS

Type	Drums						Boxes						
	Steel	Aluminium	Plywood	Fibre	Plastic	Other metal	Steel	Aluminium	Wood	Plywood	Reconstituted wood	Fibre-board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	4A	4B	4C1 4C2	4D	4F	4G	4H2

SINGLE PACKAGINGS

Type	Drums				Jerricans			Composites
Desc	Steel	Aluminium	Plastic	Other metal	Steel	Aluminium	Plastic	Plastic
Spec	1A1	1B1	1H1	1N1	3A1	3B1	3H1	All

PACKING INSTRUCTION 557

This instruction applies to Division 5.1 solids in Packing Group I on passenger aircraft.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;
- Metal packagings must be corrosion resistant or with protection against corrosion for substances with a subsidiary risk of Class 8.

Closure Requirements

Closures must meet the requirements of 5.0.2.7.

Additional Packaging Requirements

- ♦ for wetted substances where the outer packaging is not leakproof, a leakproof liner or equally effective means of intermediate containment must be provided.

Single packagings are not permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	1.0 kg	1.0 kg
Metal	1.0 kg	
Plastic	1.0 kg	

OUTER PACKAGINGS

Type	Drums						Boxes						
	Steel	Aluminium	Plywood	Fibre	Plastic	Other metal	Steel	Aluminium	Wood	Plywood	Reconstituted wood	Fibre-board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

PACKING INSTRUCTION 558

This instruction applies to Division 5.1 solids in Packing Group II on passenger aircraft.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;
- Metal packagings must be corrosion resistant or with protection against corrosion for substances with a subsidiary risk of Class 8.

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Additional Packaging Requirements

- ♦ for wetted substances where the outer packaging is not leakproof, a leakproof liner or equally effective means of intermediate containment must be provided.

Single packagings are not permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Fibre	1.0 kg	5 kg
Glass	1.0 kg	
Metal	1.0 kg	
Paper bag	1.0 kg	
Plastic	1.0 kg	
Plastic bag	1.0 kg	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

PACKING INSTRUCTION 559

This instruction applies to Division 5.1 solids in Packing Group III on passenger aircraft.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;
- Metal packagings must be corrosion resistant or with protection against corrosion for substances with a subsidiary risk of Class 8.

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Additional Packaging Requirements

- ◆ For wetted substances where the outer packaging is not leakproof, a leakproof liner or equally effective means of intermediate containment must be provided.
- ◆ Packagings must meet Packing Group II performance standards.

Single packagings are not permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Fibre	2.5 kg	25 kg
Glass	2.5 kg	
Metal	2.5 kg	
Paper bag	2.5 kg	
Plastic	2.5 kg	
Plastic bag	2.5 kg	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

PACKING INSTRUCTION 561

This instruction applies to Division 5.1 solids in Packing Group I on Cargo Aircraft Only.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;
- Metal packagings must be corrosion resistant or with protection against corrosion for substances with a subsidiary risk of Class 8.

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Additional Packaging Requirements

- ♦ for wetted substances where the outer packaging is not leakproof, a leakproof liner or equally effective means of intermediate containment must be provided.

Combination and single packagings are permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	1.0 kg	1.0 kg
Metal	1.0 kg	
Plastic	1.0 kg	

OUTER PACKAGINGS

Type	Drums						Boxes						
	Steel	Aluminium	Plywood	Fibre	Plastic	Other metal	Steel	Aluminium	Wood	Plywood	Reconstituted wood	Fibre-board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

SINGLE PACKAGINGS

Type	Drums		
Desc	Steel	Aluminium	Other metal
Spec	1A1 1A2	1B1 1B2	1N1 1N2

PACKING INSTRUCTION 562

This instruction applies to Division 5.1 solids in Packing Group II on Cargo Aircraft Only.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;
- Metal packagings must be corrosion resistant or with protection against corrosion for substances with a subsidiary risk of Class 8.

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Additional Packing Requirements

- ♦ for wetted substances where the outer packaging is not leakproof, a leakproof liner or equally effective means of intermediate containment must be provided.
- ♦ fibre, wood and plywood single packagings must be fitted with a suitable liner

Combination and single packagings are permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Fibre	2.5 kg	25 kg
Glass	2.5 kg	
Metal	5.0 kg	
Paper bag	2.5 kg	
Plastic	2.5 kg	
Plastic bag	2.5 kg	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

SINGLE PACKAGINGS

Type	Drums						Jerricans			Boxes						Comp- osites	Cylinders	
Desc	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic	Plastic	
Spec	1A1 1A2	1B1 1B2	1D	1G	1H1 1H2	1N1 1N2	3A1 3A2	3B1 3B2	3H1 3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2	All	As permitted in 5.0.6.6

PACKING INSTRUCTION 563

This instruction applies to Division 5.1 solids in Packing Group III on Cargo Aircraft Only.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;
- Metal packagings must be corrosion resistant or with protection against corrosion for substances with a subsidiary risk of Class 8.

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Additional Packing Requirements

- ♦ packagings must meet Packing Group II performance standards;
- ♦ for wetted substances where the outer packaging is not leakproof, a leakproof liner or equally effective means of intermediate containment must be provided;
- ♦ fibre, wood and plywood single packagings must be fitted with a suitable liner

Combination and single packagings are permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Fibre	5.0 kg	100 kg
Glass	5.0 kg	
Metal	5.0 kg	
Paper bag	5.0 kg	
Plastic	5.0 kg	
Plastic bag	5.0 kg	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

SINGLE PACKAGINGS

Type	Drums						Jerricans			Boxes							Comp- osites	Cylinders
Desc	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic	Plastic	
Spec	1A1 1A2	1B1 1B2	1D	1G	1H1 1H2	1N1 1N2	3A1 3A2	3B1 3B2	3H1 3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2	All	As permitted in 5.0.6.6

PACKING INSTRUCTION 565

This packing instruction applies to Oxygen generator, chemical (UN 3356) on Cargo Aircraft Only.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

Substances must be compatible with their packagings as required by 5.0.2.6;

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Additional Packing Requirements

Oxygen generator, chemical containing oxidizing substances, including when fitted in associated equipment e.g. passenger service units (PSUs), portable breathing equipment (PBE) etc., must meet all the following conditions:

- (a) the generator, without its packaging, must be capable of withstanding a 1.8 m (6 ft) drop test onto a rigid, non-resilient, flat and horizontal surface in the position most likely to cause actuation without loss of its contents and without actuation. For PBE, which are in a vacuum-sealed bag as part of their containment system, this test may be conducted on the PBE in the vacuum-sealed bag;
- (b) when a generator is equipped with an actuating device it must have at least two positive means of preventing unintentional actuation. For PBE, which are in a vacuum-sealed bag as part of their containment system, the vacuum-sealed bag may be considered the second positive means of preventing unintentional actuation;
- (c) the generator(s) must be transported in a package which will meet the following requirements when one generator in the package is actuated:
 - (1) other generators in the package will not be actuated;
 - (2) packaging material will not ignite; and
 - (3) the outside surface temperature of the completed package will not exceed 100°C (212°F).

Note: To enable test (c) (1), (2) and (3) to be conducted on PBE, it is acceptable to break the vacuum-sealed bag to actuate the generator before placing in the package.

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

Division 5.2

PACKING INSTRUCTION 570

This instruction applies to Division 5.2 Organic peroxides on passenger aircraft and Cargo Aircraft Only.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6
- Metal packagings must be corrosion resistant or with protection against corrosion for substances with a Class 8 subsidiary risk.

Closure Requirements

Closures must meet the requirements of 5.0.2.7

Additional Packing Requirements

- ♦ packagings must meet Packing Group II performance standards.

Single packagings are not permitted.

COMBINATION PACKAGINGS

LIQUIDS					
UN Number	Inner Packaging (see 6.1)	Net quantity per inner packaging Passenger Aircraft	Net quantity per inner packaging Cargo Aircraft Only	Total net quantity per package Passenger aircraft	Total net quantity per package Cargo Aircraft Only
UN 3103	Plastic	0.5 L	1.0 L	5.0 L	10.0 L
UN 3105	Plastic	0.5 L	1.0 L		
UN 3107	Plastic	1.0 L	2.5 L	10.0 L	25.0 L
UN 3109	Plastic	1.0 L	2.5 L		
SOLIDS					
UN 3104	Plastic	0.5 kg	1.0 kg	5.0 kg	10.0 kg
UN 3106	Plastic	0.5 kg	1.0 kg		
UN 3108	Plastic	1.0 kg	2.5 kg	10.0 kg	25.0 kg
UN 3110	Plastic	1.0 kg	2.5 kg		

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

5.6 Packing Instructions — Class 6 — Toxic and Infectious Substances

PACKING INSTRUCTION Y640

This instruction applies to Limited Quantities of Division 6.1 liquids with a Class 8 or a Class 3 and Class 8 subsidiary risk in Packing Group II.

The General Packing Requirements of Subsection 5.0.2 (with the exception of 5.0.2.3, 5.0.2.5, 5.0.2.11(f), 5.0.2.11(g) and 5.0.2.14) must be met except that the packagings do not have to meet the marking and testing requirements of 6.0.4 and Subsection 6.3. Packagings must meet the construction criteria specified in Subsections 6.1 and 6.2 and the test criteria specified in Subsection 6.6.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6
- Metal packagings must be corrosion resistant or with protection against corrosion for substances with a subsidiary risk of Class 8.

Closure Requirements

Closures must meet the requirements of 5.0.2.7

Limited Quantity Requirements

The requirements of Subsection 2.8 must be met including:

- ♦ the capability of the package to pass a drop test of 1.2m;
- ♦ a 24 hour stacking test;
- ♦ inner packagings for liquids must be capable of passing a pressure differential test (5.0.2.9);
- ♦ the gross weight of the completed package must not exceed 30 kg.

Single packagings are not permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	0.1 L	0.5 L
Metal	0.1 L	
Plastic	0.1 L	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Desc																

PACKING INSTRUCTION Y641

This instruction applies to Limited Quantities of Division 6.1 liquids with a Class 3 or no subsidiary risk in Packing Group II.

The General Packing Requirements of Subsection 5.0.2 (with the exception of 5.0.2.3, 5.0.2.5, 5.0.2.11(f), 5.0.2.11(g) and 5.0.2.14) must be met except that the packagings do not have to meet the marking and testing requirements of 6.0.4 and Subsection 6.3. Packagings must meet the construction criteria specified in Subsections 6.1 and 6.2 and the test criteria specified in Subsection 6.6.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6
- Metal packagings must be corrosion resistant or with protection against corrosion for substances with a subsidiary risk of Class 8.

Closure Requirements

Closures must meet the requirements of 5.0.2.7

Limited Quantity Requirements

The requirements of Subsection 2.8 must be met including:

- ♦ the capability of the package to pass a drop test of 1.2m;
- ♦ a 24 hour stacking test;
- ♦ inner packagings for liquids must be capable of passing a pressure differential test (5.0.2.9);
- ♦ the gross weight of the completed package must not exceed 30 kg.

Single packagings are not permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	0.1 L	1.0 L
Metal	0.1 L	
Plastic	0.1 L	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic

PACKING INSTRUCTION Y642

This instruction applies to Limited Quantities of Division 6.1 liquids in Packing Group III.

The General Packing Requirements of Subsection 5.0.2 (with the exception of 5.0.2.3, 5.0.2.5, 5.0.2.11(f), 5.0.2.11(g) and 5.0.2.14) must be met except that the packagings do not have to meet the marking and testing requirements of 6.0.4 and Subsection 6.3. Packagings must meet the construction criteria specified in Subsections 6.1 and 6.2 and the test criteria specified in Subsection 6.6.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6
- Metal packagings must be corrosion resistant or with protection against corrosion for substances with a Class 8 subsidiary risk.

Closure Requirements

Closures must meet the requirements of 5.0.2.7

Limited Quantity Requirements

The requirements of Subsection 2.8 must be met including:

- ♦ the capability of the package to pass a drop test of 1.2m;
- ♦ a 24 hour stacking test;
- ♦ inner packagings for liquids must be capable of passing a pressure differential test (5.0.2.9);
- ♦ the gross weight of the completed package must not exceed 30 kg.

Single packagings are not permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	0.5 L	2.0 L
Metal	0.5 L	
Plastic	0.5 L	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic

PACKING INSTRUCTION Y644

This instruction applies to Limited Quantities of Division 6.1 solids in Packing Group II.

