

## 04 - The list of Dangerous Goods



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## 04 - The list of Dangerous Goods

See TIs part 3 – “blue pages”

The Dangerous Goods List lists the dangerous goods most commonly carried but is not exhaustive.

Sorted alphabetically.

It is intended that the list cover, as far as practicable, all dangerous substances of commercial importance.

Where an article or substance is specifically listed by name in the Dangerous Goods List, it **must** be transported in accordance with the provisions in the list.

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The list also includes a number of specific articles and substances whose transport by air is forbidden.

- 1) When the word “Forbidden” appears across columns 2 and 3, it means that the dangerous goods covered by that particular entry is **forbidden on aircraft under any circumstances**.
- 2) Where an article or substance may not be carried on a passenger aircraft, the word “FORBIDDEN” is written across columns 10 and 11.
- 3) Where an article or substance may not be carried on any aircraft, the word “FORBIDDEN” is written across columns 12 and 13 as well as across columns 10 and 11.

Name	UN No.	Class or division	Subsidiary hazard	Labels	State variations	Special provisions	UN packing group	Excepted quantity	Passenger and cargo aircraft		Cargo aircraft only	
									Packing instruction	Max. net quantity per package	Packing instruction	Max. net quantity per package
1	2	3	4	5	6	7	8	9	10	11	12	13
Aluminium dross, wet or hot	1)	FORBIDDEN										
Aluminium hydride	2483	4.3		Danger if wet			I	E0	2)	FORBIDDEN	487	15 kg
Aluminium nitrate	1438	5.1		Oxidizer			III	E1	559 Y548	25 kg 10 kg	563	100 kg
Aluminium phosphide	1397	4.3	6.1	Danger if wet & Toxic			I	E0		FORBIDDEN	487	15 kg
Aluminium phosphide pesticide	3048	6.1				A128		E0	3)	FORBIDDEN		FORBIDDEN

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For these two cases, the article or substance may be transported...

- with a specific exemption;
- or with the prior approval of the appropriate authorities when allowed by the special provisions (“A1” for pax, “A2” for pax and CAO).

Name	UN No.	Class or division	Subsidiary hazard	Labels	State variations	Special provisions	UN packing group	Excepted quantity	Passenger and cargo aircraft		Cargo aircraft only	
									Packing instruction	Max. net quantity per package	Packing instruction	Max. net quantity per package
1	2	3	4	5	6	7	8	9	10	11	12	13
Aluminium dross, wet or hot		FORBIDDEN										
Aluminium hydride	2483	4.3		Danger if wet			I	E0		FORBIDDEN	487	15 kg
Aluminium nitrate	1438	5.1		Oxidizer			III	E1	559 Y548	25 kg 10 kg	563	100 kg
Aluminium phosphide	1397	4.3	6.1	Danger if wet & Toxic			I	E0		FORBIDDEN	487	15 kg
Aluminium phosphide pesticide	3048	6.1				A128		E0		FORBIDDEN		FORBIDDEN

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## 04 - The list of Dangerous Goods

### 01 – Using the list of dangerous goods

Name 1	UN No. 2	Class or division 3	Subsidiary hazard 4	Labels 5	State variations 6	Special provisions 7	UN packing group 8	Excepted quantity 9	Passenger and cargo aircraft		Cargo aircraft only	
									Packing instruction 10	Max. net quantity per package 11	Packing instruction 12	Max. net quantity per package 13
<b>Magnesium powder</b>	1418	4.3	4.2	Danger if wet & Spontaneous combustion		A3	I	E0	FORBIDDEN		488	15 kg
							II	E2	483	15 kg	490	50 kg
							III	E1	486	25 kg	491	100 kg

Proper shipping name (boldface)

Other names (lightface) with a cross reference

Names with additional considerations (lightface)

Names of articles forbidden for carriage by air (lightface)

**Bisulphates, aqueous solution**

Accumulators, electric, see  
**Batteries, etc.**

**Alcoholic beverages** containing more than 24% but not more than 70% alcohol by volume

Aluminium dross, wet or hot

FORBIDDEN

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Name 1	UN No. 2	Class or division 3	Subsidiary hazard 4	Labels 5	State variations 6	Special provisions 7	UN packing group 8	Excepted quantity 9	Passenger and cargo aircraft		Cargo aircraft only	
									Packing instruction 10	Max. net quantity per package 11	Packing instruction 12	Max. net quantity per package 13
<b>Magnesium powder</b>	1418	4.3	4.2	Danger if wet & Spontaneous combustion		A3	I	E0	FORBIDDEN		488	15 kg
							II	E2	483	15 kg	490	50 kg
							III	E1	486	25 kg	491	100 kg

Since the DG List cannot be exhaustive, it also includes various generic or “not otherwise specified” entries to assist in the transport of those commodities not specifically listed by name, e.g.

