

Chapter 10

CLASS 8 – CORROSIVE SUBSTANCES

10.1 PACKING INSTRUCTIONS

Packing Instructions Y840 – Y841

Limited quantities
Passenger and cargo aircraft

General requirements

Part 4, Chapter 1 requirements must be met (except that 4;1.1.2, 1.1.9 c), 1.1.9 e), 1.1.16, 1.1.18 and 1.1.20 do not apply), including:

1) **Compatibility requirements**

- Substances must be compatible with their packagings as required by 4;1.1.3.
- Metal packagings must be corrosion resistant or be protected against corrosion.
- Substances of Class 8 are permitted in glass or earthenware inner packagings only if the substance is free from hydrofluoric acid.

2) **Closure requirements**

- Closures must meet the requirements of 4;1.1.4.

3) **Limited quantity requirements**

- Part 3, Chapter 4 requirements must be met including:
 - the capability of the package to pass a 1.2 m drop test;
 - a 24-hour stacking test; and
 - inner packagings for liquids must be capable of passing a pressure differential test (4;1.1.6).

COMBINATION PACKAGINGS						SINGLE PACKAGINGS
<i>Packing instruction</i>	<i>Packing group</i>	<i>Inner packaging (see 6;3.2)</i>	<i>Inner packaging quantity (per receptacle)</i>	<i>Total quantity per package</i>	<i>Total gross mass per package</i>	
Y840	II	Glass	0.1L	0.5 L	30 kg	No
		Plastics	0.1L			
		Metal	0.1L			
Y841	III	Glass	0.5 L	1.0 L		No
		Plastics	0.5 L			
		Metal	0.5 L			

ADDITIONAL PACKING REQUIREMENTS FOR COMBINATION PACKAGINGS*Packing Group II*

- Glass inner packagings must be packed with sufficient absorbent material to absorb the entire contents of the inner packagings and placed in a compatible and rigid intermediate packaging before packing in outer packagings.

Packing Instructions Y840 – Y841

OUTER PACKAGINGS OF COMBINATION PACKAGINGS (see 6;3.1)

Boxes

Aluminium
Fibreboard
Natural wood
Other metal
Plastics
Plywood
Reconstituted wood
Steel

Drums

Aluminium
Fibre
Other metal
Plastics
Steel

Jerricans

Aluminium
Plastics
Steel

Packing Instructions Y843 – Y845

Limited quantities
Passenger and cargo aircraft

General requirements

Part 4, Chapter 1 requirements must be met (except that 4;1.1.2, 1.1.9 c), 1.1.9 e), 1.1.16, 1.1.18 and 1.1.20 do not apply), including:

1) Compatibility requirements

- Substances must be compatible with their packagings as required by 4;1.1.3.
- Metal packagings must be corrosion resistant or be protected against corrosion.
- Substances of Class 8 are permitted in glass or earthenware inner packagings only if the substance is free from hydrofluoric acid.

2) Closure requirements

- Closures must meet the requirements of 4;1.1.4.

3) Limited quantity requirements

- Part 3, Chapter 4 requirements must be met including:
 - the capability of the package to pass a 1.2 m drop test; and
 - a 24-hour stacking test.

COMBINATION PACKAGINGS						SINGLE PACKAGINGS
<i>Packing instruction</i>	<i>Packing group</i>	<i>Inner packaging (see 6;3.2)</i>	<i>Inner packaging quantity (per receptacle)</i>	<i>Total quantity per package</i>	<i>Total gross mass per package</i>	
Y843	II	Glass	0.5 kg	1 kg	30 kg	No
		Plastics	0.5 kg			
		Metal	0.5 kg			
		Plastic bag	0.5 kg			
Y844	II	Glass	0.5 kg	5 kg		No
		Plastics	0.5 kg			
		Metal	0.5 kg			
		Plastic bag	0.5 kg			
Y845	III	Glass	1.0 kg	5 kg		No
		Plastics	1.0 kg			
		Metal	1.0 kg			
		Plastic bag	1.0 kg			

