Dangerous goods manual Guidelines for shipping with Swiss Post



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Introduction

The transport of dangerous goods is subject to the national regulations of the SDR (Ordinance on the Carriage of Dangerous Goods by Road), and the international regulations of the ADR (Agreement concerning the International Carriage of Dangerous Goods by Road).

These regulations apply both to you as the sender and to Swiss Post as the carrier.

As the sender, you must ensure that only dangerous goods authorized for transport are handed over for transport, that the dangerous goods are correctly classified, labelled and packaged, that transport companies are informed about the type and quantity of dangerous goods and that any documents required are correctly issued and provided to the carrier.

An important aspect for the carriage of dangerous goods is also that staff responsible for the shipping of dangerous goods must be trained beforehand and then at regular intervals on a task-specific basis.

This manual provides essential information regarding the sending of dangerous goods by parcel post or letter mail. However, the information is not exhaustive. If you have any doubts or questions, contact us at dangerous.goods@swisspost.ch.

Please note that charges apply for the transport of dangerous goods in the letter and parcel channel. Please also note the additional postal labelling for letters (data matrix code and LAB) and parcels (value-added service barcode). Please see our websites for more information and prices.

Many dangerous goods that may not be transported via the letter or parcel channels can be transported via the <u>groupage freight channel</u>. Contact: stueckgut@post.ch In addition to the groupage freight channel, there are other transport options via <u>Swiss-Express Innight</u>

We can also store many dangerous substances in compliance with the law. Contact: ksvillmergen@post.ch

Preparation of dangerous goods transport

Before shipping, check whether the goods are classified as dangerous goods under the transport regulations.

The following resources are available to you for this:

- Safety data sheet of the supplier
- Delivery notes
- Marking on the supplier's shipping packaging
- The ADR regulations (Part 2 ADR, classification regulations) and Table 3.2B, alphabetical list of UN numbers

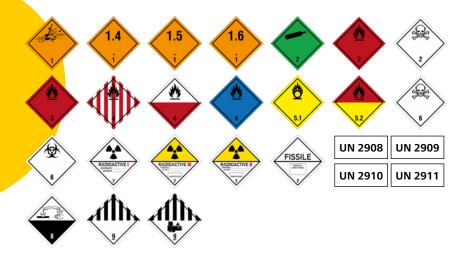
Using the UN number and any additional classification elements such as packaging group, classification code, or special provisions, it is possible to check in the ADR whether an exemption can be applied for the corresponding dangerous goods, which in turn is used to set less stringent requirements for packaging and make the goods exempt from the obligation to prepare ADR transport papers. The goods are still dangerous goods, and therefore the relevant regulations for the given exemption must be implemented correctly.

The ADR can be downloaded in German and French from the ASTRA website or purchased from a specialist company.

Consignment exclusions

3.1 Parcel post

Dangerous goods for which exemptions do not apply with regards to the packed quantity or a special regulation, as well as radioactive substances in exempted packages, are excluded from carriage in the national parcel channel.



In addition, wet-cell batteries, for example car batteries assigned to UN numbers 2794 and 2795, are also excluded from carriage unless they are packaged in such a way that the battery cannot tip during carriage, that leakage of battery acid is prevented even if the package does tip, and that any leaking battery acid is completely absorbed.

Examples of prohibited dangerous goods:

- Fireworks, indoor fireworks, sparklers
- Lithium batteries, rechargeable batteries > 100 Wh
 (e-Bike batteries, rechargeable batteries from high-powered handheld devices, etc.)
- Damaged lithium batteries
- Paint containing solvents in containers > 5 L
- Oxygen cylinders, regardless of size
- Etc.

3.2 Letter mail

Dangerous goods as defined by the Agreement concerning the International Carriage of Dangerous Goods by Road (ADR) may not be sent by letter mail. Exceptions: category B biological substances and excepted medical or veterinary laboratory samples.