The General Packing Requirements of Subsection 5.0.2 (with the exception of 5.0.2.3, 5.0.2.5, 5.0.2.11(f), 5.0.2.11(g) and 5.0.2.14) must be met except that the packagings do not have to meet the marking and testing requirements of 6.0.4 and Subsection 6.3. Packagings must meet the construction criteria specified in Subsections 6.1 and 6.2 and the test criteria specified in Subsection 6.6.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6
- Metal packagings must be corrosion resistant or with protection against corrosion for substances with a Class 8 subsidiary risk.

Closure Requirements

Closures must meet the requirements of 5.0.2.7

Limited Quantity Requirements

The requirements of Subsection 2.8 must be met including:

- ♦ the capability of the package to pass a drop test of 1.2m;
- ♦ a 24 hour stacking test;
- ♦ the gross weight of the completed package must not exceed 30 kg.

Single packagings are not permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Fibre	0.5 kg	1.0 kg
Glass	0.5 kg	
Metal	0.5 kg	
Paper bag	0.5 kg	
Plastic	0.5 kg	
Plastic bag	0.5 kg	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic

PACKING INSTRUCTION Y645

This instruction applies to Limited Quantities of Division 6.1 solids in Packing Group III.

The General Packing Requirements of Subsection 5.0.2 (with the exception of 5.0.2.3, 5.0.2.5, 5.0.2.11(f), 5.0.2.11(g) and 5.0.2.14) must be met except that the packagings do not have to meet the marking and testing requirements of 6.0.4 and Subsection 6.3. Packagings must meet the construction criteria specified in Subsections 6.1 and 6.2 and the test criteria specified in Subsection 6.6.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6
- Metal packagings must be corrosion resistant or with protection against corrosion for substances with a Class 8 subsidiary risk.

Closure Requirements

Closures must meet the requirements of 5.0.2.7

Limited Quantity Requirements

The requirements of Subsection 2.8 must be met including:

- ♦ the capability of the package to pass a drop test of 1.2m;
- ♦ a 24 hour stacking test;
- ♦ the gross weight of the completed package must not exceed 30 kg.

Single packagings are not permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Fibre	1.0 kg	10.0 kg
Glass	1.0 kg	
Metal	1.0 kg	
Paper bag	1.0 kg	
Plastic	1.0 kg	
Plastic bag	1.0 kg	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic

PACKING INSTRUCTION 651

This instruction applies to Division 6.1 liquids with a Class 8 subsidiary risk in Packing Group I on passenger aircraft.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;
- Metal packagings must be corrosion resistant or with protection against corrosion for substances with a Class 8 subsidiary risk.

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Additional Packing Requirements

- ♦ Inner packagings must be packed with absorbent material and placed in a rigid leakproof receptacle before packing in outer packagings.

Single packagings are not permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	0.5 L	0.5 L
Metal	0.5 L	
Plastic	0.5 L	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

PACKING INSTRUCTION 652

This instruction applies to Division 6.1 liquids with a Class 3 or no subsidiary risk in Packing Group I on passenger aircraft.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Additional Packing Requirements

- ♦ inner packagings must be packed with absorbent material and placed in a rigid leakproof receptacle before packing in outer packagings.

Single packagings are not permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	0.5 L	1.0 L
Metal	1.0 L	
Plastic	0.5 L	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

PACKING INSTRUCTION 653

This instruction applies to Division 6.1 liquids in Packing Group II on passenger aircraft.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;
- Metal packagings must be corrosion resistant or with protection against corrosion for substances with a Class 8 subsidiary risk.

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Single packagings are not permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	1.0 L	1.0 L
Metal	1.0 L	
Plastic	1.0 L	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

PACKING INSTRUCTION 654

This instruction applies to Division 6.1 liquids with a Class 3 or no subsidiary risk in Packing Group II on passenger aircraft.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Single packagings are not permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	1.0 L	5.0 L
Metal	2.5 L	
Plastic	1.0 L	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

PACKING INSTRUCTION 655

This instruction applies to Division 6.1 liquids in Packing Group III on passenger aircraft.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;
- Metal packagings must be corrosion resistant or with protection against corrosion for substances with a subsidiary risk of Class 8.

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Combination and single packagings are permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	2.5 L	60.0 L
Metal	5.0 L	
Plastic	2.5 L	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
	Steel	Aluminium	Plywood	Fibre	Plastic	Other metal	Steel	Aluminium	Plastic	Steel	Aluminium	Wood	Plywood	Reconstituted wood	Fibre-board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

SINGLE PACKAGINGS

Type	Drums				Jerricans			Composites	Cylinders
Desc	Steel	Aluminium	Plastic	Other metal	Steel	Aluminium	Plastic	Plastic	
Spec	1A1, 1A2	1B1, 1B2	1H1, 1H2	1N1, 1N2	3A1, 3A2	3B1, 3B2	3H1, 3H2	All	As permitted in 5.0.6.6

PACKING INSTRUCTION 657

This instruction applies to Division 6.1 liquids with a Division 5.1 or Class 8 subsidiary risk in Packing Group I on Cargo Aircraft Only. The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;
- Metal packagings must be corrosion resistant or with protection against corrosion for substances with a subsidiary risk of Class 8.

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Additional Packing Requirements

- ♦ inner packagings must be packed with absorbent material and placed in a rigid leakproof receptacle before packing in outer packagings.

Combination and single packagings are permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	1.0 L	2.5 L
Metal	2.5 L	
Plastic	1.0 L	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Aluminium	Plywood	Fibre	Plastic	Other metal	Steel	Aluminium	Plastic	Steel	Aluminium	Wood	Plywood	Reconstituted wood	Fibreboard	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

SINGLE PACKAGINGS

Type	Drums				Jerricans			Composites	Cylinders
Desc	Steel	Aluminium	Plastic	Other metal	Steel	Aluminium	Plastic	Plastic	
Spec	1A1	1B1	1H1	1N1	3A1	3B1	3H1	All	As permitted in 5.0.6.6

PACKING INSTRUCTION 658

This instruction applies to Division 6.1 liquids with a Class 3 or no subsidiary risk in Packing Group I on Cargo Aircraft Only. The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Additional Packing Requirements

- inner packagings must be packed with absorbent material and placed in a rigid leakproof receptacle before packing in outer packagings.

Combination and single packagings are permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	1.0 L	30.0 L
Metal	2.5 L	
Plastic	1.0 L	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Aluminium	Plywood	Fibre	Plastic	Other metal	Steel	Aluminium	Plastic	Steel	Aluminium	Wood	Plywood	Reconstituted wood	Fibre-board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

SINGLE PACKAGINGS

Type	Drums				Jerricans			Composites	Cylinders
Desc	Steel	Aluminium	Plastic	Other metal	Steel	Aluminium	Plastic	Plastic	
Spec	1A1	1B1	1H1	1N1	3A1	3B1	3H1	All	As permitted in 5.0.6.6

PACKING INSTRUCTION 659

This instruction applies to Division 6.1 liquids in Packing Group II on Cargo Aircraft Only.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Combination and single packagings are permitted.

COMBINATION PACKAGINGS

INNER PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	1.0 L	5.0 L
Metal	2.5 L	
Plastic	1.0 L	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Aluminium	Plywood	Fibre	Plastic	Other metal	Steel	Aluminium	Plastic	Steel	Aluminium	Wood	Plywood	Reconstituted wood	Fibreboard	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

SINGLE PACKAGINGS

Type	Drums				Jerricans			Composites	Cylinders
Desc	Steel	Aluminium	Plastic	Other metal	Steel	Aluminium	Plastic	Plastic	
Spec	1A1	1B1	1H1	1N1	3A1	3B1	3H1	All	As permitted in 5.0.6.6

PACKING INSTRUCTION 660

This instruction applies to Division 6.1 liquids in Packing Group II on Cargo Aircraft Only.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;
- Metal packagings must be corrosion resistant or with protection against corrosion for substances with a subsidiary risk of Class 8.

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Combination and single packagings are permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	1.0 L	30.0 L
Metal	2.5 L	
Plastic	1.0 L	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Aluminium	Plywood	Fibre	Plastic	Other metal	Steel	Aluminium	Plastic	Steel	Aluminium	Wood	Plywood	Reconstituted wood	Fibreboard	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

SINGLE PACKAGINGS

Type	Drums				Jerricans			Composites	Cylinders
Desc	Steel	Aluminium	Plastic	Other metal	Steel	Aluminium	Plastic	Plastic	
Spec	1A1	1B1	1H1	1N1	3A1	3B1	3H1	All	As permitted in 5.0.6.6

PACKING INSTRUCTION 661

This instruction applies to Division 6.1 liquids in Packing Group II on Cargo Aircraft Only.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Combination and single packagings are permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	1.0 L	60.0 L
Metal	2.5 L	
Plastic	1.0 L	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Aluminium	Plywood	Fibre	Plastic	Other metal	Steel	Aluminium	Plastic	Steel	Aluminium	Wood	Plywood	Reconstituted wood	Fibreboard	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

SINGLE PACKAGINGS

Type	Drums				Jerricans			Composites	Cylinders
Desc	Steel	Aluminium	Plastic	Other metal	Steel	Aluminium	Plastic	Plastic	
Spec	1A1	1B1	1H1	1N1	3A1	3B1	3H1	All	As permitted in 5.0.6.6

PACKING INSTRUCTION 662

This instruction applies to Division 6.1 liquids in Packing Group II on Cargo Aircraft Only.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Combination and single packagings are permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	2.5 L	60.0 L
Metal	5.0 L	
Plastic	2.5 L	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Aluminium	Plywood	Fibre	Plastic	Other metal	Steel	Aluminium	Plastic	Steel	Aluminium	Wood	Plywood	Reconstituted wood	Fibreboard	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

SINGLE PACKAGINGS

Type	Drums				Jerricans			Composites	Cylinders
Desc	Steel	Aluminium	Plastic	Other metal	Steel	Aluminium	Plastic	Plastic	
Spec	1A1	1B1	1H1	1N1	3A1	3B1	3H1	All	As permitted in 5.0.6.6

PACKING INSTRUCTION 663

This instruction applies to Division 6.1 liquids in Packing Group III on Cargo Aircraft Only.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;
- Metal packagings must be corrosion resistant or with protection against corrosion for substances with a subsidiary risk of Class 8.

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Combination and single packagings are permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	5.0 L	220.0 L
Metal	10.0 L	
Plastic	5.0 L	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
	Steel	Aluminium	Plywood	Fibre	Plastic	Other metal	Steel	Aluminium	Plastic	Steel	Aluminium	Wood	Plywood	Reconstituted wood	Fibre-board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

SINGLE PACKAGINGS

Type	Drums				Jerricans			Composites	Cylinders
Desc	Steel	Aluminium	Plastic	Other metal	Steel	Aluminium	Plastic	Plastic	
Spec	1A1 1A2	1B1 1B2	1H1 1H2	1N1 1N2	3A1 3A2	3B1 3B2	3H1 3H2	All	As permitted in 5.0.6.6

PACKING INSTRUCTION 665

This instruction applies to Division 6.1 solids in Packing Group I on passenger aircraft.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;
- Metal packagings must be corrosion resistant or with protection against corrosion for substances with a subsidiary risk of Class 8.

Closure Requirements

Closures must meet the requirements of 5.0.2.7.

Single packagings are not permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	0.5 kg	1.0 kg
Metal	1.0 kg	
Plastic	1.0 kg	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
	Steel	Aluminium	Plywood	Fibre	Plastic	Other metal	Steel	Aluminium	Plastic	Steel	Aluminium	Wood	Plywood	Reconstituted wood	Fibre-board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

PACKING INSTRUCTION 666

This instruction applies to Division 6.1 solids without a subsidiary risk in Packing Group I on passenger aircraft.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;

Closure Requirements

Closures must meet the requirements of 5.0.2.7.

Single packagings are not permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	0.5 kg	5.0 kg
Metal	1.0 kg	
Plastic	1.0 kg	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
	Steel	Aluminium	Plywood	Fibre	Plastic	Other metal	Steel	Aluminium	Plastic	Steel	Aluminium	Wood	Plywood	Reconstituted wood	Fibre-board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

PACKING INSTRUCTION 667

This instruction applies to Division 6.1 solids with a Division 5.1 subsidiary risk in Packing Group II on passenger aircraft. The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Single packagings are not permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Fibre	1.0 kg	5 kg
Glass	1.0 kg	
Metal	2.5 kg	
Paper bag	1.0 kg	
Plastic	2.5 kg	
Plastic bag	1.0 kg	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

PACKING INSTRUCTION 668

This instruction applies to Division 6.1 solids with subsidiary risks in Packing Group II on passenger aircraft.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;
- Metal packagings must be corrosion resistant or with protection against corrosion for substances with a subsidiary risk of Class 8.