Packing Instructions Y843 – Y845

OUTER PACKAGINGS OF COMBINATION PACKAGINGS (see 6;3.1)

Boxes

Aluminium
Fibreboard
Natural wood
Other metal
Plastics
Plywood
Reconstituted wood
Steel

Drums

Aluminium
Fibre
Other metal
Plastics
Steel

Jerricans

Aluminium
Plastics
Steel

Packing Instructions 850 – 852

Passenger aircraft

General requirements

Part 4, Chapter 1 requirements must be met, including:

1) Compatibility requirements

- Substances must be compatible with their packagings as required by 4;1.1.3.
- Metal packagings must be corrosion resistant or be protected against corrosion.
- Substances of Class 8 are permitted in glass or earthenware inner packagings only if the substance is free from hydrofluoric acid.

2) Closure requirements

- Closures must meet the requirements of 4;1.1.4.

COMBINATION PACKAGINGS					SINGLE PACKAGINGS
Packing instruction	Packing group	Inner packaging (see 6;3.2)	Inner packaging quantity (per receptacle)	Total quantity per package	
850	I	Glass	0.5 L	0.5 L	No
		Plastics	0.5 L		
		Metal	0.5 L		
851	II	Glass	1.0 L	1 L	No
		Plastics	1.0 L		
		Metal	1.0 L		
852	III	Glass	2.5 L	5 L	No
		Plastics	2.5 L		
		Metal	5.0 L		

ADDITIONAL PACKING REQUIREMENTS FOR COMBINATION PACKAGINGS

Packing Group I

- Inner packagings must be packed with sufficient absorbent material to absorb the entire contents of the inner packagings and placed in a rigid leakproof receptacle before packing in outer packagings.

Packing Group III

- Packagings must meet the Packing Group II performance requirements.

Packing Instructions 850 – 852

OUTER PACKAGINGS OF COMBINATION PACKAGINGS (see 6;3.1)

Boxes

Aluminium (4B)
Fibreboard (4G)
Natural wood (4C1, 4C2)
Other metal (4N)
Plastics (4H1, 4H2)
Plywood (4D)
Reconstituted wood (4F)
Steel (4A)

Drums

Aluminium (1B1, 1B2)
Fibre (1G)
Other metal (1N1, 1N2)
Plastics (1H1, 1H2)
Steel (1A1, 1A2)

Jerricans

Aluminium (3B1, 3B2)
Plastics (3H1, 3H2)
Steel (3A1, 3A2)

Packing Instructions 854 – 856

Cargo aircraft only

General requirements

Part 4, Chapter 1 requirements must be met, including:

1) Compatibility requirements

- Substances must be compatible with their packagings as required by 4;1.1.3.
- Metal packagings must be corrosion resistant or be protected against corrosion.
- Substances of Class 8 are permitted in glass or earthenware inner packagings only if the substance is free from hydrofluoric acid.

2) Closure requirements

- Closures must meet the requirements of 4;1.1.4.

COMBINATION PACKAGINGS					SINGLE PACKAGINGS
Packing instruction	Packing group	Inner packaging (see 6;3.2)	Inner packaging quantity (per receptacle)	Total quantity per package	
854	I	Glass	1.0 L	2.5 L	No
		Plastics	1.0 L		
		Metal	1.0 L		
855	II	Glass	2.5 L	30 L	30 L
		Plastics	2.5 L		
		Metal	2.5 L		
856	III	Glass	5.0 L	60 L	60 L
		Plastics	5.0 L		
		Metal	10.0 L		

ADDITIONAL PACKING REQUIREMENTS FOR COMBINATION PACKAGINGS

Packing Group I

- Inner packagings must be packed with sufficient absorbent material to absorb the entire contents of the inner packagings and placed in a rigid leakproof receptacle before packing in outer packagings.

Packing Group III

- Packagings must meet the Packing Group II performance requirements.