Generics	→	<b>Bipyridilium pesticide, solid, toxic*</b>	2781	6.1			Toxic
		<b>Bisulphates, aqueous solution</b>	2837	8			Corrosive
Not Otherwise Specified	→	<b>Flammable liquid, n.o.s.*</b>	1993	3			Liquid flammable

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Name	UN No.	Class or division	Subsidiary hazard	Labels	State variations	Special provisions	UN packing group	Excepted quantity	Passenger and cargo aircraft		Cargo aircraft only	
									Packing instruction	Max. net quantity per package	Packing instruction	Max. net quantity per package
1	2	3	4	5	6	7	8	9	10	11	12	13
Magnesium powder	1418	4.3	4.2	Danger if wet & Spontaneous combustion		A3	I	E0	FORBIDDEN			
							II	E2	483	15 kg	490	50 kg
							III	E1	486	25 kg	491	100 kg

\* >> + Technical name or description

e.g. « UN 1993 - Flammable liquid, n.o.s. (contains xylene and benzene) »

Bipyridilium pesticide, solid, toxic	2781	6.1		Toxic
Bisulphates, aqueous solution	2837	8		Corrosive
Flammable liquid, n.o.s.	1993	3		Liquid flammable

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#### n.o.s. proper shipping names

The technical name must be a recognized chemical or biological name or other name currently used.  
Trade names must not be used for this purpose, e.g.



Aerohydraulic 520

Environmentally hazardous substance, liquid, n.o.s.*	3082	9		Miscellaneous
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Environmentally hazardous substance, liquid, n.o.s. (Aerohydraulic 520) ✗

Environmentally hazardous substance, liquid, n.o.s. (Distillates (petroleum), hydrotreated middle) ✓

>> see the related Safety Data Sheet (SDS)

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Name	UN No.	Class or division	Subsidiary hazard	Labels	State variations	Special provisions	UN packing group	Excepted quantity	Passenger and cargo aircraft		Cargo aircraft only	
									Packing instruction	Max. net quantity per package	Packing instruction	Max. net quantity per package
1	2	3	4	5	6	7	8	9	10	11	12	13
Magnesium powder	1418	4.3	4.2	Danger if wet & Spontaneous combustion		A3	I	E0	FORBIDDEN		488	15 kg
							II	E2	483	15 kg	490	50 kg
							III	E1	486	25 kg	491	100 kg

“UN1418”

This column contains the serial number assigned to the article or substance under the United Nations classification system.

Some entries in the list have not been assigned such a number and for these, a temporary identification number (ID) in the 8000 series has been allocated and is indicated where appropriate:

Consumer commodity †	8000	9		Miscellaneous
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“ID8000”

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Name	UN No.	Class or division	Subsidiary hazard	Labels	State variations	Special provisions	UN packing group	Excepted quantity	Passenger and cargo aircraft		Cargo aircraft only	
									Packing instruction	Max. net quantity per package	Packing instruction	Max. net quantity per package
1	2	3	4	5	6	7	8	9	10	11	12	13
Magnesium powder	1418	4.3	4.2	Danger if wet & Spontaneous combustion		A3	I	E0	FORBIDDEN		488	15 kg
							II	E2	483	15 kg	490	50 kg
							III	E1	486	25 kg	491	100 kg

When the word “Forbidden” appears across this column and column 3...

Aluminium dross, wet or hot	FORBIDDEN		
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... it means that the dangerous goods covered by that particular entry meet the description of dangerous goods **forbidden on aircraft under any circumstances**.