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Single packagings are not permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Fibre	1.0 kg	15 kg
Glass	1.0 kg	
Metal	2.5 kg	
Paper bag	1.0 kg	
Plastic	2.5 kg	
Plastic bag	1.0 kg	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

PACKING INSTRUCTION 669

This instruction applies to Division 6.1 solids without a subsidiary risk in Packing Group II on passenger aircraft.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Single packagings are not permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Fibre	1.0 kg	25 kg
Glass	1.0 kg	
Metal	2.5 kg	
Paper bag	1.0 kg	
Plastic	2.5 kg	
Plastic bag	1.0 kg	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

PACKING INSTRUCTION 670

This instruction applies to Division 6.1 solids in Packing Group III on passenger aircraft.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;
- Metal packagings must be corrosion resistant or with protection against corrosion for substances with a subsidiary risk of Class 8.

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Additional Packaging Requirements

- ♦ Fibre, wood and plywood single packagings must be fitted with a suitable liner.

Combination and single packagings are permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Fibre	2.5 kg	25 kg
Glass	2.5 kg	
Metal	2.5 kg	
Paper bag	2.5 kg	
Plastic	2.5 kg	
Plastic bag	2.5 kg	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

SINGLE PACKAGINGS

Type	Drums						Jerricans			Boxes							Bags	Compos- ites	Cylin- ders
Desc	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic		Plastic	
Spec	1A1 1A2	1B1 1B2	1D	1G	1H1 1H2	1N1 1N2	3A1 3A2	3B1 3B2	3H1 3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2	5L3, 5H3, 5H4, 5M2	All	As perm- itted in 5.0.6.6

PACKING INSTRUCTION 672

This instruction applies to Division 6.1 solids in Packing Group I on Cargo Aircraft Only.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;
- Metal packagings must be corrosion resistant or with protection against corrosion for substances with a subsidiary risk of Class 8.

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Additional Packaging Requirements

- ♦ Fibre, wood and plywood single packagings must be fitted with a suitable liner.

Combination and single packagings are permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Fibre	1.0 kg	15 kg
Glass	1.0 kg	
Metal	2.5 kg	
Paper bag	1.0 kg	
Plastic	2.5 kg	
Plastic bag	1.0 kg	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

SINGLE PACKAGINGS

Type	Drums						Jerricans			Composites	Cylinders
Desc	Steel	Aluminium	Plywood	Fibre	Plastic	Other metal	Steel	Aluminium	Plastic	Plastic	
Spec	1A1 1A2	1B1 1B2	1D	1G	1H1 1H2	1N1 1N2	3A1 3A2	3B1 3B2	3H1 3H2	All	As permitted in 5.0.6.6

PACKING INSTRUCTION 673

This instruction applies to Division 6.1 solids without a subsidiary risk in Packing Group I on Cargo Aircraft Only.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Additional Packaging Requirements

- ♦ Fibre, wood and plywood single packagings must be fitted with a suitable liner.

Combination and single packagings are permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Fibre	1.0 kg	50 kg
Glass	1.0 kg	
Metal	2.5 kg	
Paper bag	1.0 kg	
Plastic	2.5 kg	
Plastic bag	1.0 kg	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
	Steel	Aluminium	Plywood	Fibre	Plastic	Other metal	Steel	Aluminium	Plastic	Steel	Aluminium	Wood	Plywood	Reconstituted wood	Fibre-board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

SINGLE PACKAGINGS

Type	Drums						Jerricans			Composites	Cylinders
Desc	Steel	Aluminium	Plywood	Fibre	Plastic	Other metal	Steel	Aluminium	Plastic	Plastic	
Spec	1A1 1A2	1B1 1B2	1D	1G	1H1 1H2	1N1 1N2	3A1 3A2	3B1 3B2	3H1 3H2	All	As permitted in 5.0.6.6

PACKING INSTRUCTION 674

This instruction applies to Division 6.1 solids in Packing Group II on Cargo Aircraft Only.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Additional Packing Requirements

- ♦ Fibre, wood and plywood single packagings must be fitted with a suitable liner.

Combination and single packagings are permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Fibre	2.5 kg	25 kg
Glass	2.5 kg	
Metal	5.0 kg	
Paper bag	2.5 kg	
Plastic	5.0 kg	
Plastic bag	2.5 kg	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

SINGLE PACKAGINGS

Type	Drums						Jerricans			Boxes							Comp- sites	Cylinders
	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic		
Spec	1A1 1A2	1B1 1B2	1D	1G	1H1 1H2	1N1 1N2	3A1 3A2	3B1 3B2	3H1 3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2	All	As permitted in 5.0.6.6

PACKING INSTRUCTION 675

This instruction applies to Division 6.1 solids with a subsidiary risk in Packing Group II on Cargo Aircraft Only.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;
- Metal packagings must be corrosion resistant or with protection against corrosion for substances with a subsidiary risk of Class 8.

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Additional Packing Requirements

- ♦ Fibre, wood and plywood single packagings must be fitted with a suitable liner.

Combination and single packagings are permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Fibre	2.5 kg	50 kg
Glass	2.5 kg	
Metal	5.0 kg	
Paper bag	2.5 kg	
Plastic	5.0 kg	
Plastic bag	2.5 kg	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

SINGLE PACKAGINGS

Type	Drums						Jerricans			Boxes						Comp- osites	Cylinders	
Desc	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic	Plastic	
Spec	1A1 1A2	1B1 1B2	1D	1G	1H1 1H2	1N1 1N2	3A1 3A2	3B1 3B2	3H1 3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2	All	As permitted in 5.0.6.6

PACKING INSTRUCTION 676

This instruction applies to Division 6.1 solids without a subsidiary risk in Packing Group II on Cargo Aircraft Only.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Additional Packing Requirements

- ♦ Fibre, wood and plywood single packagings must be fitted with a suitable liner.

Combination and single packagings are permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Fibre	2.5 kg	100 kg
Glass	2.5 kg	
Metal	5.0 kg	
Paper bag	2.5 kg	
Plastic	5.0 kg	
Plastic bag	2.5 kg	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

SINGLE PACKAGINGS

Type	Drums						Jerricans			Boxes							Comp- osites	Cylinders
	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic		
Spec	1A1 1A2	1B1 1B2	1D	1G	1H1 1H2	1N1 1N2	3A1 3A2	3B1 3B2	3H1 3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2	All	As permitted in 5.0.6.6

PACKING INSTRUCTION 677

This instruction applies to Division 6.1 solids in Packing Group III on Cargo Aircraft Only.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;
- Metal packagings must be corrosion resistant or with protection against corrosion for substances with a subsidiary risk of Class 8.

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Additional Packing Requirements

- ♦ Fibre, wood and plywood single packagings must be fitted with a suitable liner

Combination and single packagings are permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Fibre	5.0 kg	200 kg
Glass	5.0 kg	
Metal	10.0 kg	
Paper bag	5.0 kg	
Plastic	10.0 kg	
Plastic bag	5.0 kg	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

SINGLE PACKAGINGS

Type	Drums						Jerricans			Boxes							Bags	Compos- ites	Cylin- ders
Desc	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic		Plastic	
Spec	1A1 1A2	1B1 1B2	1D	1G	1H1 1H2	1N1 1N2	3A1 3A2	3B1 3B2	3H1 3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2	5L3, 5H3, 5H4, 5M2	All	As perm- itted in 5.0.6.6

PACKING INSTRUCTION 679

This instruction applies to UN 1700, UN 2016 and UN 2017 on Cargo Aircraft Only.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Additional Packaging Requirements

- ♦ Packagings must meet Packing Group II performance standards.
- ♦ The articles must be individually packaged and separated from each other using partitions, dividers, inner packagings or cushioning material to prevent inadvertent discharge during normal conditions of transport.

Single packagings are not permitted.

COMBINATION PACKAGINGS

UN Number		Total net quantity per package
UN 1700, Tear gas candles	Elements must not be assembled in grenades or devices, but must be packed in a separate wooden (4C1, 4C2) box and so cushioned that they cannot come into contact with each other or with the walls of the packaging during transport. Not more than 24 grenades and 24 functioning devices per package are permitted	50 kg
UN 2016, Ammunition, toxic, non-explosive		75 kg
UN 2017, Ammunition, tear producing, non-explosive		50 kg

OUTER PACKAGINGS

Type	Drums						Boxes						
	Steel	Alum- inium	Plywood	Fibre	Plastic	Other metal	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

PACKING INSTRUCTION 680

This instruction applies to UN 1888, Chloroform on passenger aircraft and Cargo Aircraft Only.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6

Closure Requirements

Closures must meet the requirements of 5.0.2.7

Combination and single packagings are permitted.

COMBINATION PACKAGINGS

	Inner Packaging (see 6.1)	Net quantity per inner packaging Passenger Aircraft	Net quantity per inner packaging Cargo Aircraft Only	Total net quantity per package Passenger aircraft	Total net quantity per package Cargo Aircraft Only
UN 1888, Chloroform	Glass	1.0 L	2.5 L	60 L	220 L
	Metal	2.5 L	5.0 L		
	Plastic	1.0 L	2.5 L		

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

SINGLE PACKAGINGS CARGO AIRCRAFT ONLY

Type	Drums				Jerricans			Composites	Cylinders
Desc	Steel	Aluminium	Plastic	Other metal	Steel	Aluminium	Plastic	Plastic	
Spec	1A1 1A2	1B1 1B2	1H1 1H2	1N1 1N2	3A1 3A2	3B1, 3B2	3H1 3H2	All	As permitted in 5.0.6.6

PACKING INSTRUCTION Y680

For Limited Quantities of UN 1888, Chloroform.

The General Packing Requirements of Subsection 5.0.2 (with the exception of 5.0.2.3, 5.0.2.5, 5.0.2.11(f), 5.0.2.11(g) and 5.0.2.14) must be met except that the packagings do not have to meet the marking and testing requirements of 6.0.4 and Subsection 6.3. Packagings must meet the construction criteria specified in Subsections 6.1 and 6.2 and the test criteria specified in Subsection 6.6.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6

Closure Requirements

Closures must meet the requirements of 5.0.2.7

Limited Quantity Requirements

The requirements of Subsection 2.8 must be met including:

- ♦ the capability of the package to pass a drop test of 1.2m;
- ♦ a 24 hour stacking test;
- ♦ inner packagings for liquids must be capable of passing a pressure differential test (5.0.2.9);
- ♦ the gross weight of the completed package must not exceed 30 kg.

Single packagings are not permitted.

COMBINATION PACKAGINGS

INNER PACKAGINGS

	Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
UN 1888, Chloroform	Glass	0.1L	2.0 L
	Metal	0.1L	
	Plastic	0.1L	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic

PACKING INSTRUCTION 699

This instruction applies to UN 3123 in Packing Group I on Cargo Aircraft Only and UN 3125 in Packing Group I on passenger aircraft and Cargo Aircraft Only.

Only packagings that are approved by the appropriate national authority for these substances may be used (see 5.0.6.7). A copy of the approval must accompany each consignment or the Shipper's Declaration must include an indication of the approval.

5.8 Packing Instructions — Class 8 — Corrosives

PACKING INSTRUCTION Y840

This instruction applies to Limited Quantities of Class 8 liquids in Packing Group II.

The General Packing Requirements of Subsection 5.0.2 (with the exception of 5.0.2.3, 5.0.2.5, 5.0.2.11(f), 5.0.2.11(g) and 5.0.2.14) must be met except that the packagings do not have to meet the marking and testing requirements of 6.0.4 and Subsection 6.3. Packagings must meet the construction criteria specified in Subsections 6.1 and 6.2 and the test criteria specified in Subsection 6.6.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6
- Metal packagings must be corrosion resistant or with protection against corrosion.
- Substances of class 8 are permitted in glass or earthenware inner packagings only if the substance is free from hydrofluoric acid.

Closure Requirements

Closures must meet the requirements of 5.0.2.7

Limited Quantity Requirements

The requirements of Subsection 2.8 must be met including:

- ♦ the capability of the package to pass a drop test of 1.2m;
- ♦ a 24 hour stacking test;
- ♦ inner packagings for liquids must be capable of passing a pressure differential test (5.0.2.9);
- ♦ the gross weight of the completed package must not exceed 30 kg.

Single packagings are not permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	0.1 L	0.5 L
Metal	0.1 L	
Plastic	0.1 L	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic

PACKING INSTRUCTION Y841

This instruction applies to Limited Quantities of Class 8 liquids in Packing Group III.