Packing Instructions 854 – 856			
OUTER PACKAGINGS OF COMBINATION PACKAGINGS (see 6;3.1)			
<i>Boxes</i>	<i>Drums</i>	<i>Jerricans</i>	
Aluminium (4B)	Aluminium (1B1, 1B2)	Aluminium (3B1, 3B2)	
Fibreboard (4G)	Fibre (1G)	Plastics (3H1, 3H2)	
Natural wood (4C1, 4C2)	Other metal (1N1, 1N2)	Steel (3A1, 3A2)	
Other metal (4N)	Plastics (1H1, 1H2)		
Plastics (4H1, 4H2)	Steel (1A1, 1A2)		
Plywood (4D)			
Reconstituted wood (4F)			
Steel (4A)			
SINGLE PACKAGINGS FOR PACKING GROUP II			
<i>Composites</i>	<i>Cylinders</i>	<i>Drums</i>	<i>Jerricans</i>
All (see 6;3.1.18)	See 4;2.7	Aluminium (1B1)	Aluminium (3B1)
		Other metal (1N1)	Plastics (3H1)
		Plastics (1H1)	Steel (3A1)
		Steel (1A1)	
SINGLE PACKAGINGS FOR PACKING GROUP III ONLY			
<i>Composites</i>	<i>Cylinders</i>	<i>Drums</i>	<i>Jerricans</i>
All (see 6;3.1.18)	See 4;2.7	Aluminium (1B1, 1B2)	Aluminium (3B1, 3B2)
		Other metal (1N1, 1N2)	Plastics (3H1, 3H2)
		Plastics (1H1, 1H2)	Steel (3A1, 3A2)
		Steel (1A1, 1A2)	

Packing Instructions 858 – 860

Passenger aircraft

General requirements

Part 4, Chapter 1 requirements must be met, including:

1) Compatibility requirements

- Substances must be compatible with their packagings as required by 4;1.1.3.
- Metal packagings must be corrosion resistant or be protected against corrosion.
- Substances of Class 8 are permitted in glass or earthenware inner packagings only if the substance is free from hydrofluoric acid.

2) Closure requirements

- Closures must meet the requirements of 4;1.1.4.

COMBINATION PACKAGINGS					SINGLE PACKAGINGS
Packing instruction	Packing group	Inner packaging (see 6;3.2)	Inner packaging quantity (per receptacle)	Total quantity per package	
858	I	Glass	0.5 kg	1 kg	No
		Plastics	0.5 kg		
		Metal	0.5 kg		
859	II	Glass	1.0 kg	15 kg	No
		Plastics	2.5 kg		
		Metal	2.5 kg		
		Plastic bag	1.0 kg		
860	III	Glass	2.5 kg	25 kg	No
		Plastics	2.5 kg		
		Metal	5.0 kg		
		Plastic bag	2.5 kg		

ADDITIONAL PACKING REQUIREMENTS FOR COMBINATION PACKAGINGS

Packing Group III

- Packagings must meet the Packing Group II performance requirements.

OUTER PACKAGINGS OF COMBINATION PACKAGINGS (see 6;3.1)

Boxes

Aluminium (4B)
Fibreboard (4G)
Natural wood (4C1, 4C2)
Other metal (4N)
Plastics (4H1, 4H2)
Plywood (4D)
Reconstituted wood (4F)
Steel (4A)

Drums

Aluminium (1B1, 1B2)
Fibre (1G)
Other metal (1N1, 1N2)
Plastics (1H1, 1H2)
Plywood (1D)
Steel (1A1, 1A2)

Jerricans

Aluminium (3B1, 3B2)
Plastics (3H1, 3H2)
Steel (3A1, 3A2)

Packing Instructions 862 – 864

Cargo aircraft only

General requirements

Part 4, Chapter 1 requirements must be met, including:

1) Compatibility requirements

- Substances must be compatible with their packagings as required by 4;1.1.3.
- Metal packagings must be corrosion resistant or be protected against corrosion.
- Substances of Class 8 are permitted in glass or earthenware inner packagings only if the substance is free from hydrofluoric acid.

2) Closure requirements

- Closures must meet the requirements of 4;1.1.4.