Consignment exclusions

3.3 Small consignments

The following are excluded from carriage as small consignments:

Class 1: Explosive substances and articles, except sub-class 1.4

Class 4.1: Self-reacting substances and polymerizing substances requiring temperature control

Class 5.2: Organic peroxides requiring temperature control

Class 7: Radioactive materials, apart from excepted packages

High consequence dangerous goods as defined by 1.10.3 ADR

The transport of dangerous goods in tanks with a capacity of 3 m³ or greater

3.4 Swiss-Express "Innight"

Excluded from carriage with Swiss Express "Innight":

Class 1: Explosive substances and articles, except sub-class 1.4

Class 4.1: Self-reacting substances and polymerizing substances requiring temperature control

Class 5.2: Organic peroxides requiring temperature control

Class 7: Radioactive materials, apart from excepted packages

High consequence dangerous goods as defined by 1.10.3 ADR

Dangerous goods exceeding the quantity limits defined in 1.1.3.6 ADR:

Exemptions related to quantities of dangerous goods carried per transport unit

4.1 Permitted dangerous goods

In the national parcel channel, shipping is only permitted for those dangerous goods that – based on their classification, a special provision, or a maximum permissible quantity per package – are partially or fully exempt from the Agreement concerning the International Carriage of Dangerous Goods by Road (ADR).

Description of the exemption (Location in ADR)	Marking of the packages
Dangerous goods in limited quantities (Chapter 3.4 ADR)	\Diamond
Dangerous goods in excepted quantities (Chapter 3.5 ADR)	
Low-power lithium batteries (Special provision 188, chapter 3.3 ADR)	UNXXXX
UN 3373 Biological substance, category B (Special provision 650, chapter 3.3 ADR)	BIOLOGICAL SUBSTANCE, CATEGORY B
Excepted laboratory samples, exempt human specimens Excepted laboratory samples, exempt animal specimens	EXEMPT HUMAN SPECIMEM
(Sub-section 2.2.6.1.5.8 ADR)	EXEMPT ANIMAL SPECIMEN
Used medical device Used medical equipment	USED MEDICAL DEVICE
(Sub-section 2.2.62.1.5.9 ADR)	USED MEDICAL EQUIPMENT
Small gas bottles containing UN 1006 ARGON, COMPRESSED UN 1013 CARBON DIOXIDE UN 1046 HELIUM, COMPRESSED UN 1066 NITROGEN, COMPRESSED Test pressure capacity product of maximum 152 bar.litres (Special provision 653, chapter 3.3 ADR)	UN 1006 UN 1013 UN 1046 UN 1066
Dry ice (Sub-section 5.5.3.4 ADR)	DRY ICE
	CARBON DIOXIDE, SOLID
	DRI ICE, AS COOLANT
	CARBON DIOXIDE, SOLID, AS COOLANT
UN 1057 Lighters up to 10 kg per shipping item (Special provision 658, chapter 3.3 ADR) The list is not exhaustive	UN 1057 LIGHTERS

The list is not exhaustive.

4.2 Packaging and labelling of selected permitted dangerous goods

You will find an overview of the labelling and packaging regulations below, along with important information about various exemptions which are not exhaustive.

4.2.1 Dangerous goods in limited quantities LQ (3.4 ADR)

Many everyday products fall under this exemption such as spray cans, strong cleaning agents, solvents, disinfectants, perfumes and matches, but also other chemical substances and compounds and dangerous objects.

Packaging

Sturdy outer packaging (padded)

Inner packaging (tightly sealed, doubly protected against accidental opening, opens upwards for liquids, mutual contact protection)

Attention: inner packaging made of glass must be individually protected and packaged in rigid intermediate packaging.

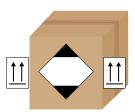
1 Please also observe our <u>shipping instructions</u> when packaging goods.



Labelling

Black-white-black diamond symbol for dangerous goods in limited quantities 100×100 mm (the diamond symbol can be reduced to 50×50 mm for small packages)

Orientation arrows on two opposite sides for liquids gross weight (if not transmitted electronically)



Quantity

The maximum quantity per outer packaging is 30 kg

The maximum quantity per inner packaging is shown in table 3.2A, column 7a ADR. The following procedure must be adopted for determining the maximum permissible quantity: if there is a 0 in column 7a, the UN number must not be transported as dangerous goods in limited quantities.

- Identify UN number including additional information such as packing group, etc.
- Search for UN number in table 3.2 A ADR.
- If there are several possible lines, observe the corresponding additional information, e.g. packing group.
- Find the maximum permissible quantity in column 7a.