The General Packing Requirements of Subsection 5.0.2 (with the exception of 5.0.2.3, 5.0.2.5, 5.0.2.11(f), 5.0.2.11(g) and 5.0.2.14) must be met except that the packagings do not have to meet the marking and testing requirements of 6.0.4 and Subsection 6.3. Packagings must meet the construction criteria specified in Subsections 6.1 and 6.2 and the test criteria specified in Subsection 6.6.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6
- Metal packagings must be corrosion resistant or with protection against corrosion.
- Substances of class 8 are permitted in glass or earthenware inner packagings only if the substance is free from hydrofluoric acid.

Closure Requirements

Closures must meet the requirements of 5.0.2.7

Limited Quantity Requirements

The requirements of Subsection 2.8 must be met including:

- ♦ the capability of the package to pass a drop test of 1.2m;
- ♦ a 24 hour stacking test;
- ♦ inner packagings for liquids must be capable of passing a pressure differential test (5.0.2.9);
- ♦ the gross weight of the completed package must not exceed 30 kg.

Single packagings are not permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	0.5 L	1.0 L
Metal	0.5 L	
Plastic	0.5 L	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic

PACKING INSTRUCTION Y843

This instruction applies to Limited Quantities of UN 2430 in Packing Group II.

The General Packing Requirements of Subsection 5.0.2 (with the exception of 5.0.2.3, 5.0.2.5, 5.0.2.11(f), 5.0.2.11(g) and 5.0.2.14) must be met except that the packagings do not have to meet the marking and testing requirements of 6.0.4 and Subsection 6.3. Packagings must meet the construction criteria specified in Subsections 6.1 and 6.2 and the test criteria specified in Subsection 6.6.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6
- Metal packagings must be corrosion resistant or with protection against corrosion.
- Substances of class 8 are permitted in glass or earthenware inner packagings only if the substance is free from hydrofluoric acid.

Closure Requirements

Closures must meet the requirements of 5.0.2.7

Limited Quantity Requirements

The requirements of Subsection 2.8 must be met including:

- ◆ the capability of the package to pass a drop test of 1.2m;
- ◆ a 24 hour stacking test;
- ◆ the gross weight of the completed package must not exceed 30 kg.

Single packagings are not permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	0.5 kg	1.0 kg
Metal	0.5 kg	
Plastic	0.5 kg	
Plastic bag	0.5 kg	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Desc																

PACKING INSTRUCTION Y844

This instruction applies to Limited Quantities of Class 8 solids in Packing Group II.

The General Packing Requirements of Subsection 5.0.2 (with the exception of 5.0.2.3, 5.0.2.5, 5.0.2.11(f), 5.0.2.11(g) and 5.0.2.14) must be met except that the packagings do not have to meet the marking and testing requirements of 6.0.4 and Subsection 6.3. Packagings must meet the construction criteria specified in Subsections 6.1 and 6.2 and the test criteria specified in Subsection 6.6.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6
- Metal packagings must be corrosion resistant or with protection against corrosion.
- Substances of class 8 are permitted in glass or earthenware inner packagings only if the substance is free from hydrofluoric acid.

Closure Requirements

Closures must meet the requirements of 5.0.2.7

Limited Quantity Requirements

The requirements of Subsection 2.8 must be met including:

- ◆ the capability of the package to pass a drop test of 1.2m;
- ◆ a 24 hour stacking test;
- ◆ the gross weight of the completed package must not exceed 30 kg.

Single packagings are not permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	0.5 kg	5.0 kg
Metal	0.5 kg	
Plastic	0.5 kg	
Plastic bag	0.5 kg	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Desc																

PACKING INSTRUCTION Y845

This instruction applies to Limited Quantities of Class 8 solids in Packing Group III.

The General Packing Requirements of Subsection 5.0.2 (with the exception of 5.0.2.3, 5.0.2.5, 5.0.2.11(f), 5.0.2.11(g) and 5.0.2.14) must be met except that the packagings do not have to meet the marking and testing requirements of 6.0.4 and Subsection 6.3. Packagings must meet the construction criteria specified in Subsections 6.1 and 6.2 and the test criteria specified in Subsection 6.6.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6
- Metal packagings must be corrosion resistant or with protection against corrosion.
- Substances of class 8 are permitted in glass or earthenware inner packagings only if the substance is free from hydrofluoric acid.

Closure Requirements

Closures must meet the requirements of 5.0.2.7

Limited Quantity Requirements

The requirements of Subsection 2.8 must be met including:

- ◆ the capability of the package to pass a drop test of 1.2m;
- ◆ a 24 hour stacking test;
- ◆ the gross weight of the completed package must not exceed 30 kg.

Single packagings are not permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	1.0 kg	5.0 kg
Metal	1.0 kg	
Plastic	1.0 kg	
Plastic bag	1.0 kg	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic

PACKING INSTRUCTION 850

This instruction applies to Class 8 liquids in Packing Group I on passenger aircraft.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;
- Metal packagings must be corrosion resistant or with protection against corrosion.
- Substances of class 8 are permitted in glass or earthenware inner packagings only if the substance is free from hydrofluoric acid.

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Additional Packing Requirements

- ♦ Inner packagings must be packed with absorbent material and placed in a rigid leakproof receptacle before packing in outer packagings.

Single packagings are not permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	0.5 L	0.5 L
Metal	0.5 L	
Plastic	0.5 L	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

PACKING INSTRUCTION 851

This instruction applies to Class 8 liquids in Packing Group II on passenger aircraft.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;
- Metal packagings must be corrosion resistant or with protection against corrosion for substances with a Class 8 subsidiary risk.
- Substances of class 8 are permitted in glass or earthenware inner packagings only if the substance is free from hydrofluoric acid.

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Single packagings are not permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	1.0 L	1.0 L
Metal	1.0 L	
Plastic	1.0 L	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

PACKING INSTRUCTION 852

This instruction applies to Class 8 liquids in Packing Group III on passenger aircraft.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;
- Metal packagings must be corrosion resistant or with protection against corrosion for substances with a Class 8 subsidiary risk.
- Substances of class 8 are permitted in glass or earthenware inner packagings only if the substance is free from hydrofluoric acid.

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Additional Packing Requirements

- ◆ Packagings must meet Packing Group II performance standards.

Single packagings are not permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	2.5 L	5.0 L
Metal	5.0 L	
Plastic	2.5 L	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

PACKING INSTRUCTION 854

This instruction applies to Class 8 liquids in Packing Group I on Cargo Aircraft Only.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;
- Metal packagings must be corrosion resistant or with protection against corrosion.
- Substances of class 8 are permitted in glass or earthenware inner packagings only if the substance is free from hydrofluoric acid.

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Additional Packing Requirements

- ♦ Inner packagings must be packed with absorbent material and placed in a rigid leakproof receptacle before packing in outer packagings.

Single packagings are not permitted.

COMBINATION PACKAGINGS

INNER PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	1.0 L	2.5 L
Metal	1.0 L	
Plastic	1.0 L	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

PACKING INSTRUCTION 855

This instruction applies to Class 8 liquids in Packing Group II on Cargo Aircraft Only.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;
- Metal packagings must be corrosion resistant or with protection against corrosion.
- Substances of class 8 are permitted in glass or earthenware inner packagings only if the substance is free from hydrofluoric acid.

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Combination and single packagings are permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	2.5 L	30 L
Metal	2.5 L	
Plastic	2.5 L	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Aluminium	Plywood	Fibre	Plastic	Other metal	Steel	Aluminium	Plastic	Steel	Aluminium	Wood	Plywood	Reconstituted wood	Fibre-board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

SINGLE PACKAGINGS

Type	Drums				Jerricans			Composites	Cylinders
Desc	Steel	Aluminium	Plastic	Other metal	Steel	Aluminium	Plastic	Plastic	
Spec	1A1	1B1	1H1	1N1	3A1	3B1	3H1	All	As permitted in 5.0.6.6

PACKING INSTRUCTION 856

This instruction applies to Class 8 liquids in Packing Group III on Cargo Aircraft Only.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;
- Metal packagings must be corrosion resistant or with protection against corrosion.
- Substances of class 8 are permitted in glass or earthenware inner packagings only if the substance is free from hydrofluoric acid.

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Additional Packing Requirements

- ♦ Packagings must meet Packing Group II performance standards.

Combination and single packagings are permitted.

COMBINATION PACKAGINGS

INNER PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	5.0 L	60 L
Metal	10.0 L	
Plastic	5.0 L	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Aluminium	Ply-wood	Fibre	Plastic	Other metal	Steel	Aluminium	Plastic	Steel	Aluminium	Wood	Ply-wood	Reconstituted wood	Fibre-board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

SINGLE PACKAGINGS

Type	Drums				Jerricans			Composites	Cylinders
Desc	Steel	Aluminium	Plastic	Other metal	Steel	Aluminium	Plastic	Plastic	
Spec	1A1, 1A2	1B1, 1B2	1H1, 1H2	1N1, 1N2	3A1, 3A2	3B1, 3B2	3H1, 3H2	All	As permitted in 5.0.6.6

PACKING INSTRUCTION 858

This instruction applies to Class 8 solids in Packing Group I on passenger aircraft.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;
- Metal packagings must be corrosion resistant or with protection against corrosion.
- Substances of class 8 are permitted in glass or earthenware inner packagings only if the substance is free from hydrofluoric acid.

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Single packagings are not permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	0.5 kg	1 kg
Metal	0.5 kg	
Plastic	0.5 kg	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

PACKING INSTRUCTION 859

This instruction applies to Class 8 solids in Packing Group II on passenger aircraft.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;
- Metal packagings must be corrosion resistant or with protection against corrosion.
- Substances of class 8 are permitted in glass or earthenware inner packagings only if the substance is free from hydrofluoric acid.

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Single packagings are not permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	1.0 kg	15 kg
Metal	2.5 kg	
Plastic	2.5 kg	
Plastic bag	1.0 kg	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

PACKING INSTRUCTION 860

This instruction applies to Class 8 solids in Packing Group III on passenger aircraft.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;
- Metal packagings must be corrosion resistant or with protection against corrosion.
- Substances of class 8 are permitted in glass or earthenware inner packagings only if the substance is free from hydrofluoric acid.

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Additional Packing Requirements

- ♦ Packagings must meet Packing Group II performance standards.

Single packagings are not permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	2.5 kg	25 kg
Metal	5.0 kg	
Plastic	2.5 kg	
Plastic bag	2.5 kg	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

PACKING INSTRUCTION 862

This instruction applies to Class 8 solids in Packing Group I on Cargo Aircraft Only.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;
- Metal packagings must be corrosion resistant or with protection against corrosion.
- Substances of class 8 are permitted in glass or earthenware inner packagings only if the substance is free from hydrofluoric acid.

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Additional Packing Requirements

- ♦ Fibre, wood and plywood single packagings must be fitted with a suitable liner

Combination and single packagings are permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	1.0 kg	25 kg
Metal	2.5 kg	
Plastic	2.5 kg	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Aluminium	Plywood	Fibre	Plastic	Other metal	Steel	Aluminium	Plastic	Steel	Aluminium	Wood	Plywood	Reconstituted wood	Fibre-board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

SINGLE PACKAGINGS

Type	Drums						Jerricans			Composites	Cylinders
Desc	Steel	Aluminium	Plywood	Fibre	Plastic	Other metal	Steel	Aluminium	Plastic	Plastic	
Spec	1A1 1A2	1B1 1B2	1D	1G	1H1 1H2	1N1 1N2	3A1 3A2	3B1 3B2	3H1 3H2	All	As permitted in 5.0.6.6

PACKING INSTRUCTION 863

This instruction applies to Class 8 solids in Packing Group II on Cargo Aircraft Only.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;
- Metal packagings must be corrosion resistant or with protection against corrosion.
- Substances of class 8 are permitted in glass or earthenware inner packagings only if the substance is free from hydrofluoric acid.

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Additional Packing Requirements

- ♦ Fibre, wood and plywood single packagings must be fitted with a suitable liner

Combination and single packagings are permitted.

COMBINATION PACKAGINGS

INNER PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	2.5 kg	50 kg
Metal	5.0 kg	
Plastic	5.0 kg	
Plastic bag	2.5 kg	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

SINGLE PACKAGINGS

Type	Drums						Jerricans			Boxes							Comp- osites	Cylinders
Desc	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic	Plastic	
Spec	1A1 1A2	1B1 1B2	1D	1G	1H1 1H2	1N1 1N2	3A1 3A2	3B1 3B2	3H1 3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2	All	As permitted in 5.0.6.6

PACKING INSTRUCTION 864

This instruction applies to Class 8 solids in Packing Group III on Cargo Aircraft Only.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;
- Metal packagings must be corrosion resistant or with protection against corrosion.
- Substances of class 8 are permitted in glass or earthenware inner packagings only if the substance is free from hydrofluoric acid.