COMBINATION PACKAGINGS					SINGLE PACKAGINGS
Packing instruction	Packing group	Inner packaging (see 6;3.2)	Inner packaging quantity (per receptacle)	Total quantity per package	
862	I	Glass	1.0 kg	25 kg	25 kg
		Plastics	2.5 kg		
		Metal	2.5 kg		
863	II	Glass	2.5 kg	50 kg	50 kg
		Plastics	5.0 kg		
		Metal	5.0 kg		
		Plastic bag	2.5 kg		
864	III	Glass	5.0 kg	100 kg	100 kg
		Plastics	5.0 kg		
		Metal	10.0 kg		
		Plastic bag	5.0 kg		

ADDITIONAL PACKING REQUIREMENTS FOR COMBINATION PACKAGINGS

Packing Group III

- Packagings must meet the Packing Group II performance requirements.

OUTER PACKAGINGS OF COMBINATION PACKAGINGS (see 6;3.1)

Boxes

Aluminium (4B)
Fibreboard (4G)
Natural wood (4C1, 4C2)
Other metal (4N)
Plastics (4H1, 4H2)
Plywood (4D)
Reconstituted wood (4F)
Steel (4A)

Drums

Aluminium (1B1, 1B2)
Fibre (1G)
Other metal (1N1, 1N2)
Plastics (1H1, 1H2)
Plywood (1D)
Steel (1A1, 1A2)

Jerricans

Aluminium (3B1, 3B2)
Plastics (3H1, 3H2)
Steel (3A1, 3A2)

ADDITIONAL PACKING REQUIREMENTS FOR SINGLE PACKAGINGS

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

Packing Instructions 862 – 864				
SINGLE PACKAGINGS FOR PACKING GROUP I				
<i>Composites</i>	<i>Cylinders</i>	<i>Drums</i>	<i>Jerricans</i>	
All (see 6;3.1.18)	See 4;2.7	Aluminium (1B1, 1B2) Fibre (1G) Plastics (1H1, 1H2) Plywood (1D) Steel (1A1, 1A2)	Aluminium (3B1, 3B2) Plastics (3H1, 3H2) Steel (3A1, 3A2)	
SINGLE PACKAGINGS FOR PACKING GROUPS II AND III ONLY				
<i>Boxes</i>	<i>Composites</i>	<i>Cylinders</i>	<i>Drums</i>	<i>Jerricans</i>
Aluminium (4B) Fibreboard (4G) Natural wood (4C2) Other metal (4N) Plastics (4H2) Plywood (4D) Reconstituted wood (4F) Steel (4A)	All (see 6;3.1.18)	See 4;2.7	Aluminium (1B1, 1B2) Fibre (1G) Plastics (1H1, 1H2) Plywood (1D) Steel (1A1, 1A2)	Aluminium (3B1, 3B2) Plastics (3H1, 3H2) Steel (3A1, 3A2)

Packing Instruction 866					
Cargo aircraft only for UN 2028 only					
General requirements					
Part 4, Chapter 1 requirements must be met, including:					
1) Compatibility requirements					
— Substances must be compatible with their packagings as required by 4;1.1.3.					
— Metal packagings must be corrosion resistant or be protected against corrosion.					
2) Closure requirements					
— Closures must meet the requirements of 4;1.1.4.					
COMBINATION PACKAGINGS					SINGLE PACKAGINGS
UN number and proper shipping name	Packing conditions	Total quantity per package – passenger	Total quantity per package – cargo		
UN 2028 Bombs, smoke, non-explosive with corrosive liquid, without initiating device	Bombs, smoke may be carried provided they are without ignition elements, bursting charges, detonating fuses or other explosive components.	Forbidden	50 kg		No
ADDITIONAL PACKING REQUIREMENTS FOR COMBINATION PACKAGINGS					
+ — Packagings must meet the Packing Group II performance requirements.					
— The articles must be individually packaged and separated from each other using partitions, dividers, inner packagings or cushioning material.					