UN No.	Name and description	Class	Classification code	Packing group	Labels	Special provisions	Limited and ex quanti	cepted
	3.1.2	2.2	2.2	2.1.1.3	5.2.2	3.3	3.4	3.5
(1)	(2)	(3a)	(3b)	(4)	(5)	(6)	(7a)	(7b)
1993	FLAMMABLE LIQUID N.O.S.	3	F1	I	3	274	0	EO
1993	FLAMMABLE LIQUID N.O.S. (Vapour pressure at 50°C more than 110 kPa)	3	F1	II	3	274 601 640C	11	

The following is a list of frequently sent dangerous goods which can be sent as dangerous goods in limited quantities:

Description	UN No.	Packing group	Maximum permissible quantity per inner packaging
Spray can with flammable contents	UN 1950	None	1 L
Ethanol-based hand sanitizer, approx. 70% ethanol	UN 1170	II	1 L
Non-refillable gas cartridge for a small barbecue	UN 2037	None	1 L
White spirit	UN 1300	III	5 L
Paint, flammable	UN 1263	Ш	5 L
Perfume	UN 1266	II	5 L

4.2.2 Dangerous goods in excepted quantities (3.5 ADR)

This exemption covers very small quantities of dangerous goods, such as those shipped by chemical laboratories for testing purposes.

Packaging

Triple-layer packaging, consisting of

- Outer packaging (sturdy, padded)
- Intermediate packaging (absorbent material between inner and intermediate packaging)
- Inner packaging (non-porous, mutual contact protection, opening upwards for liquids)



Labelling

Labelling for dangerous goods in excepted quantities (100 \times 100 mm)

- * Enter main hazard
- ** Sender or recipient on the label or on the same surface as the label



Quantity

- Maximum permissible quantity per inner packaging according to the code in column 7b of the table below, on the basis of the UN number and any additional information, such as packing group, etc.
- E0 = EQ shipping not permitted!
- For a breakdown of the codes, see sub-section 3.5.1.2 of the ADR
- For the maximum permissible net weight of the package, see the table in sub-section 3.5.1.2 of the ADR

UN No.	Name and description	Class	Classification code	Packing group	Labels	Special provisions	Limited except quanti	ed
	3.1.2	2.2	2.2	2.1.1.3	5.2.2	3.3	3.4	3.5
(1)	(2)	(3a)	(3b)	(4)	(5)	(6)	(7a)	(7b)
1993	FLAMMABLE LIQUID N.O.S.	3	F1	I	3	274	0	EO
1993	FLAMMABLE LIQUID N.O.S. (Vapour pressure at 50°C more than 110 kPa)	3	F1	II	3	274 601 640C	11 (E2

Code	Maximum net quanitity per inner packaging (in grams for solids and ml for liquids and gases)	Maximum net quantity per outer packaging (in grams for solids and ml for liquids and gases, or sum of grams and ml in the case of mixed packaging)		
E0	Not permitted as Excepted Quantity			
E1	30	10		
E2	30	500		
E3	30	300		
E4	1	500		
E5	1	300		

4.2.3 Low-power lithium batteries and devices containing low-power lithium batteries

Batteries that meet the conditions of special provision 188 fall under this exemption.

These include single-use and rechargeable batteries for small devices such as cameras, car keys, hearing aids, toys, small garden tools, phones, laptop computers, etc.

Features

Composition	Lithium metal	Lithium-ion/lithium-polymer
Construction type	Cell Battery	Cell Battery
Rechargeable	No	Yes
Definition of low-power	Cell ≤ 1g lithium content battery ≤ 2g lithium content	Cell ≤ 20Wh power Battery ≤100Wh power
UN No. Cells and batteries	UN 3090	UN 3480
UN No. Cells and batteries contained in equipment or packed with equipment	UN 3091	UN 3481

Packaging

Cells and batteries

- Inner packaging, non-conductive
- Battery completely enclosed in the inner packaging
- Batteries protected against short circuit
- Resistant outer packaging
- The inner packaging must not have any room to move within the outer packaging



Cells and batteries installed in devices

- Batteries protected against short circuit
- Device secured against unintentional start-up
- Resistant outer packaging
- Devices must not have any room to move within the outer packaging



Labelling

- Label for small, low-power lithium batteries: 100×100 mm (if the package is too small, minimum size of 100 mm wide \times 70 mm high)
- Enter the corresponding UN number



Excepted from labelling (special provision 188 f)

- Button cell batteries integrated into equipment (car keys, hearing aids, etc.)



 Maximum of 4 cells installed in equipment per package and maximum of 2 such packages each with 4 cells installed in equipment to a single recipient.