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Additional Packing Requirements

- ◆ Packagings must meet Packing Group II performance standards.
- ◆ Fibre, wood and plywood single packagings must be fitted with a suitable liner

Combination and single packagings are permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
Glass	5.0 kg	100 kg
Metal	10.0 kg	
Plastic	5.0 kg	
Plastic bag	5.0 kg	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

SINGLE PACKAGINGS

Type	Drums						Jerricans			Boxes							Compos- ites	Cylinders
Desc	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic	Plastic	
Spec	1A1 1A2	1B1 1B2	1D	1G	1H1 1H2	1N1 1N2	3A1 3A2	3B1 3B2	3H1 3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2	All	As permitted in 5.0.6.6

PACKING INSTRUCTION 866

This instruction applies to UN 2028 on Cargo Aircraft Only.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;
- Metal packagings must be corrosion resistant or with protection against corrosion.

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Additional Packaging Requirements

- ♦ The articles must be individually packaged and separated from each other using partitions, dividers, inner packagings or cushioning material.

Single packagings are not permitted.

COMBINATION PACKAGINGS

UN Number		Total net quantity per package
UN 2028, Bombs, smoke, non-explosive	Bombs smoke may be carried provided they are without ignition elements, bursting charges, detonating fuses or other explosive components	50 kg

OUTER PACKAGINGS

Type	Drums						Boxes						
	Steel	Alum- inium	Plywood	Fibre	Plastic	Other metal	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

PACKING INSTRUCTION 867

This instruction applies to Gallium (UN 2803) on passenger aircraft and Cargo Aircraft Only.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;
- Metal packagings must be corrosion resistant or with protection against corrosion.

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Additional Packaging Requirements

- ◆ packagings must meet Packing Group I performance standards;
- ◆ plastic inner packagings must be enclosed in liners or bags of strong leak-proof and puncture resistant material impervious to the contents and completely surrounding the contents to prevent it from escaping from a package irrespective of its position or orientation;
- ◆ plastic inner packagings must be packed with sufficient cushioning material to prevent breakage.

Carriage at Low temperatures

When it is necessary to transport Gallium at low temperatures in order to maintain it in a completely solid state, packagings may be overpacked in strong water resistant outer packagings which contains dry ice or other means of refrigeration. If a refrigerant is used, all of the above materials used in the packaging of gallium must be chemically and physically resistant at the low temperatures of the refrigerant employed. If dry ice is used the outer packaging must permit the release of carbon dioxide gas.

Single packagings are not permitted.

COMBINATION PACKAGINGS

UN Number	Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
UN 2803, Gallium	Plastic	3.5 kg	20 kg

OUTER PACKAGINGS

Type	Drums						Boxes						
	Steel	Alum- inium	Plywood	Fibre	Plastic	Other metal	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Desc													
Spec	1A2	1B2	1D	1G	1H2	1N2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

PACKING INSTRUCTION 868

This instruction applies to Mercury (UN 2809) on passenger aircraft and Cargo Aircraft Only.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;
- Metal packagings must be corrosion resistant or with protection against corrosion.

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Additional Packaging Requirements

- ♦ packagings must meet Packing Group I performance standards;
- ♦ inner packagings must be enclosed in liners or bags of strong leak-proof and puncture resistant material impervious to the contents and completely surrounding the contents to prevent it from escaping from a package irrespective of its position or orientation;
- ♦ inner packagings must be packed with sufficient cushioning material to prevent breakage.

Combination and single packagings are permitted.

COMBINATION PACKAGINGS

UN Number	Inner Packaging (see 6.1)	Net quantity per inner packaging	Total net quantity per package
UN 2809, Mercury	Glass	2.5 kg	35 kg
	Plastic	2.5 kg	

OUTER PACKAGINGS

Type	Drums						Boxes						
	Steel	Alum- inium	Plywood	Fibre	Plastic	Other metal	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

SINGLE PACKAGINGS

Mercury may also be packed in single packagings, which must be a welded steel bottle with an inner vaulted bottom, an opening not exceeding 20 mm and a closure which must be a bolt with a conical thread.

PACKING INSTRUCTION 869

This instruction applies to mercury contained in manufactured articles (UN 2809) on passenger aircraft and Cargo Aircraft Only. The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;
- Metal packagings must be corrosion resistant or with protection against corrosion.

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Additional Requirements

- ◆ For electron tubes, mercury vapour tubes and similar tubes the shipper must indicate the quantity of mercury on the Shipper's Declaration for Dangerous Goods.
- ◆ Thermometers, switches and relays each containing a total quantity of not more than 15 g (0.5 oz) of mercury are excepted from the requirements of these Regulations if they are installed as an integral part of a machine or apparatus and so fitted that shock or impact damage, leading to leakage of mercury, is unlikely to occur under conditions normally incident to transport.

COMBINATION PACKAGINGS

UN Number			Quantity per package
UN 2809, Mercury contained in manufactured articles	Manufactured articles or apparatus of which metallic mercury is a component part, such as manometers, pumps, thermometers, switches, etc.	Must have sealed inner liners or bags of strong leak-proof and puncture-resistant material impervious to mercury and which will prevent escape of mercury from the package irrespective of the position of the package. The inner liners or bags must be packed in strong outer packagings. <i>Note: Mercury switches and relays are excepted from the requirement for a sealed inner liner or bag providing they are of the totally enclosed, leak-proof type in sealed metal or plastic units.</i>	No limit
	Electron tubes, mercury vapour tubes (tubes with less than a total net quantity of 450 g (16 oz) of mercury)	Tubes must be packed in strong outer packagings with all seams and joints sealed with self-adhesive, pressure-sensitive tape which will prevent the escape of mercury from the package <i>Note: Tubes with more than 450 g (16 oz) of mercury must be packed according to the requirements for manufactured articles or apparatus (above).</i>	

OUTER PACKAGINGS - strong outer packagings, such as:

Type	Drums						Jerricans			Boxes						
Desc	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic

PACKING INSTRUCTION 870

This instruction applies to UN 2794 and UN 2795 on passenger aircraft and Cargo Aircraft Only.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;
- Metal packagings must be corrosion resistant or with protection against corrosion.

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Additional Requirements

- ◆ Packagings must meet Packing Group II performance standards.
- ◆ For batteries, electric storage, packed with battery fluid in the same outer packaging, see UN 2796 and UN 2797.

COMBINATION PACKAGINGS

UN Number		Quantity per package passenger aircraft	Quantity per package Cargo Aircraft Only
UN 2794 Batteries, wet, filled with acid and UN 2795 Batteries, wet, filled with alkali	Batteries must be packed in one of the outer packagings shown below and must incorporate an acid/alkali-proof liner of sufficient strength and adequately sealed to positively preclude leakage in the event of spillage. The batteries must be packed so that the fill openings and vents, if any, are upward; they are incapable of short-circuiting and they are securely cushioned in the packagings. The upright position of the package must be indicated on it by the "Package Orientation" label. The words "THIS SIDE UP" or "THIS END UP" may also be displayed on the top of the package.	30 kg G	No limit
UN 2794 and UN 2795 Batteries, installed in equipment	If batteries are shipped as an integral component of assembled equipment, they must be securely installed and fastened in an upright position and protected against contact with other articles so as to prevent short circuits. Batteries must be removed and packed according to this packing instruction if the assembled equipment is likely to be carried in other than an upright position.		

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

PACKING INSTRUCTION 871

This instruction applies to UN 3028 on passenger aircraft and Cargo Aircraft Only.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;
- Metal packagings must be corrosion resistant or with protection against corrosion.

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Additional Requirements

- ♦ Packagings must meet Packing Group II performance standards.

COMBINATION PACKAGINGS

UN Number		Quantity per package passenger aircraft	Quantity per package Cargo Aircraft Only
UN 3028 Batteries, dry, containing potassium hydroxide	Batteries must be packed in one of the outer packagings shown below and must be securely cushioned in the packagings.	25 kg G	230 kg G

OUTER PACKAGINGS

Type	Boxes						
Desc	Steel	Aluminium	Wood	Plywood	Reconstituted wood	Fibreboard	Plastic
Spec	4A	4B	4C1 4C2	4D	4F	4G	4H2

PACKING INSTRUCTION 872

This instruction applies to UN 2800 on passenger aircraft and Cargo Aircraft Only.
The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;
- Metal packagings must be corrosion resistant or with protection against corrosion.

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Testing

Batteries can be considered as non-spillable provided that they are capable of withstanding the vibration and pressure differential tests given below, without leakage of battery fluid.

Vibration test— The battery is rigidly clamped to the platform of a vibration machine and a simple harmonic motion having an amplitude of 0.8 mm (0.032 in) (1.6 mm [0.063 in] maximum total excursion) is applied. The frequency is varied at the rate of 1 Hz/min between the limits of 10 Hz to 55 Hz. The entire range of frequencies and return is traversed in 95±5 minutes for each mounting position (direction of vibration) of the battery. The battery must be tested in three mutually perpendicular positions (to include testing with fill openings and vents, if any, in an inverted position) for equal time periods.

Pressure differential test— Following the vibration test, the battery is stored for six hours at 24°C ± 4°C (75°F ± 8°F) while subjected to a pressure differential of at least 88 kPa. The battery must be tested in three mutually perpendicular positions (to include testing with fill openings and vents, if any, in an inverted position) for at least six hours in each position.

Note: *Non-spillable type batteries which are an integral part of, and necessary for the operation of mechanical or electronic equipment, must be securely fastened in the battery holder on the equipment and protected in such a manner as to prevent damage and short circuits.*

COMBINATION PACKAGINGS

UN Number		Quantity per package
UN 2800 Batteries, wet, non-spillable	Batteries must be protected against short circuits and must be securely packed in strong outer packagings.	No limit

OUTER PACKAGINGS - strong outer packagings, such as:

Type	Drums						Jerricans			Boxes						
Desc	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic

PACKING INSTRUCTION 873 – 875

Note: *Packing Instructions 873 to 875 are not included in this appendix as the content and format is the same as is shown in Section 5 of the 50th edition DGR.*

5.9 Packing Instructions — Class 9 — Miscellaneous Dangerous Goods

PACKING INSTRUCTION 950

This instruction applies to UN 3166, **Engines, internal combustion, flammable liquid powered** and **Vehicle, flammable liquid powered** on passenger aircraft and Cargo Aircraft Only (see PI 951 for **Engines, internal combustion, flammable gas powered** and **Vehicle, flammable gas powered**).

Vehicles, machines or equipment containing internal combustion engines must meet the following requirements:

- (a) **Flammable liquid fuel tanks.** Except as otherwise provided for in this Packing Instruction, fuel tanks must be drained of fuel and tank caps fitted securely. Special precautions are necessary to ensure complete drainage of the fuel system of vehicles, machines or equipment incorporating internal combustion engines, such as lawn mowers, outboard motors, etc., where such machines or equipment could possibly be handled in other than an upright position. When it is not possible to handle in other than an upright position, vehicles, except those with diesel engines, must be drained of fuel as far as practicable and if any fuel remains it must not exceed one quarter of the tank capacity;
1. **Diesel engines.** Vehicles equipped with diesel engines are excepted from the requirement to drain the fuel tanks, provided that a sufficient ullage space has been left inside the tank to allow fuel expansion without leakage, and the tank caps are tightly closed. A careful check must be made to ensure there are no fuel leakages.
- (b) **Batteries.** All batteries must be installed and securely fastened in the battery holder of the vehicle, machinery or equipment and be protected in such a manner as to prevent damage and short circuits. In addition:
1. if spillable batteries are installed, and it is possible for the vehicle, machine or equipment to be handled in such a way that batteries would not remain in their intended orientation, they must be removed and packed according to Packaging Instruction 492 or 869, as applicable;
 2. If lithium batteries are installed, they must be of a type that has successfully passed the tests specified in the UN Manual of Tests and Criteria, Part III, subsection 38.3, must be securely fastened in the vehicle, machinery or equipment and must be protected in such a manner as to prevent damage and short circuits;
 3. If sodium batteries are installed they must conform to the requirements of special provision A94.
- (c) **Other operational equipment**
1. dangerous goods required for the operation of the vehicle, machine or equipment, such as fire extinguishers, tire inflation canisters, safety devices, etc., must be securely mounted in the vehicle, machine or equipment. Aircraft may also contain other articles and substances which would otherwise be classified as dangerous goods but which are installed in that aircraft in accordance with the pertinent airworthiness requirements and operating regulations. If fitted, life-rafts, emergency escape slides and other inflation devices must be protected such that they cannot be activated accidentally. Vehicles containing dangerous goods identified in Subsection 4.2 - List of Dangerous Goods as forbidden on passenger aircraft may only be transported on cargo aircraft;
 2. vehicles equipped with theft-protection devices, installed radio communications equipment or navigational system must have such devices, equipment or system disabled.

