

CANADA
POST



POSTES
CANADA

DANGEROUS GOODS

SELF-STUDY GUIDE

Summer 2021

**Should You
Accept That
Package?**

**11 Clues For
Recognizing
Dangerous
Goods**

**How to Handle
Dangerous
Goods Found in
the Mail**

About This Self-Study Guide

What's expected of you

Read the entire self-study guide. If you have any concerns, please discuss them with your Team Leader.

How to record completion

Corporate Employees:

After completing the self-study guide, record completion by calling the eSolutions Self-Serve Line at Canada Post, as follows:

1. Call 1-855-833-8809.
2. Select Option 1 for service in English or select Option 2 for service in French.
3. Enter your Canada Post employee identification number (found on the front of your Canada Post Identification card), then press the pound (#) key. If you make a mistake, press the star (*) key to make a correction.
4. Select Option 2 for Dangerous Goods.
5. Select Option 1 to confirm you have completed the self-study guide.

Authorized Dealers:

After completing the self-study guide, record completion by calling the 1-855-689-8503 number and following these prompts:

1. Select **Language** (Option 1 for service in English or Option 2 for service in French).
2. Select Option 2 (Dangerous Goods course).
3. Enter the Post Office RC number, then press the pound (#) key. If you make a mistake, press the star (*) key to make a correction.
4. Select Option 1 to confirm you have completed the self-study guide.

This booklet is produced by Learning and Development and is available in English and French.

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Overview

Welcome to your dangerous goods self-study guide.

Many everyday items that we take for granted when used in the house, garage or garden fall under the heading of dangerous goods when being transported. These items may appear to pose little danger, but during transportation, the situation is very different. For example, it is relatively easy to deal with a leaking bottle of bleach in the kitchen, but if this happens during a flight, the crew's ability to deal with such an incident would be severely limited.

For safety reasons and to minimize the likelihood of dangerous goods incidents, Canada Post allows only certain common consumer items containing dangerous goods in limited quantities, which we will discuss later in this guide.

Today, we'll learn about dangerous goods at Canada Post. First, we'll review the definition and general philosophy of dangerous goods. Then, we'll learn how to recognize dangerous goods, along with acceptance rules and limitations. And finally, we'll take a look at a case study.

By working through this guide, you'll be able to:

- Define dangerous goods.
- Understand your role in preventing the introduction of dangerous goods into the mail.
- Know what to do if you're presented with or find dangerous goods in your facility.
- Use clues to identify hidden dangerous goods.

At the end of this guide, there is an assessment to check your knowledge of the material covered.

Questions?

If there is anything in this guide that you don't understand or would like to discuss further, don't hesitate to contact your Team Leader, Retail Business Manager or Local Area Manager for assistance or clarification. They will know whom to contact if any additional support is required.



Introduction

Not all items can be sent by mail. That perfect gift for that special someone could become the perfect nightmare for the people charged with delivering it. It's Canada Post's responsibility to remind customers that lighters, matches, drink carbonation systems, smoke detectors and many other items are considered **non-mailable matter**.

There are a number of reasons why an item may be labelled non-mailable, but the two most common reasons are that:

- **The item is prohibited by law, or**
- **It poses a risk to employees and public safety**

Did you know?

Mother's Day is one of the busiest times of the year for Canada Post. Shipping your mother her favourite perfume may sound like a great idea, but the majority of perfumes are alcohol-based and considered dangerous goods. Keep reading to learn the acceptance rules to ship this with Canada Post.

Canada Day is a great time to shoot off fireworks but since they are classified dangerous goods, it is unacceptable to mail fireworks to your launching pad.

Defining Dangerous Goods

Dangerous goods are defined as a “product, substance or organism included by its nature or by the regulations in any of the classes listed in the schedule”. Dangerous goods are solids, liquids or gases that pose a risk to the health and safety of people, other living organisms, property or the environment during transport.

Dangerous goods can cause a fire, explosion, and/or release toxic, flammable, or corrosive materials. This can occur during transportation on an aircraft, in a train, ship, or truck, or when being handled by Canada Post employees.

In general, Canada Post will not accept packages that contain dangerous goods.