Packing Instruction 866

OUTER PACKAGINGS OF COMBINATION PACKAGINGS (see 6;3.1)

Boxes

Aluminium (4B)
Fibreboard (4G)
Natural wood (4C1, 4C2)
Other metal (4N)
Plastics (4H1, 4H2)
Plywood (4D)
Reconstituted wood (4F)
Steel (4A)

Drums

Aluminium (1B2)
Fibre (1G)
Other metal (1N2)
Plastics (1H2)
Steel (1A2)

Packing Instruction 867

Passenger and cargo aircraft for UN 2803 only

General requirements

Part 4, Chapter 1 requirements must be met, including:

1) Compatibility requirements

- Substances must be compatible with their packagings as required by 4;1.1.3.
- Metal packagings must be corrosion resistant or be protected against corrosion.

2) Closure requirements

- Closures must meet the requirements of 4;1.1.4.

COMBINATION PACKAGINGS					SINGLE PACKAGINGS
UN number and proper shipping name	Inner packaging (see 6;3.2)	Inner packaging quantity (per receptacle)	Total quantity per package – passenger	Total quantity per package – cargo	
UN 2803 Gallium	Plastics	3.5 kg	20 kg	20 kg	No

ADDITIONAL PACKING REQUIREMENTS FOR COMBINATION PACKAGINGS

- Packagings must meet the Packing Group I performance requirements.
- Plastic inner packagings must be enclosed in liners or bags of strong leakproof 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.

OUTER PACKAGINGS OF COMBINATION PACKAGINGS (see 6;3.1)

Boxes

Fibreboard (4G)
Natural wood (4C1, 4C2)
Other metal (4N)
Plastics (4H1, 4H2)
Plywood (4D)
Reconstituted wood (4F)
Steel (4A)

Drums

Fibre (1G)
Other metal (1N1, 1N2)
Plastics (1H1, 1H2)
Steel (1A1, 1A2)

Packing Instruction 867

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 contain 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.

Packing Instruction 868

Passenger and cargo aircraft for UN 2809 only

General requirements

Part 4, Chapter 1 requirements must be met, including:

1) Compatibility requirements

- Substances must be compatible with their packagings as required by 4;1.1.3.
- Metal packagings must be corrosion resistant or be protected against corrosion.

2) Closure requirements

- Closures must meet the requirements of 4;1.1.4.

COMBINATION PACKAGINGS					SINGLE PACKAGINGS
UN number and proper shipping name	Inner packaging (see 6;3.2)	Inner packaging quantity (per receptacle)	Total quantity per package – passenger	Total quantity per package – cargo	
UN 2809 Mercury	Glass	2.5 kg	35 kg	35 kg	See below
	Plastics	2.5 kg			

ADDITIONAL PACKING REQUIREMENTS FOR COMBINATION PACKAGINGS

- Packagings must meet the Packing Group I performance requirements.
- Inner packagings must be enclosed in liners or bags of strong leakproof 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.

OUTER PACKAGINGS OF COMBINATION PACKAGINGS (see 6;3.1)

Boxes

Fibreboard (4G)
Natural wood (4C1, 4C2)
Other metal (4N)
Plastics (4H1, 4H2)
Plywood (4D)
Reconstituted wood (4F)
Steel (4A)

Drums

Fibre (1G)
Other metal (1N1, 1N2)
Plastics (1H1, 1H2)
Steel (1A1, 1A2)

SINGLE PACKAGINGS

Mercury may also be packed in a single packaging which may only 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

Passenger and cargo aircraft for UN Nos. 3506 and 3554 only

General requirements

Part 4, Chapter 1 requirements must be met, including:

1) Compatibility requirements

- Substances must be compatible with their packagings as required by 4;1.1.3.
- Metal packagings must be corrosion resistant or be protected against corrosion.

2) Closure requirements

- Closures must meet the requirements of 4;1.1.4.