Internal combustion engines shipped separately (not installed)

When internal combustion engines are being shipped separately, all fuel, coolant or hydraulic systems remaining in or on the engine must be drained as far as practicable and all disconnected fluid pipes must be sealed with leak-proof caps, which are positively retained.

This requirement also applies to vehicles, machines or equipment containing internal combustion engines that are being shipped in a dismantled state such that fuel lines have been disconnected.

Replacements for the dangerous goods permitted in paragraphs (b) and (c) must not be carried under this packing instruction.

	Net quantity per package passenger aircraft	Net quantity per package Cargo Aircraft Only
UN 3166, Engines, internal combustion, flammable liquid powered , or Vehicle, flammable liquid powered	No limit	No limit

PACKING INSTRUCTION 951

This instruction applies to UN 3166, **Engines, internal combustion, flammable gas powered** and **Vehicle, flammable gas powered** on Cargo Aircraft Only (see PI 950 for **Engines, internal combustion, flammable liquid powered** and **Vehicle, flammable liquid powered**).

Vehicles, machines or equipment containing internal combustion engines must meet the following requirements:

(a) **Flammable gas pressure vessels (fuel tanks).**

1. For flammable gas powered vehicles, machines or equipment, pressurised vessels containing the flammable gas must be completely emptied of flammable gas. Lines from vessels to gas regulators, and gas regulators themselves must also be drained of all trace of flammable gas. To ensure that these conditions are met, gas shut-off valves must be left open and connections of lines to gas regulators must be left disconnected upon delivery of the vehicle to the operator. Shut-off valves must be closed and lines reconnected at gas regulators before loading the vehicle aboard the aircraft;

Or alternatively:

2. Flammable gas-powered vehicles, machines or equipment that have pressure receptacles (fuel tanks) equipped with electrically operated valves that close automatically in case the power is disconnected, or with manual shut-off valves, may be transported under the following conditions:
 - (i) the valves must be in the closed position and in the case of electrically operated valves, power to those valves must be disconnected;
 - (ii) after closing the valves, the vehicle, equipment or machinery must be operated until it stops from lack of fuel before being loaded aboard the aircraft;
 - (iii) in no part of the closed system must the remaining pressure of compressed gases exceed 5% of the maximum allowable working pressure of the system, or more than 2,000 kPa (20 bar), whichever is the lower;

(c) Batteries. All batteries must be installed and securely fastened in the battery holder of the vehicle, machinery or equipment and be protected in such a manner as to prevent damage and short circuits. In addition:

1. if spillable batteries are installed, and it is possible for the vehicle, machine or equipment to be handled in such a way that batteries would not remain in their intended orientation, they must be removed and packed according to Packaging Instruction 492 or 869, as applicable;
2. If lithium batteries are installed, they must be of a type that has successfully passed the tests specified in the UN Manual of Tests and Criteria, Part III, subsection 38.3, must be securely fastened in the vehicle, machinery or equipment and must be protected in such a manner as to prevent damage and short circuits;
3. If sodium batteries are installed they must conform to the requirements of special provision A94.

(c) Other operational equipment

1. dangerous goods required for the operation of the vehicle, machine or equipment, such as fire extinguishers, tire inflation canisters, safety devices, etc., must be securely mounted in the vehicle, machine or equipment. Aircraft may also contain other articles and substances which would otherwise be classified as dangerous goods but which are installed in that aircraft in accordance with the pertinent airworthiness requirements and operating regulations. If fitted, life-rafts, emergency escape slides and other inflation devices must be protected such that they cannot be activated accidentally. Vehicles containing dangerous goods identified in Subsection 4.2 - List of Dangerous Goods as forbidden on passenger aircraft may only be transported on cargo aircraft;
2. vehicles equipped with theft-protection devices, installed radio communications equipment or navigational system must have such devices, equipment or system disabled.

Internal combustion engines shipped separately (not installed)

When internal combustion engines are being shipped separately, all fuel, coolant or hydraulic systems remaining in or on the engine must be drained as far as practicable and all disconnected fluid pipes must be sealed with leak-proof caps, which are positively retained.

This requirement also applies to vehicles, machines or equipment containing internal combustion engines that are being shipped in a dismantled state such that fuel lines have been disconnected.

Replacements for the dangerous goods permitted in paragraphs (b) and (c) must not be carried under this packing instruction.

	Net quantity per package passenger aircraft	Net quantity per package Cargo Aircraft Only
UN 3166, Engines, internal combustion, flammable gas powered, or Vehicle, flammable gas powered	Forbidden	No limit

PACKING INSTRUCTION 952

This instruction applies to UN 3171, **Battery-powered equipment** and **Battery-powered vehicle** on passenger aircraft and Cargo Aircraft Only. This applies to vehicles and equipment that are powered by wet batteries, sodium batteries or lithium batteries and which are transported with these batteries installed. Examples of such vehicles and equipment are electrically powered cars, lawn mowers, wheelchairs and other mobility aids. Vehicles that also contain an internal combustion engine must be consigned under UN 3166 (see PI 950 or PI 951).

Battery-powered vehicles, machines or equipment must meet the following requirements:

(a) Batteries

All batteries must be installed and securely fastened in the battery holder of the vehicle, machinery or equipment and be protected in such a manner as to prevent damage and short circuits. In addition:

- (1) if spillable batteries are installed, and it is possible for the vehicle, machine or equipment to be handled in such a way that batteries would not remain in their intended orientation, they must be removed and packed according to Packaging Instruction 492 or 869, as applicable;
- (2) If lithium batteries are installed, they must be of a type that has successfully passed the tests specified in the UN Manual of Tests and Criteria, Part III, subsection 38.3, must be securely fastened in the vehicle, machinery or equipment and must be protected in such a manner as to prevent damage and short circuits;
- (3) If sodium batteries are installed they must conform to the requirements of special provision A94.

(b) Other operational equipment

- (1) dangerous goods required for the operation of the vehicle, machine or equipment, such as fire extinguishers, tire inflation canisters, safety devices, etc., must be securely mounted in the vehicle, machine or equipment. Aircraft may also contain other articles and substances which would otherwise be classified as dangerous goods but which are installed in that aircraft in accordance with the pertinent airworthiness requirements and operating regulations. If fitted, life-rafts, emergency escape slides and other inflation devices must be protected such that they cannot be activated accidentally. Vehicles containing dangerous goods identified in Subsection 4.2 - List of Dangerous Goods as forbidden on passenger aircraft may only be transported on cargo aircraft;
- (2) vehicles equipped with theft-protection devices, installed radio communications equipment or navigational system must have such devices, equipment or system disabled.

Replacements for the dangerous goods permitted in paragraphs (a) and (b) must not be carried under this packing instruction.

	Net quantity per package passenger aircraft	Net quantity per package Cargo Aircraft Only
UN 3166, Battery-powered equipment, or Battery-powered equipment vehicle	No limit	No limit

PACKING INSTRUCTION 953

This instruction applies to UN 2807, **Magnetized material** on passenger aircraft and Cargo Aircraft Only.

Magnetized material will be accepted only when:

- (a) devices such as magnetrons and light meters have been packed so that the polarities of the individual units oppose one another;
- (b) permanent magnets, where possible, have keeper bars installed;
- (c) the magnetic field strength at a distance of 4.6 m (15 ft) from any point on the surface of the assembled consignment:
 - (1) does not exceed 0.418 A/m (0.00525 gauss), or
 - (2) produces a magnetic compass deflection of 2 degrees or less.

Note: For loading instructions see 9.3.11.

Determination of shielding requirements

The magnetic field strength of magnetized materials must be measured using measuring devices having a sensitivity sufficient to measure magnetic fields greater than 0.0398 A/m (0.0005 gauss) within a tolerance of plus or minus 5%, or with a magnetic compass sensitive enough to read a two-degree variation, preferably in 1 degree increments or finer. Methods of determining if a magnetized article meets the definition of a magnetized material include:

Method 1— When an oersted meter is used, it is placed on one of two points positioned 4.6 m (15 ft) apart and located in an area that is free from magnetic interference other than the earth's magnetic field. The oersted meter is then aligned with the second point and "balanced" to a zero reading. The magnetic article is then placed on the other point and the magnetic field strength is measured by reading the meter while rotating the package 360 degrees in its horizontal plane. If the maximum field strength observed is 0.418 A/m (0.00525 gauss) or less, the article is acceptable for air transport. When the maximum field strength exceeds 0.418 A/m (0.00525 gauss) shielding should be applied until a reading of 0.418 A/m (0.00525 gauss) or less has been attained.

Method 2— When a magnetic compass is used as a sensing device, it should be placed on one of two points positioned 4.6 m (15 ft) apart which are aligned in an East/West direction and in an area that is free from any magnetic interference other than the earth's magnetic field. The packaged item to be tested is placed on the other point and rotated 360 degrees in its horizontal plane for indication of compass deflection. When the maximum compass deflection observed is two degrees or less, the article is acceptable for air transport. When the maximum compass deflection of an item exceeds 2 degrees, shielding must be applied until the maximum deflection is not more than 2 degrees.

If the maximum field strength observed at a distance of 2.1 m (7 ft) is less than 0.159 A/m (0.002 gauss) or there is no significant compass deflection (less than 0.5 degree), the article is not restricted as a magnetized material.

PACKING INSTRUCTION 954

This instruction applies to UN 1845, **Carbon dioxide, solid (dry ice)** on passenger aircraft and Cargo Aircraft Only.

The General Packing Requirements of Subsection 5.0.2 must be met.

Additional Packing Requirements

In packages:

- (a) must be in packaging designed and constructed to permit the release of carbon dioxide gas and to prevent a build-up of pressure that could rupture the packaging;
- (b) the shipper must make arrangements with the operator(s) for each shipment, to ensure ventilation safety procedures are followed;
- (c) the Shipper's Declaration requirements of Subsections 8.1 and 10.8.1 are only applicable when the Carbon dioxide, solid (dry ice) is used as a refrigerant for dangerous goods that require a Shipper's Declaration;
- (d) when a Shipper's Declaration is not required, the following information, as required by 8.2.3 for the Carbon dioxide, solid (dry ice), must be contained in the "Nature and Quantity of Goods" box on the air waybill and should be shown in the following order:
 - 1) UN 1845;
 - 2) proper shipping name (Carbon dioxide, solid or Dry ice);

- 3) 9 (the word "Class" may be included prior to the number "9");
 - 4) the number of packages; and
 - 5) the net weight of dry ice in each package.
- (e) the net weight of the Carbon dioxide, solid (dry ice) must be marked on the outside of the package.

Dry ice used as a refrigerant for other than dangerous goods:

- (a) may be shipped in a unit load device or other type of pallet prepared by a single shipper provided that the shipper has made prior arrangements with the operator;
- (b) the unit load device, or other type of pallet must allow the venting of the carbon dioxide gas to prevent a dangerous build up of pressure;
- (c) the shipper must provide the operator with written documentation stating the total weight of the dry ice contained in the unit load device or other type of pallet.

Notes:

- 1. Refer to the relevant airline's loading procedures for Carbon dioxide, solid (dry ice) limitations.
- 2. For Air Waybill requirements see 8.2.3. For loading instructions see 9.3.12.
- 3. For cooling purposes, an overpack may contain Carbon dioxide, solid (dry ice), provided that the overpack meets the requirements of Packing Instruction 904.

UN Number	Net quantity per package
UN 1845 Carbon dioxide, solid (Dry ice)	200 kg

PACKING INSTRUCTION 955

This instruction applies to UN 2990, **Life-saving appliances, self-inflating** and UN 3072, **Life saving appliances, not self-inflating** on passenger aircraft and Cargo Aircraft Only.

The description "Life-saving appliances, self-inflating", (UN 2990) is intended to apply to life-saving appliances that present a hazard if the self-inflating device is activated accidentally.

Life-saving appliances, such as life-rafts, life-vests, aircraft survival kits or aircraft evacuation slides, may only contain the dangerous goods listed below:

- (a) Division 2.2 gases, must be contained in cylinders which conform to the requirements of the appropriate national authority of the country in which they are approved and filled. Such cylinders may be connected to the life-saving appliance. These cylinders may include installed actuating cartridges (cartridges, power device of Division 1.4C and 1.4S) provided the aggregate quantity of deflagrating (propellant) explosives does not exceed 3.2 g per unit. When the cylinders are shipped separately, they shall be classified as appropriate for the Division 2.2 gas contained and need not be marked, labelled or described as explosive articles;
- (b) signal devices (Class 1), which may include smoke and illumination signal flares; signal devices must be packed in plastic or fibreboard inner packagings;
- (c) small quantities of flammable substances, corrosive solids and organic peroxides (Classes 3 and 8, Divisions 4.1 and 5.2), which may include a repair kit and not more than 30 strike-anywhere matches. The organic peroxide may only be a component of a repair kit and the kit must be packed in strong inner packaging. The strike-anywhere matches must be packed in a cylindrical metal or composition packaging with a screw-type closure and be cushioned to prevent movement;
- (d) electric storage batteries (Class 8) and lithium batteries (Class 9); and
- (e) first aid kits which may include flammable, corrosive and toxic articles or substances.