TIs Part 1 chapter 2.1

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Name	UN No.	Class or division	Subsidiary hazard	Labels	State variations	Special provisions	UN packing group	Excepted quantity	Passenger and cargo aircraft		Cargo aircraft only	
									Packing instruction	Max. net quantity per package	Packing instruction	Max. net quantity per package
1	2	3	4	5	6	7	8	9	10	11	12	13
Magnesium powder	1418	4.3	4.2	Danger if wet & Spontaneous combustion		A3	I II III	E0 E2 E1	FORBIDDEN		488	15 kg
									483	15 kg	490	50 kg
									486	25 kg	491	100 kg

This column contains the class or division of the primary hazard...



... and, in the case of Class 1, the compatibility group assigned to the article.

Cartridges for weapons, inert projectile †	0417	1.3C	
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Name	UN No.	Class or division	Subsidiary hazard	Labels	State variations	Special provisions	UN packing group	Excepted quantity	Passenger and cargo aircraft		Cargo aircraft only	
									Packing instruction	Max. net quantity per package	Packing instruction	Max. net quantity per package
1	2	3	4	5	6	7	8	9	10	11	12	13
Magnesium powder	1418	4.3	4.2	Danger if wet & Spontaneous combustion		A3	I II III	E0 E2 E1	FORBIDDEN		488	15 kg
									483	15 kg	490	50 kg
									486	25 kg	491	100 kg

This column contains (if needed) the class or division number of any important subsidiary hazards which have been identified by applying the classification process.



If no subsidiary hazard is associated to the article or substance, this column remains empty:

Cartridges for weapons, inert projectile †	0417	1.3C	
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Name	UN No.	Class or division	Subsidiary hazard	Labels	State variations	Special provisions	UN packing group	Excepted quantity	Passenger and cargo aircraft		Cargo aircraft only	
									Packing instruction	Max. net quantity per package	Packing instruction	Max. net quantity per package
1	2	3	4	5	6	7	8	9	10	11	12	13
Magnesium powder	1418	4.3	4.2	Danger if wet & Spontaneous combustion		A3	I	E0	FORBIDDEN		488	15 kg
							II	E2	483	15 kg	490	50 kg
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This column specifies the class hazard label followed by the subsidiary hazard label(s) to be applied to each outside packaging and overpack.



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Name	UN No.	Class or division	Subsidiary hazard	Labels	State variations	Special provisions	UN packing group	Excepted quantity	Passenger and cargo aircraft		Cargo aircraft only	
									Packing instruction	Max. net quantity per package	Packing instruction	Max. net quantity per package
1	2	3	4	5	6	7	8	9	10	11	12	13
Magnesium powder	1418	4.3	4.2	Danger if wet & Spontaneous combustion		A3	I	E0	FORBIDDEN		488	15 kg
							II	E2	483	15 kg	490	50 kg
							III	E1	486	25 kg	491	100 kg

For magnetized material the required handling label is also shown.

Magnetized material	2807	9		Magnetic
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In the instances where no label is required the word "None" will be mentioned.

Genetically modified micro-organisms	3245	9		None
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E.g. Biological substances, Category B the dedicated mark is however mandatory.

Biological substance, Category B	3373	6.2		None
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Name	UN No.	Class or division	Subsidiary hazard	Labels	State variations	Special provisions	UN packing group	Excepted quantity	Passenger and cargo aircraft		Cargo aircraft only	
									Packing instruction	Max. net quantity per package	Packing instruction	Max. net quantity per package
1	2	3	4	5	6	7	8	9	10	11	12	13
Magnesium powder	1418	4.3	4.2	Danger if wet & Spontaneous combustion		A3	I II III	E0 E2 E1	FORBIDDEN		488	15 kg
									483	15 kg	490	50 kg
									486	25 kg	491	100 kg

presentation 02 - Limitations  
 chapter 2 of this module  
 presentation 03 - Classification  
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Name	UN No.	Class or division	Subsidiary hazard	Labels	State variations	Special provisions	UN packing group	Excepted quantity	Passenger and cargo aircraft		Cargo aircraft only	
									Packing instruction	Max. net quantity per package	Packing instruction	Max. net quantity per package
1	2	3	4	5	6	7	8	9	10	11	12	13
Magnesium powder	1418	4.3	4.2	Danger if wet & Spontaneous combustion		A3	I II III	E0 E2 E1	FORBIDDEN		488	15 kg
									483	15 kg	490	50 kg
									486	25 kg	491	100 kg

This column refers to the relevant packing instructions listed in TIs Part 4 for transport of the article or substance on a passenger aircraft or a cargo one.