COMBINATION PACKAGINGS			SINGLE PACKAGINGS
UN number and proper shipping name	Net quantity* per package – passenger	Net quantity* per package – cargo	
UN 3506 Mercury contained in manufactured articles	No limit	No limit	No
UN 3554 Gallium contained in manufactured articles			

*For the purposes of Part 5;4.1.5.1 the “net quantity” shown on the dangerous goods transport document is the net mass of the manufactured articles in each package.

ADDITIONAL PACKING REQUIREMENTS

- Manufactured articles or apparatuses of which metallic mercury or gallium is a component part, such as manometers, pumps, thermometers and switches must be packed in sealed inner liners or bags of strong leakproof and puncture-resistant material impervious to mercury or gallium, as appropriate, which will prevent the escape of mercury or gallium from the package irrespective of its position before being packed in outer packagings.

Note.— Mercury switches and relays are excepted from the requirement for a sealed inner liner or bag providing they are of the totally enclosed leakproof type in sealed metal or plastic units.

- Electron tubes, mercury vapour tubes (tubes with less than a total net quantity of 450 g of mercury) 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.

Note.— Tubes with 450 g of mercury or more must be packaged according to the requirements for manufactured articles or apparatuses (above).

- Electron tubes which are packed in sealed leakproof metal cases may be shipped in the manufacturer's original packagings.

OUTER PACKAGINGS OF COMBINATION PACKAGINGS (see 6;3.1)

Boxes

Drums

Jerricans

Strong outer packagings

Packing Instruction 870

Passenger and cargo aircraft for UN 2794 and 2795 only

General requirements

Part 4, Chapter 1 requirements must be met, including:

1) Compatibility requirements

- Substances must be compatible with their packagings as required by 4;1.1.3.
- Metal packagings must be corrosion resistant or be protected against corrosion.

2) Closure requirements

- Closures must meet the requirements of 4;1.1.4.

<i>UN number and proper shipping name</i>	<i>Packing conditions</i>	<i>Total quantity per package – passenger</i>	<i>Total quantity per package – cargo</i>
UN 2794 Batteries, wet, filled with acid UN 2795 Batteries, wet, filled with alkali	Batteries must be placed in 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 must be incapable of short-circuiting and be securely cushioned in the packagings. The upright position of the package must be indicated on it by "Package orientation" labels (Figure 5-29) as required by 5;3. The words "This side up" or "This end up" may also be displayed on the top of the package.	30 kg	400 kg

ADDITIONAL PACKING REQUIREMENTS

- Packagings must meet the Packing Group II performance requirements.
- For batteries, electric storage, packed with battery fluid in the same outer packaging, see UN 2796 and UN 2797.

PACKAGINGS

Boxes

Aluminium (4B)
Fibreboard (4G)
Natural wood (4C1, 4C2)
Plastics (4H1, 4H2)
Plywood (4D)
Reconstituted wood (4F)
Steel (4A)

Drums

Aluminium (1B2)
Fibre (1G)
Other metal (1N2)
Plastics (1H2)
Plywood (1D)
Steel (1A2)

Jerricans

Aluminium (3B2)
Plastics (3H2)
Steel (3A2)

Packing Instruction 871

Passenger and cargo aircraft for UN 3028 only

General requirements

Part 4, Chapter 1 requirements must be met, including:

1) Compatibility requirements

- Substances must be compatible with their packagings as required by 4;1.1.3.
- Metal packagings must be corrosion resistant or be protected against corrosion.

2) Closure requirements

- Closures must meet the requirements of 4;1.1.4.

<i>UN number and proper shipping name</i>	<i>Packing conditions</i>	<i>Total quantity per package – passenger</i>	<i>Total quantity per package – cargo</i>
UN 3028 Batteries, dry, containing potassium hydroxide solid	The batteries must be securely cushioned in the packagings.	25 kg	230 kg

ADDITIONAL PACKING REQUIREMENTS

- Packagings must meet the Packing Group II performance requirements.