 Maximum of 4 cells installed in equipment per package and maximum of 2 such packages each with 4 cells installed in equipment to a single recipient.





Quantity

Maximum permissible gross weight of the package: 30 kg



Attention: Damaged lithium batteries and devices with damaged integrated lithium batteries must not be sent by parcel post.

4.2.4 Lighters or lighter refills

This exemption applies to lighters that may be transported in accordance with special provision 658.

Packaging

- Sturdy outer packaging (padded)
- Inner packaging

Labelling

Labelling of the package: "UN 1057 LIGHTERS" or "UN 1057 LIGHTER REFILLS"



Quantity

- Maximum permissible gross weight of the package: 10 kg
- Maximum permissible quantity per vehicle 100 kg



Please note

If this special provision is applied, hazard label 2 must be removed or rendered unrecognizable and replaced with the labelling described above. Packages marked with a hazard label will be stopped.



4.2.5 UN 3373 Biological substance, category B

Biological substances that pose a risk of infection to healthy people are covered by this exemption. However, the course of the disease is mild in healthy humans or animals and leads neither to permanent damage nor to death of the infected persons.

Packaging

Triple-layer packaging, consisting of

Outer packaging

- Resistant
- Rigid, if the inner packaging is not rigid
- The complete package must withstand a drop from a height of 1.2 m without the contents leaking out
- One of the surfaces must have a minimum size of 100×100 mm



Secondary packaging

- Liquid-tight or dust-tight
- Absorbent material between primary and secondary packaging
- Rigid, if the outer packaging is not rigid

Primary packaging

- Liquid-tight or dust-tight
- Padding or physical separation of the primary receptacles from each other

Labelling

- UN 3373 diamond label, at least 50 x 50 mm, text size at least 6 mm
- Official designation according to table 3.2 A ADR: "BIOLOGICAL SUBSTANCE, CATEGORY B", in capitals, text size at least 6 mm
- Orientation arrows on two opposite sides of the package in the case of liquids > 50 ml per primary packaging



Quantity

- Maximum gross weight of the package: 30 kg

4.2.6 Excepted laboratory samples

This exemption covers human or animal specimens that have a minimal likelihood of containing pathogens.

Packaging

Triple-layer packaging, consisting of

Outer packaging

- Sufficiently rigid
- One of the surfaces must have a minimum size of 100 × 100 mm

Secondary receptacle

- Waterproof
- Absorbent material between primary and secondary packaging for liquids

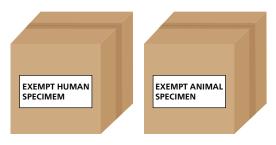
Primary receptacle

- Waterproof
- Padding or physical separation of the primary receptacles from each other



Labelling

Labelling of the package in capital letters: "EXEMPT HUMAN SPECIMEN" or "EXEMPT ANIMAL SPECIMEN"



Quantity

- Maximum gross weight of the package: 30 kg

4.2.7 Medical devices or equipment

This covers medical devices or equipment that may possibly be contaminated with or contain infectious substances.

This exemption does not, however, cover the following medical devices or equipment:

- medical waste
- highly infectious substances of Category A (UN 2814 / UN 2910)
- Instruments and devices that are contaminated with or contain other dangerous goods

Packaging

Sturdy packaging that, under normal conditions of carriage, prevents the contents from breaking or leaking out of the packaging.

Labelling

Labelling of the package in capital letters: "USED MEDICAL DEVICE" or "USED MEDICAL EQUIPMENT"



4.2.8 Dry ice Packaging

Outer packaging

- Well insulated
- Gas-permeable (danger of explosion in gas-tight containers)
- Prevents the unintentional release of the dry ice

Inner packaging

Cold-resistant to minus 78 °C

Labelling

Labelling of the package in capital letters:

Variant 1: Shipping of dry ice: "DRY ICE" or "CARBON DIOXIDE, SOLID"

Variant 2: Shipping of dry ice for refrigeration purposes: "DRY ICE, AS COOLANT" or "CARBON DIOXIDE, SOLID, AS COOLANT"

If dry ice is being used to cool other dangerous goods, the relevant labels must also be attached to the packaging.