Dangerous goods handled by Canada Post are regulated by:

- The *Transportation of Dangerous Goods Act & Regulations (TDG)*, which promote public safety in the transportation of dangerous goods within Canada
- The *International Civil Aviation Organization (ICAO) Technical Instructions*, which contain all the detailed instructions necessary for the safe international transport of dangerous goods by air



Air Transportation

Now that we have identified what a dangerous goods is, it's important to know that a large portion of mail is transported by air.

Unlike other modes of transportation, aircrafts are vulnerable to unique factors such as **improper cargo handling and loading, vibrations, changes in air pressure and extreme variation in temperature**, which could lead to accidents if dangerous goods are on board. If the worst were to happen, access to the dangerous goods on an aircraft in flight could be extremely limited or impossible.

Furthermore, certain products can be extremely dangerous if they are not packaged and transported properly or if they are mixed with other products.

Dangerous Goods Incidents

Consider these examples of dangerous goods incidents on aircraft in flight.

Incident 1

On September 3, 2010, UPS flight 6 departed Dubai en route to Cologne. About 25 minutes into the flight, a fire broke out on the main cargo deck. The fire caused extensive damage to the flight control systems and ultimately caused the aircraft to crash.

Both pilots were killed.

It turns out that the origin of the fire was a pallet of lithium batteries. It is believed that the batteries were not properly packaged and became damaged during the handling or loading process. This damage resulted in a short circuit, which started the fire.

Canada Post's acceptance of lithium batteries is discussed in more detail later in the guide.

Incident 2

On May 11, 1996, ValuJet Flight 592, a domestic passenger flight between Miami, Florida and Atlanta, Georgia, crashed into the Everglades as a result of a fire in the cargo compartment.

All 110 people on board were killed.

So what caused and fueled the fire? Improperly packaged and incorrectly declared oxygen generators. These oxygen generators were stored next to the aircraft tires, which are also classified as dangerous goods.

The proper handling of dangerous goods is essential so that catastrophic incidents like this one can be avoided.

Classes of Dang

Dangerous goods can be found in everyday items or commodities and are assigned to one of **nine classes**. Each class displays a **diamond-shaped** mark (square on point) with an identifying **colour**, **number** and symbol. Items displaying these marks/labels are prohibited in the mail.

Class 1 – Explosives

Class 1 includes materials like fireworks, ammunition, gunpowder and automobile airbags.



Class 2 – Gases

Class 2 includes materials such as aerosols and compressed gas cylinders.



Class 3 – Flammable Liquids

Class 3 includes fuels, items that contain or formerly contained fuel, some paints, varnishes, perfumes, nail polish and nail polish remover.



Class 4 – Flammable Solids, Substances Liable to Spontaneous Combustion and Substances that on Contact with Water Emit Flammable Gases (Water-Reactive Substances)

Class 4 includes commodities such as matches, flares, oily rags and aluminum powder.



erous Goods

Class 5 – Oxidizing Substances and Organic Peroxides

Class 5 includes items such as fertilizers and pool chemicals.



Class 6 – Toxic and Infectious Substances

Class 6 includes materials like pesticides and biohazardous sharps disposal bins.



Class 7 – Radioactive Materials

Class 7 includes items like smoke detectors and radiotherapy equipment to treat cancer.



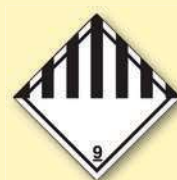
Class 8 – Corrosive Materials

Class 8 includes items such as wet cell batteries, mercury compounds, bleach and drain cleaners.



Class 9 – Miscellaneous Products, Substances or Organisms

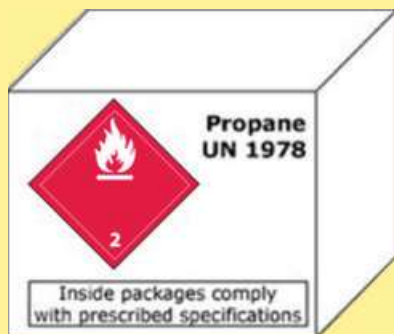
Class 9 can include a variety of different commodities, such as magnets, dry ice, self-inflating life preservers and lithium batteries.



Dangerous Goods— Shipping Name and UN Number

In addition to an appropriate hazard class, dangerous goods also have a **proper shipping name**, which describes the properties and composition of the dangerous goods, for example, ACETONE or OXYGEN, COMPRESSED. The shipping name can be found in the *ICAO List of Dangerous Goods* or Schedule 1 of the *Transportation of Dangerous Goods Regulations*.