PACKAGINGS

Boxes

Aluminium (4B))
Fibreboard (4G)
Natural wood (4C1, 4C2)
Plastics (4H2)
Plywood (4D)
Reconstituted wood (4F)
Steel (4A)

<div><div>Packing Instruction 872</div><div>Passenger and cargo aircraft for UN 2800</div></div>				
<div>General requirements</div> <div>Part 4, Chapter 1 requirements must be met, including:</div> <div>1) Compatibility requirements</div> <div><div>— Substances must be compatible with their packagings as required by 4;1.1.3.</div><div>— Metal packagings must be corrosion resistant or be protected against corrosion.</div></div> <div>2) Closure requirements</div> <div><div>— Closures must meet the requirements of 4;1.1.4.</div></div>				
<div>UN number and proper shipping name</div>		<div>Packing conditions</div>	<div>Total quantity per package – passenger</div>	<div>Total quantity per package – cargo</div>
<div>UN 2800 Batteries, wet, non-spillable</div>		<div>Batteries must be protected against short circuits and must be securely packed in strong outer packagings.</div>	<div>No limit</div>	<div>No limit</div>
<div>PACKAGINGS</div> <div><div>Boxes</div><div>Drums</div><div>Jerricans</div><div>Strong outer packagings</div></div>				

Packing Instruction 873

Passenger and cargo aircraft for UN 3477

General requirements

Part 4;1.1.1, 1.1.2 and 1.1.8 requirements must be met, including:

1) Compatibility requirements

- Substances must be compatible with their packagings as required by 4;1.1.3.

<i>UN number and proper shipping name</i>	<i>Quantity – passenger</i>	<i>Quantity – cargo</i>
UN 3477 Fuel cell cartridges	5 kg of fuel cell cartridges	50 kg of fuel cell cartridges

ADDITIONAL PACKING REQUIREMENTS

- Fuel cell cartridges must be securely cushioned in the outer packagings.
- The mass of each fuel cell cartridge must not exceed 1 kg.
- Packagings must meet the Packing Group II performance requirements.

OUTER PACKAGINGS OF COMBINATION PACKAGINGS (see 6;3.1)

Boxes

Aluminium(4B)
Fibreboard (4G)
Natural wood (4C1, 4C2)
Other metal (4N)
Plastics (4H2)
Plywood (4D)
Reconstituted wood (4F)
Steel (4A)

Drums

Aluminium(1B2)
Fibre (1G)
Other metal (1N2)
Plastics (1H2)
Plywood (1D)
Steel (1A2)

Jerricans

Aluminium (3B2)
Plastics (3H2)
Steel (3A2)

Packing Instruction Y873

Limited quantities for UN 3477 only

General requirements

Part 3;4 requirements must be met.

Single packagings are not permitted for limited quantities.

For the purpose of this packing instruction, a fuel cell cartridge is considered an inner packaging.

1) Compatibility requirements

- Substances must be compatible with their packagings as required by 4;1.1.3.

<i>UN number and name</i>	<i>Maximum quantity per package</i>
UN 3477 Fuel cell cartridges, containing corrosive substances	2.5 kg of fuel cell cartridges

ADDITIONAL PACKING REQUIREMENTS

- Fuel cell cartridges must be securely cushioned in the outer packagings.
- Fuel cell cartridges must not exceed 0.2 L of liquid corrosive fuel or 0.2 kg of solid corrosive fuel per cartridge.

Packing Instruction Y873		
OUTER PACKAGINGS OF COMBINATION PACKAGINGS (see 6;3.1)		
<i>Boxes</i>	<i>Drums</i>	<i>Jerricans</i>
Aluminium	Aluminium	Aluminium
Fibreboard	Fibre	Plastics
Natural wood	Other metal	Steel
Other metal	Plastics	
Plastics	Plywood	
Plywood	Steel	
Reconstituted wood		
Steel		