>> See presentation 05 – Packaging, markings and labelling

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Name	UN No.	Class or division	Subsidiary hazard	Labels	State variations	Special provisions	UN packing group	Excepted quantity	Passenger and cargo aircraft		Cargo aircraft only	
									Packing instruction	Max. net quantity per package	Packing instruction	Max. net quantity per package
1	2	3	4	5	6	7	8	9	10	11	12	13
Magnesium powder	1418	4.3	4.2	Danger if wet & Spontaneous combustion		A3	I II III	E0 E2 E1	FORBIDDEN		488	15 kg
									483	15 kg	490	50 kg
									486	25 kg	491	100 kg

For some entries an alternative packing instruction is shown prefixed with the letter “Y”.  
Such packing instructions are for limited quantities of dangerous goods.

Fuel, aviation, turbine engine	1863	3		Liquid flammable		A3	I II III	E3 E2 E1	351	1 L
									353	5 L
									Y341	1 L
									355	60 L
									Y344	10 L



>> See presentation 02 - Limitations

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Name	UN No.	Class or division	Subsidiary hazard	Labels	State variations	Special provisions	UN packing group	Excepted quantity	Passenger and cargo aircraft		Cargo aircraft only	
									Packing instruction	Max. net quantity per package	Packing instruction	Max. net quantity per package
1	2	3	4	5	6	7	8	9	10	11	12	13
Magnesium powder	1418	4.3	4.2	Danger if wet & Spontaneous combustion		A3	I II III	E0 E2 E1	FORBIDDEN		488	15 kg
									483	15 kg	490	50 kg
									486	25 kg	491	100 kg

This column shows the maximum net quantity (mass or volume) of the article or substance allowed in each package...

... unless indicated by a letter “G” where the mass quoted is the total (gross) mass of the package:

Aerosols, flammable	1950	2.1		Gas flammable		A145 A167		E0	203	75 kg
									Y203	30 kg <span style="border: 1px solid black; padding: 0 2px;">G</span>

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Name	UN No.	Class or division	Subsidiary hazard	Labels	State variations	Special provisions	UN packing group	Excepted quantity	Passenger and cargo aircraft		Cargo aircraft only	
									Packing instruction	Max. net quantity per package	Packing instruction	Max. net quantity per package
1	2	3	4	5	6	7	8	9	10	11	12	13
Magnesium powder	1418	4.3	4.2	Danger if wet & Spontaneous combustion		A3	I II III	E0 E2 E1	FORBIDDEN		488	15 kg
									483	15 kg	490	50 kg
									486	25 kg	491	100 kg

#### Reminder

Where the word “FORBIDDEN” is written across columns 10 and 11, it means that an article or substance may not be carried on a passenger aircraft.

Anyway, it could be transported:

- with a specific exemption;
- or with the prior approval of the appropriate authorities when allowed by the special provisions (“A1” for pax, “A2” for pax and CAO).

>> See presentation 13

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Name	UN No.	Class or division	Subsidiary hazard	Labels	State variations	Special provisions	UN packing group	Excepted quantity	Passenger and cargo aircraft		Cargo aircraft only	
									Packing instruction	Max. net quantity per package	Packing instruction	Max. net quantity per package
1	2	3	4	5	6	7	8	9	10	11	12	13
Magnesium powder	1418	4.3	4.2	Danger if wet & Spontaneous combustion		A3	I II III	E0 E2 E1	FORBIDDEN		488	15 kg
									483	15 kg	490	50 kg
									486	25 kg	491	100 kg

Explanations ≡ columns 10 & 11



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#### 02 – Special provisions

Name	UN No.	Class or division	Sub-sidiary hazard	Labels	State variations	Special provisions	UN packing group	Excepted quantity	Passenger and cargo aircraft		Cargo aircraft only	
									Packing instruction	Max. net quantity per package	Packing instruction	Max. net quantity per package
1	2	3	4	5	6	7	8	9	10	11	12	13
Magnesium powder	1418	4.3	4.2	Danger if wet & Spontaneous combustion		A3	I	E0	FORBIDDEN		488	15 kg
							II	E2	483	15 kg	490	50 kg
							III	E1	486	25 kg	491	100 kg

Special provisions consist of complementary information related to the transport of the concerned Dangerous Goods.