The appliances must be packed so that they cannot be accidentally activated, in strong outer packagings and except for life-vests, the dangerous goods must be in inner packagings packed so as to prevent movement. The dangerous goods must be an integral part of the appliance without which it would not be operational and in quantities which do not exceed those appropriate for the actual appliance when in use.

Passenger restraint systems consisting of a cylinder charged with a non-liquefied, non-flammable compressed gas and no more than two actuating cartridges per passenger restraint system that meet the requirements of the State of manufacture must be packed in strong outer packagings so they cannot be accidentally activated.

Life-saving appliances may also include articles and substances, not subject to these Regulations, which are an integral part of the appliance.

	Net quantity per package passenger aircraft	Net quantity per package Cargo Aircraft Only
UN 2990, Life-saving appliances, self-inflating , or Life saving appliances, not self-inflating	No limit	No limit

PACKING INSTRUCTION 956

This instruction applies to UN 1841, UN 1931, UN 2969, UN 3077, UN 3152, UN 3335 and UN 3432 on passenger aircraft and Cargo Aircraft Only.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

Substances must be compatible with their packagings as required by 5.0.2.6;

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Additional Packing Requirements

- ◆ Fibre, wood and plywood single packagings must be fitted with a suitable liner.

Combination and single packagings are permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging
Fibre	50.0 kg
Glass	10.0 kg
Metal	50.0 kg
Paper bag	50.0 kg
Plastic	50.0 kg
Plastic bag	50.0 kg

UN numbers	Total net quantity per package passenger aircraft	Total net quantity per package Cargo Aircraft Only
UN 1841 Acetaldehyde ammonia	200 kg	200 kg
UN 1931 Zinc dithionite or Zinc hydrosulphite UN 3152 Polyhalogenated biphenyls, solid or Polyhalogenated terphenyls, solid UN 3335 Aviation regulated solid, n.o.s. UN 3432 Polychlorinated biphenyls, solid	100 kg	200 kg
UN 3077 Environmentally hazardous substance, solid, n.o.s.	400 kg	400 kg
UN 2969 Castor beans, Castor flake, Castor meal or Castor pomace	No limit	No limit

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

SINGLE PACKAGINGS

Type	Drums						Jerricans			Boxes						Bags	Comp- osites	Cylinders	
Desc	Steel	Alum- inium	Ply- wood	Fibre	Plas- tic	Other metal	Steel	Alum- inium	Plas- tic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic		Plastic	
Spec	1A1 1A2	1B1 1B2	1D	1G	1H1 1H2	1N1 1N2	3A1 3A2	3B1 3B2	3H1 3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2	5L3 5H3 5H4 5M2	All	As per- mitted in 5.0.6.6

PACKING INSTRUCTION Y956

This instruction applies to Limited Quantities of UN 3077.

The General Packing Requirements of Subsection 5.0.2 (with the exception of 5.0.2.3, 5.0.2.5, 5.0.2.11(f), 5.0.2.11(g) and 5.0.2.14) must be met except that the packagings do not have to meet the marking and testing requirements of 6.0.4 and Subsection 6.3. Packagings must meet the construction criteria specified in Subsections 6.1 and 6.2 and the test criteria specified in Subsection 6.6.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6

Closure Requirements

Closures must meet the requirements of 5.0.2.7

Limited Quantity Requirements

The requirements of Subsection 2.8 must be met including:

- ♦ the capability of the package to pass a drop test of 1.2m;
- ♦ a 24 hour stacking test;
- ♦ the gross weight of the completed package must not exceed 30 kg.

Single packagings are not permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total quantity per package
Glass	5.0 kg	30.0 kg G
Metal	5.0 kg	
Paper bag	5.0 kg	
Plastic	5.0 kg	
Plastic bag	5.0 kg	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Desc																

PACKING INSTRUCTION 957

This instruction applies to UN 2211 and UN 3314 on passenger aircraft and Cargo Aircraft Only.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Additional Packaging Requirements

For other than metal packagings a sealed plastic liner must be used

Single packagings are permitted.

UN Number	Quantity per package passenger aircraft	Quantity per package Cargo Aircraft Only
UN 2211 Polymeric beads, expandable	100 kg	200 kg
UN 3314 Plastics moulding compound		

SINGLE PACKAGINGS

Type	Drums				Boxes			
Desc	Steel	Aluminium	Plywood	Fibre	Wood	Plywood	Reconstituted wood	Fibreboard
Spec	1A1, 1A2	1B1, 1B2	1D	1G	4C1 4C2	4D	4F	4G

PACKING INSTRUCTION 958

This instruction applies to UN 2071 and UN 2590 on passenger aircraft and Cargo Aircraft Only.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Additional Packaging Requirements

- All rigid packagings must be sift-proof
- For UN 2590 bags must be palletised and unitised by methods such as shrink wrapping in plastic film or wrapping in fibreboard secured by strapping.

Single packagings are permitted.

UN Number	Net quantity per package
UN 2071 Ammonium nitrate fertilizers	200 kg
UN 2590 White asbestos	

SINGLE PACKAGINGS

Type	Drums						Jerricans			Boxes						Bags		
Desc	Steel	Aluminium	Plywood	Fibre	Plastic	Other metal	Steel	Aluminium	Plastic	Steel	Aluminium	Wood	Plywood	Reconstituted wood	Fibreboard	Plastic	Textile	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C2	4D	4F	4G	4H1 4H2	5L3	5H3 5H4

PACKING INSTRUCTION Y958

This instruction applies to Limited Quantities of UN 2071.

The General Packing Requirements of Subsection 5.0.2 (with the exception of 5.0.2.3, 5.0.2.5, 5.0.2.11(f), 5.0.2.11(g) and 5.0.2.14) must be met except that the packagings do not have to meet the marking and testing requirements of 6.0.4 and Subsection 6.3. Packagings must meet the construction criteria specified in Subsections 6.1 and 6.2 and the test criteria specified in Subsection 6.6.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6

Closure Requirements

Closures must meet the requirements of 5.0.2.7

Limited Quantity Requirements

The requirements of Subsection 2.8 must be met including:

- the capability of the package to pass a drop test of 1.2m;
- a 24 hour stacking test;
- the gross weight of the completed package must not exceed 30 kg.

Single packagings are not permitted.

COMBINATION PACKAGINGS

INNER PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total quantity per package
Glass	5.0 kg	30.0 kg G
Metal	5.0 kg	
Paper bag	5.0 kg	
Plastic	5.0 kg	
Plastic bag	5.0 kg	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Desc																

PACKING INSTRUCTION 959

This instruction applies to UN 3245 on passenger aircraft and Cargo Aircraft Only.

The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6;

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Additional Packaging Requirements

The packaging must comply with all of the requirements of PI 602.

Single packagings are not permitted.

UN Number	Inner Packaging (see PI 602)	Net quantity per package
UN 3245 Genetically modified micro-organisms or Genetically modified organisms	Liquids: 100 mL	No limit
	Solids: 100 g	

PACKING INSTRUCTION 960

This instruction applies to UN 3316 on passenger aircraft and Cargo Aircraft Only.

The description "Chemical Kit" and/or "First Aid Kit" is intended to apply to boxes, cases, etc., containing small quantities of various compatible dangerous goods which are used for medical, analytical or testing purposes.

The General Packing Requirements of Subsection 5.0.2 must be met, except that the requirements of 5.0.2.11(b) through 5.0.2.11(h) and 5.0.2.14 do not apply.

Compatibility Requirements

Substances must be compatible with their packagings as required by 5.0.2.6;

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Additional Packaging Requirements

- Kits may contain dangerous goods which require segregation according to Table 9.3.A. The packing group assigned to the kit as a whole must be the most stringent packing group assigned to any individual substance contained in the kit. This packing group must be shown on the Shipper's Declaration.
- Kits must not be packed with other dangerous goods in the same outer packaging with the exception of dry ice. If dry ice is used, the provisions in Packing Instruction 954 must be met.

Single packagings are not permitted.

UN Number	Inner Packaging (see 6.1)	Maximum net quantity of dangerous goods per kit	Net quantity per package
UN 3316 Chemical kit or First aid kit	Liquids: 250 mL	Liquids: 1.0 L	10 kg
	Solids: 250 g	Solids: 1.0 kg	

OUTER PACKAGINGS

Type	Boxes						
Desc	Steel	Aluminium	Wood	Plywood	Reconstituted wood	Fibreboard	Plastic
Spec	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

PACKING INSTRUCTION Y960

For Limited Quantities of Dangerous Goods in Chemical Kits or First Aid Kits.

The description "Chemical Kit" and/or "First Aid Kit" is intended to apply to boxes, cases, etc., containing small quantities of various compatible dangerous goods which are used for medical, analytical or testing purposes.

The General Packing Requirements of Subsection 5.0.2 (with the exception of 5.0.2.3, 5.0.2.5, 5.0.2.11(f), 5.0.2.11(g) and 5.0.2.14) must be met except that the packagings do not have to meet the marking and testing requirements of 6.0.4 and Subsection 6.3. Packagings must meet the construction criteria specified in Subsections 6.1 and 6.2 and the test criteria specified in Subsection 6.6.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6

Closure Requirements

Closures must meet the requirements of 5.0.2.7

Limited Quantity Requirements

The requirements of Subsection 2.8 must be met including:

- the capability of the package to pass a drop test of 1.2m;
- a 24 hour stacking test.
- the gross weight of the completed package must not exceed 30 kg.

Additional Packaging Requirements

- Kits may contain dangerous goods which require segregation according to Table 9.3.A. The packing group assigned to the kit as a whole must be the most stringent packing group assigned to any individual substance contained in the kit. This packing group must be shown on the Shipper's Declaration.
- Kits must not be packed with other dangerous goods in the same outer packaging with the exception of dry ice. If dry ice is used, the provisions in Packing Instruction 954 must be met.

Single packagings are not permitted.

UN Number	Inner Packaging (see 6.1)	Maximum net quantity of dangerous goods per kit	Net quantity per package
UN 3316 Chemical kit or First aid kit	Liquids: 30 mL	1.0 kg	1.0 kg
	Solids: 100 g		

OUTER PACKAGINGS

Type	Boxes						
Desc	Steel	Aluminium	Wood	Plywood	Reconstituted wood	Fibreboard	Plastic

PACKING INSTRUCTION 961

This instruction applies to UN 3268 on passenger aircraft and Cargo Aircraft Only.

The General Packing Requirements of Subsection 5.0.2 must be met.

Additional Packaging Requirements

- ◆ Packagings must meet Packing Group III performance standards;
- ◆ The packagings must be designed and constructed to prevent movement of the articles and inadvertent operation during normal conditions of transport;
- ◆ Any pressure vessel must be in accordance with the requirements of the appropriate national authority for the substance(s) contained in the pressure vessel(s).

Cargo Aircraft Only

Air bag inflators, air bag modules and seat-belt pretensioners may also be transported unpackaged on Cargo Aircraft Only in dedicated handling devices when they are transported from where they are manufactured to vehicle assembly plants. When transported in dedicated handling devices the following conditions must be met:

- (a) air bag inflators, air bag modules or seat-belt pretensioners as fitted in the dedicated handling device must be capable of meeting the test criteria prescribed in Special Provision A115;
- (b) the dedicated handling device must be completely enclosed;
- (c) each air bag inflator, air bag module or seat-belt pretensioner unit must be secured within the dedicated handling device to prevent movement in transport;
- (d) irrespective of the limit specified in Column L of Table 4.2, a handling device meeting these requirements may have a gross weight not exceeding 1,000 kg.

UN Number	Quantity per package passenger aircraft	Quantity per package Cargo Aircraft Only
UN 3268 Air bag inflators, Air bag modules or Seat belt pretensioners	25 kg	100 kg

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

PACKING INSTRUCTION 962

This instruction applies to UN 3363 on passenger aircraft and Cargo Aircraft Only.