Packing Instruction 874		
Passenger and cargo aircraft for UN 3477 (contained in equipment) only		
General requirements		
Part 4;1.1.1 and 1.1.8 requirements must be met, including:		
1) Compatibility requirements		
— Substances must be compatible with their packagings as required by 4;1.1.3.		
<i>UN number and name</i>	<i>Quantity – passenger</i>	<i>Quantity – cargo</i>
UN 3477 Fuel cell cartridges contained in equipment , containing corrosive substances	5 kg of fuel cell cartridges	50 kg of fuel cell cartridges
ADDITIONAL PACKING REQUIREMENTS		
— Fuel cell cartridges that are contained in equipment must be protected against short circuit and the equipment must be protected against inadvertent operation.		
— Equipment must be securely cushioned in the outer packagings.		
— The mass of each fuel cell cartridge must not exceed 1 kg.		
— Fuel cell systems must not charge batteries during transport.		
— On passenger aircraft, each fuel cell system and each fuel cell cartridge must conform to IEC 62282-6-100 Ed. 1, including Amendment 1, or a standard approved by the appropriate authority of the State of Origin.		
OUTER PACKAGINGS OF COMBINATION PACKAGINGS (see 6;3.1)		
<i>Boxes</i>	<i>Drums</i>	<i>Jerricans</i>
	Strong outer packagings	

Packing Instruction 875

Passenger and cargo aircraft for UN 3477 (packed with equipment) only

General requirements

Part 4;1.1.1 and 1.1.8 requirements must be met, including:

1) Compatibility requirements

- Substances must be compatible with their packagings as required by 4;1.1.3.

<i>UN number and name</i>	<i>Quantity – passenger</i>	<i>Quantity – cargo</i>
UN 3477 Fuel cell cartridges packed with equipment , containing corrosive substances	5 kg of fuel cell cartridges	50 kg of fuel cell cartridges

ADDITIONAL PACKING REQUIREMENTS

- When fuel cell cartridges are packed with equipment, they must be packed in intermediate packagings together with the equipment they are capable of powering.
- The maximum number of fuel cell cartridges in the intermediate packaging must be the minimum number required to power the equipment, plus 2 spares.
- The fuel cell cartridges and the equipment must be packed with cushioning material or divider(s) or inner packaging so that the fuel cell cartridges are protected against damage that may be caused by the movement or placement of the equipment and the cartridges within the packaging.
- The mass of each fuel cell cartridge must not exceed 1 kg.

OUTER PACKAGINGS OF COMBINATION PACKAGINGS (see 6;3.1)

Boxes

Drums

Jerricans

Strong outer packagings

Packing Instruction 876

Cargo aircraft only for Chlorosilanes

General requirements

Part 4, Chapter 1 requirements must be met, including:

1) Compatibility requirements

- Substances must be compatible with their packagings as required by 4;1.1.3.
- Metal packagings must be corrosion resistant or be protected against corrosion.

2) Closure requirements

- Closures must meet the requirements of 4;1.1.4.

COMBINATION PACKAGINGS				SINGLE PACKAGINGS	
UN number	Inner packaging (see 6;3.2)	Net quantity per inner packaging – cargo	Total quantity per package – cargo	Passenger	Cargo
UN 1724, UN 1728, UN 1747, UN 1753, UN 1762, UN 1763, UN 1766, UN 1767, UN 1769, UN 1771, UN 1781, UN 1784, UN 1799, UN 1800, UN 1801, UN 1804, UN 1816, UN 1818, UN 2434, UN 2435, UN 2437, UN 2986, UN 2987	Glass	1.0 L	30.0 L	No	30.0 L
	Plastics	Forbidden			
	Steel	5.0 L			

OUTER PACKAGINGS OF COMBINATION PACKAGINGS

Boxes

Fibreboard (4G)
Natural wood (4C1, 4C2)
Plastics (4H1, 4H2)
Plywood (4D)
Reconstituted wood (4F)
Steel (4A)

Drums

Fibre (1G)
Plastics (1H1, 1H2)
Plywood (1D)
Steel (1A1, 1A2)

SINGLE PACKAGINGS FOR CARGO AIRCRAFT ONLY

Composites

Plastic receptacle in steel drum (6HA1)

Cylinders

Steel (as
permitted by 4;2.7)

Drums

Steel (1A1)

Jerricans

Steel (3A1)