Quantity

Maximum gross weight of the package: 30 kg



Please note

Dry ice is often labelled in accordance with the regulations applicable for air freight, but this is only permissible if the package is directly on its way to or from an airport. To avoid delays, we would ask you to ensure that the packages are correctly labelled, as our employees are instructed to stop packages with hazard labels for clarification.



4.2.9 Small gas cylinders in accordance with special provision 653

Small gas cylinders containing UN 1006 ARGON, COMPRESSED, UN 1013 CARBON DIOXIDE, UN 1046 HELIUM, COMPRESSED or UN 1066 NITROGEN, COMPRESSED, for which the product does not exceed the test pressure and capacity of 152 bar \times litres, may be transported in the parcel channel in an outer packaging with appropriate labelling.

Packaging

Outer packaging

- Sturdy
- Padded

Inner packaging

The gas cylinders must comply with the general construction and filling regulations.

Labelling

Diamond label, minimum size of 100×100 mm with the corresponding UN number









Quantity

Maximum gross weight of the package: 30 kg

Dangerous goods in the national letter channel

5.1 Permitted dangerous goods

In the national letter channel, Swiss Post only carries the dangerous goods described below.

Description	Labelling
UN 3373 Biological substance, category B	BIOLOGICAL SUBSTANCE, CATEGORY B
Excepted laboratory samples, exempt human specimens Excepted laboratory samples, exempt animal specimens	EXEMPT HUMAN SPECIMEM
	EXEMPT ANIMAL SPECIMEN
Used medical device	USED MEDICAL DEVICE
	USED MEDICAL EQUIPMENT

5.2 Dangerous goods that are excluded from transport

Only the dangerous goods listed below are excepted for transport in the letter channel.

5.3 Packaging and labelling of the permitted dangerous goods

Below, you will find information about packaging and labelling of the dangerous goods permitted in the letter channel.

5.3.1 UN 3373 Biological substance, category B

Biological substances that pose a risk of infection to healthy people are covered by this exemption. However, the course of the disease must be mild in healthy humans or animals and lead neither to permanent damage nor to death of the infected persons.

Packaging

Triple-layer packaging, consisting of

Outer packaging

- Resistant
- Rigid, if the inner packaging is not rigid
- The complete package must withstand a drop from a height of 1.2 m without the contents leaking out
- One of the surfaces must have a minimum size of 100 x 100 mm

Secondary packaging

- Liquid-tight or dust-tight
- Absorbent material between primary and secondary packaging
- Rigid, if the outer packaging is not rigid

Dangerous goods in the national letter channel

Primary packaging

- Liquid-tight or dust-tight
- Padding or physical separation of the primary receptacles from each other



Labelling

- UN 3373 diamond label, at least 50 × 50 mm, text size at least 6 mm
- Official designation according to table 3.2 A ADR: "BIOLOGICAL SUBSTANCE, CATEGORY B", in capitals, text size at least 6 mm



Quantity

Maximum gross weight of the letter, see product information our website

5.3.2 Excepted laboratory samples

This exemption covers human or animal specimens that have a minimal likelihood of containing pathogens.

Packaging

Triple-layer packaging, consisting of

Outer packaging

- Sufficiently rigid
- One of the surfaces must have a minimum size of 100×100 mm

Secondary receptacle

- Waterproof
- Absorbent material between primary and secondary packaging for liquids

Primary receptacle

- Waterproof
- Padding or physical separation of the primary receptacles from each other



Dangerous goods in the national letter channel

Labelling

Labelling of the package in capital letters: "EXEMPT HUMAN SPECIMEN" or "EXEMPT ANIMAL SPECIMEN"



Quantity

Maximum gross weight of the letter, see <u>product information</u> on our website

5.3.3 Medical devices or equipment

This covers medical devices or equipment that may possibly be contaminated with or contain infectious substances.

This exemption does not cover the following medical devices or equipment, however:

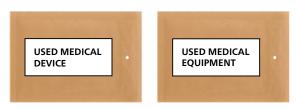
- Medical waste
- Highly infectious substances of Category A (UN 2814 / UN 2910)
- Devices and equipment that are contaminated with or contain other dangerous goods

Packaging

Sturdy packaging that, under normal conditions of carriage, prevents the contents from breaking or leaking out of the packaging.

Labelling

Labelling of the package in capital letters: "USED MEDICAL DEVICE" or "USED MEDICAL EQUIPMENT"



Quantity

Maximum gross weight of the letter, see product information on our website