This entry only applies to machinery or apparatus containing dangerous goods as a residue or as an integral element of the machinery or apparatus. It must not be used for machinery or apparatus for which a proper shipping name exists in Table 4.2. For other than fuel system components, machinery or apparatus may only contain dangerous goods permitted under 2.8.1 or dangerous goods permitted under 2.8.1 and magnetized material meeting the requirements of Packing Instruction 953.

Note: If machinery or apparatus contains only magnetised material meeting the requirements of Packing Instruction 908, it must be consigned as UN 2807.

If the machinery or apparatus contains more than one item of dangerous goods, the individual substances must not be capable of reacting dangerously together.

The General Packing Requirements of 5.0.2 must be met except that 5.0.2.4, 5.0.2.11, 5.0.2.12.2, 5.0.2.13.3 and 5.0.2.14 do not apply.

Compatibility Requirements

Substances must be compatible with their packagings as required by 5.0.2.6;

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Additional Packaging Requirements

- ◆ Receptacles containing dangerous goods must be so secured or cushioned as to prevent their breakage or leakage and so as to control their movement within the machinery or apparatus during normal conditions of transport. Cushioning material must not react dangerously with the contents of the receptacles. Any leakage of the contents must not substantially impair the protective properties of the cushioning material.
- ◆ Package orientation ("This Way Up") labels (see 7.4.4 and 7.4.5) or pre-printed orientation labels meeting the same specifications must be affixed on at least two vertical sides with the arrows pointing in the correct direction only when required to ensure liquid dangerous goods remain in their intended orientation.
- ◆ Machinery or apparatus containing magnetized material meeting the requirements of Packing Instruction 956 must bear the "Magnetized Material" label (Figure 7.4.A) in addition to the "Miscellaneous Dangerous Goods" label (Figure 7.3.W).
- ◆ For Division 2.2 gases, cylinders for gases, their contents and filling ratios, must conform to the requirements of PI 200.

Fuel System Components

Fuel system components must be emptied of fuel as far as practicable and all openings must be sealed securely. They must be packed:

- a) in sufficient absorbent material to absorb the maximum amount of liquid which may possibly remain after emptying. Where the outer packaging is not liquid tight, a means of containing the liquid in the event of leakage must be provided in the form of a leakproof liner, plastic bag or other equally efficient means of containment;
- b) in strong outer packagings.

UN Number	Total net quantity of dangerous goods contained in one package (excluding magnetized material)
UN 3363 Dangerous goods in apparatus or Dangerous goods in machinery	Liquids: 0.5 L
	Solids: 1.0 kg
	Gases (Div. 2.2 only): 0.5 kg

OUTER PACKAGINGS - strong outer packagings, such as:

Type	Drums						Jerricans			Boxes						
	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Desc																

PACKING INSTRUCTION 963

This instruction applies to ID 8000 on passenger aircraft and Cargo Aircraft Only.

Consumer commodities are materials that are packaged and distributed in a form intended or suitable for retail sale for purposes of personal care or household use. These include items administered or sold to patients by doctors or medical administrations. Except as otherwise provided below, dangerous goods packed in accordance with this packing instruction do not need to comply with Subsection 5.0 or Section 6 of these Regulations; they must, however, comply with all other applicable requirements.

- (a) Each packaging must be designed and constructed to prevent leakage that may be caused by changes in altitude and temperature during air transport;
- (b) Inner packagings that are breakable (such as earthenware, glass or brittle plastic) must be packed to prevent breakage and leakage under conditions normally incident to transport. These completed packagings must be capable of withstanding a 1.2 m (4 ft) drop on solid concrete in the position most likely to cause damage;
- (c) When filling receptacles for liquids, sufficient ullage (outage) must be left to ensure that neither leakage nor permanent distortion of the receptacle will occur as a result of an expansion of the liquid caused by temperatures likely to prevail during transport. Unless specific requirements are prescribed in national rules or international agreements, liquids must not completely fill a receptacle at a temperature of 55°C (130°F). At this temperature a minimum ullage of 2% should be left. The primary packaging (which may include composite packaging), for which retention of the liquid is a basic function, must be capable of withstanding without leakage, an internal pressure which produces a pressure differential of not less than 75 kPa (0.75 bar, 10.9 lb/in²) or a pressure related to the vapour pressure of the liquid to be conveyed, whichever is the greater. The pressure related to the vapour pressure must be determined by the method shown in 5.0.2.9. Tests on sample receptacles must be carried out to demonstrate the capability of the primary packaging to withstand the above pressure;
- (d) Stoppers, corks or other such friction-type closures must be held securely, tightly and effectively in place by positive means. The closure device must be so designed that it is extremely improbable that it can be incorrectly or incompletely closed, and must be such that it may be easily checked to determine that it is completely closed;
- (e) Inner packagings must be tightly packed in strong outer packagings and must be so packed, secured or cushioned as to prevent any breakage, leakage or significant movement within the outer packaging(s) during normal conditions of transport. Absorbent material must be provided for glass or earthenware inner packaging(s) containing consumer commodities in Class 2 or 3 or liquids of Division 6.1, in sufficient quantity to absorb the liquid contents of the largest of such inner packagings contained in the outer packaging. Absorbent and cushioning material must not react dangerously with the contents of the inner packagings. Notwithstanding the above, absorbent material may not be required if the inner packagings are so protected that breakage of the inner packagings and leakage of their contents from the outer packaging will not occur during normal conditions of transport;
- (f) Packagings (including closures) in direct contact with dangerous goods must be resistant to any chemical or other action of such goods. The materials of the receptacles must not contain substances which may react dangerously with the contents, form hazardous products or significantly weaken the receptacles;
- (g) Each completed package as prepared for shipment must not exceed a gross weight of 30 kg G (66 lb G);
- (h) Class 2 substances must be further limited to aerosol products containing non-toxic compressed or liquefied gas(es) that are necessary to expel liquids, powders or pastes, packed in inner non-refillable non-metal receptacles not exceeding 120 mL (4 Fl.oz) capacity each, or in inner non-refillable metal receptacles not exceeding 820 mL (28 Fl.oz) capacity each (except that flammable aerosols must not exceed 500 mL (17 Fl.oz) capacity each), subject, in either case, to the following provisions:
 1. the pressure in the aerosol must not exceed 1,500 kPa at 55°C (15.0 bar, 217 lb/in² at 130°F) and each receptacle must be capable of withstanding without bursting a pressure of at least 1.5 times the equilibrium pressure of the contents at 55°C (130°F);
 2. if the pressure in the aerosol exceeds 970 kPa at 55°C (9.7 bar, 140.7 lb/in² at 130°F) but does not exceed 1,105 kPa at 55°C (11.0 bar, 160 lb/in² at 130°F), one of the following inner metal receptacles must be used:
 - IP7, IP7A, IP7B;
 3. if the pressure in the aerosol exceeds 1,105 kPa at 55°C (11.05 bar, 160 lb/in² at 130°F) but does not exceed 1,245 kPa at 55°C (12.45 bar, 180 lb/in² at 130°F), one of the following inner metal receptacles must be used:
 - IP7A, IP7B;
 4. if the pressure in the aerosol exceeds 1,245 kPa at 55°C (12.45 bar, 180 lb/in² at 130°F), only IP.7B metal receptacle must be used;
 5. IP.7B metal receptacles having a minimum burst pressure of 1,800 kPa may be equipped with an inner capsule charged with a non-flammable, non-toxic compressed gas to provide the propellant function. In this case, the pressure indicated in (1), (2), (3) or (4) do not apply to the pressure within the capsule. The quantity of gas contained in the capsule must be so limited that the minimum burst pressure of the receptacle would not be exceeded if the entire gas content of the capsule were released into an aerosol;
 6. the liquid content must not completely fill the closed receptacle at 55°C (130°F);
 7. each aerosol exceeding 120 mL (4 Fl.oz) capacity must have been heated until the pressure in the aerosol is equivalent to the equilibrium pressure of the contents at 55°C (130°F) without evidence of leakage, distortion or other defect;
 8. the valves must be protected by a cap or other suitable means during transport.
- (i) For aerosols containing a biological or medical preparation which will be deteriorated by a heat test and which are non-toxic and non-flammable, packed in inner non-refillable receptacles not exceeding 575 mL (19.4 Fl.oz) capacity each, the following provisions are applicable:

- 1 the pressure in the aerosol must not exceed 970 kPa at 55°C (9.7 bar, 140.7 lb/in² at 130°F);
 - 2 the liquid contents must not completely fill the closed receptacle at 55°C (130°F);
 - 3 one aerosol out of each lot of 500 or less, must be heated until the pressure in the aerosol is equivalent to the equilibrium pressure of the contents at 55°C (130°F) without evidence of leakage, distortion or other defect;
 - 4 the valves must be protected by a cap or other suitable means during transport.
- (j) Except for aerosols, inner packagings must not exceed:
- 1 500 mL for liquids; and
 - 2 500 g for solids.
- (k) Consumer commodities shipped according to these provisions may be shipped in a unit load device or other type of pallet when prepared by a single shipper provided they contain no other dangerous goods. The shipper must provide the operator with written documentation stating the number of packages and the total gross weight of ID 8000 contained in each unit load device
- (l) The gross weight on the Shipper's Declaration for Dangerous Goods must be shown as:
- 1 for one package, the actual gross weight of the package;
 - 2 for more than one package, either the actual gross weight of each package or as the average weight of the packages. For example, if there are 10 packages and the total gross weight of them is 100 kg, the Shipper's Declaration for Dangerous Goods may show this as "average gross weight per package 10 kg G".

PACKING INSTRUCTION 964

This instruction applies to UN 1941, UN 1990, UN 2315, UN 3151, UN 3082 and UN 3334 on passenger aircraft and Cargo Aircraft Only. The General Packing Requirements of Subsection 5.0.2 must be met.

Compatibility Requirements

Substances must be compatible with their packagings as required by 5.0.2.6;

Closure Requirements

Closures must meet the requirements of 5.0.2.7;

Combination and single packagings are permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging
Glass	10.0 L
Metal	40.0 L
Plastic	30.0 L

UN numbers	Total net quantity per package passenger aircraft	Total net quantity per package Cargo Aircraft Only
UN 1941 Dibromodifluoromethane UN 1990 Benzaldehyde UN 2315 Polychlorinated biphenyls, liquid UN 3151 Polyhalogenated biphenyls, liquid or Polyhalogenated terphenyls, liquid UN 3334 Aviation regulated liquid, n.o.s.	100 L	220 L
UN 3082 Environmentally hazardous substance, liquid, n.o.s.	450 L	450 L

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic
Spec	1A2	1B2	1D	1G	1H2	1N2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2

SINGLE PACKAGINGS

Type	Drums				Jerricans			Composites	Cylinders
Desc	Steel	Aluminium	Plastic	Other metal	Steel	Aluminium	Plastic	Plastic	
Spec	1A1 1A2	1B1 1B2	1H1 1H2	1N1 1N2	3A1 3A2	3B1 3B2	3H1 3H2	All	As permitted in 5.0.6.6

PACKING INSTRUCTION Y964

This instruction applies to Limited Quantities of UN 1941, UN 1990 and UN 3082.

The General Packing Requirements of Subsection 5.0.2 (with the exception of 5.0.2.3, 5.0.2.5, 5.0.2.11(f), 5.0.2.11(g) and 5.0.2.14) must be met except that the packagings do not have to meet the marking and testing requirements of 6.0.4 and Subsection 6.3. Packagings must meet the construction criteria specified in Subsections 6.1 and 6.2 and the test criteria specified in Subsection 6.6.

Compatibility Requirements

- Substances must be compatible with their packagings as required by 5.0.2.6

Closure Requirements

Closures must meet the requirements of 5.0.2.7

Limited Quantity Requirements

The requirements of Subsection 2.8 must be met including:

- the capability of the package to pass a drop test of 1.2m;
- a 24 hour stacking test.
- Inner packagings for liquids must be capable of passing a pressure differential test (5.0.2.9).
- The gross weight of the completed package must not exceed 30 kg.

Single packagings are not permitted.

COMBINATION PACKAGINGS

Inner Packaging (see 6.1)	Net quantity per inner packaging	Total quantity per package
Glass	5.0 L	30.0 kg G
Metal	5.0 L	
Plastic	5.0 L	

OUTER PACKAGINGS

Type	Drums						Jerricans			Boxes						
Desc	Steel	Alum- inium	Ply- wood	Fibre	Plastic	Other metal	Steel	Alum- inium	Plastic	Steel	Alum- inium	Wood	Ply- wood	Recon- stituted wood	Fibre- board	Plastic

PACKING INSTRUCTION 965

Note: *Packing Instructions 965 to 9706 are not included in this appendix as the content and format is the same as is shown in Section 5 of the 50th edition DGR.*