They are listed in the table 3-2.

Special provisions apply to all the packing groups permitted for a particular substance or article unless the wording makes it otherwise apparent

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### 02 – Special provisions

UN special provision number when the wording of the special provision is equivalent to that in the UN Model regulations

information and/or requirements

Special provision references  
(from A1 to A214)



Table 3-2. Special provisions	
TIs	UN
A1	This article or substance may be transported on passenger aircraft only with the prior approval of the appropriate authority of the State of Origin and the State of the Operator under the written conditions established by those authorities. The conditions must include the quantity limitations and packing requirements and these must comply with S-3;1.2.2 of the Supplement. A copy of the document(s) of approval, showing the quantity limitations and packing requirements, must accompany the consignment. The article or substance may be carried on cargo aircraft in accordance with columns 12 and 13 of Table 3-1.  When States, other than the State of Origin and the State of the Operator, have notified ICAO that they require prior approval of shipments made under this special provision, approval must also be obtained from these States, as appropriate.
A2	This article or substance may be transported on cargo aircraft only with the prior approval of the appropriate authority of the State of Origin and the State of the Operator under the written conditions established by those authorities.  When States, other than the State of Origin and the State of the Operator, have notified ICAO that they require prior approval of shipments made under this special provision, approval must also be obtained from the States of transit, overflight and destination, as appropriate.  In each case, the conditions must include the quantity limitations and packing requirements and these must comply with S-3;1.2.3 of the Supplement. A copy of the document(s) of approval, showing the quantity limitations and the packing and labelling requirements, must accompany the consignment.
A3	(223) If the chemical or physical properties of a substance covered by this description are such that, when tested, it does not meet the established defining criteria for the class or division listed in column 3, or any other class or division, it is not subject to these Instructions.

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### 02 – Special provisions

#### Examples

A9 (≈145) Alcoholic beverages containing not more than 70 per cent alcohol by volume, when packed in receptacles of 5 litres or less, are not subject to these Instructions when carried as cargo.



145 Other than for air transport, alcoholic beverages of packing group III, when carried in receptacles of 250 litres or less, are not subject to these Regulations.

A48 Packaging tests are not considered necessary.

A57 Packagings must be so constructed that explosion is not possible by reason of increased internal pressure.

A62 (178) This designation may only be used when no other appropriate designation exists in the list and then only with the approval of the appropriate authority of the State in which the dangerous goods were manufactured.

A145 Waste aerosols are forbidden from air transport.

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### 02 – Special provisions

Aerosols, flammable (engine starting fluid)	1950	2.1		Gas flammable	AU 1 CA 7	A1		E0	FORBIDDEN	203	150 kg
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This article or substance may be transported on passenger aircraft only with the prior approval of the appropriate authority of the State of Origin and the State of the Operator under the written conditions established by those authorities. The conditions must include the quantity limitations and packing requirements and these must comply with S-3;1.2.2 of the Supplement. A copy of the document(s) of approval, showing the quantity limitations and packing requirements, must accompany the consignment. The article or substance may be carried on cargo aircraft in accordance with columns 12 and 13 of Table 3-1.

When States, other than the State of Origin and the State of the Operator, have notified ICAO that they require prior approval of shipments made under this special provision, approval must also be obtained from these States, as appropriate.



>> See presentation 13 – CAA's responsibilities and tasks

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### 02 – Special provisions

Compressed gas, toxic, flammable, n.o.s.*	1953	2.3	2.1		AU 1 CA 7	A2			FORBIDDEN	FORBIDDEN
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This article or substance may be transported on cargo aircraft only with the prior approval of the appropriate authority of the State of Origin and the State of the Operator under the written conditions established by those authorities.

When States, other than the State of Origin and the State of the Operator, have notified ICAO that they require prior approval of shipments made under this special provision, approval must also be obtained from the States of transit, overflight and destination, as appropriate.

In each case, the conditions must include the quantity limitations and packing requirements and these must comply with S-3;1.2.3 of the Supplement. A copy of the document(s) of approval, showing the quantity limitations and the packing and labelling requirements, must accompany the consignment.



Possible with an exemption IAW Doc9284-sup from States of:

- origin;
- operator;
- transit;
- overflight;
- and destination.

>> See presentation 13 – CAA's responsibilities and tasks



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Thank you for your attention



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