When reviewing a package and looking for dangerous goods marks/labels, you should also be aware that any number identified on a package that is preceded by UN could possibly contain dangerous goods that are NOT acceptable for the mail.



Dangerous Goods— Shipping Documents

Packages that contain dangerous goods are usually accompanied by a shipping document. The shipping document is prepared by the sender and describes the dangerous goods, the packaging used, and the quantity being shipped.

Canada Post does not accept any dangerous goods that require a shipping document.

Did you know?

There are three packing groups (PG) that dangerous goods are assigned to, depending on their degree of danger. Items in PG I impose the highest risk, followed by PG II and PG III items. Understanding these three packing groups is useful for choosing the most appropriate packaging for the dangerous goods.

Col.1 UN Number	Col.2 Shipping Name and Description	Col.3 Class	Col.4 Packing Group / Category	Col.5 Special Provisions	Col.6a Explosive Limit and Limited Quantity Index	Col.6b Excepted Quantities	Col.7 ERAP Index	Col.8 Passenger Carrying Vessel Index	Col.9 Passenger Carrying Road Vehicle or Passenger Carrying Railway Vehicle Index
UN1986	ALCOHOLS, FLAMMABLE, TOXIC, N.O.S.	3 (6.1)	I	6	0	E0	1000	Forbidden	Forbidden
			II	6	1 L	E2		1 L	
			III	6	5 L	E1		60 L	

Dangerous Goods— Everyday Examples

Here are examples of **common items** that many consumers may not realize are **dangerous for transport**. These each fall into one of the nine classes.

Perfume

Most perfumes contain alcohol and can be flammable under certain conditions. If perfume is travelling under pressure in an aircraft's cargo, it can be a serious threat to safety.



Aerosol cans

Aerosols are compressed gases and can potentially explode under pressure. If an aerosol can is travelling under pressure in an aircraft's cargo, it can be a serious threat to safety.



Nail polish/nail polish remover

Nail polish and nail polish remover contain acetone, which can be flammable.



Lithium batteries

Lithium batteries can overheat and cause a fire if they are not properly packaged and can be difficult to extinguish on an aircraft. We'll discuss lithium batteries in more detail shortly.



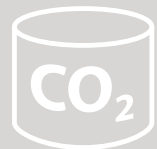
Air bag inflator

Air bag inflators are dangerous due to the pyrotechnic make-up of their launch devices. The major hazard from air bags is their accidental inflation in a working area; an unrestrained air bag may become a potentially lethal projectile.



Dry ice

Dry ice presents a hazard because it is extremely cold and because it quickly transitions into carbon dioxide gas. Carbon dioxide can build up pressure or displace normal air, potentially causing an explosion or asphyxiation in an area that is not well ventilated, such as the cargo hold of an aircraft. Dry ice will be covered in more detail later in this guide.



Acceptance, Processing and Delivery

It is the customer's responsibility to ensure they are not mailing dangerous goods. However, it is Canada Post's responsibility to ensure the customer is well informed and that unacceptable dangerous goods do not enter the mail stream.

DO NOT accept parcels that contain dangerous goods or that display dangerous goods marks/labels.

REMOVE from the mail stream any parcel that is suspected of containing dangerous goods or that displays dangerous goods marks/labels.

All employees have a role to play in recognizing and refusing to accept dangerous goods.

Retail

It is vital and mandatory to always ask the customer, ***"Does your package contain dangerous goods, such as lithium batteries, aerosol cans or perfume?"*** while referring them to the **Dangerous Goods: What Not to Mail** brochure. It provides the customer with specific examples of commodities that they may not have considered dangerous, and it helps them determine whether or not their item is considered a dangerous goods.

It is also important to **remind customers who purchase pre-paid items that dangerous goods cannot be mailed.**

Provide these customers with the brochure to take home for easy reference before they mail their item.

When accepting parcels at the Retail counter, use your Dangerous Goods quick reference guide and refer to the Corporate Manual System (CMS) 1101.01.

Order acceptance (RVUs and CDCs)

When inspecting parcel orders using the Plant Receiving and Verification System (PRVS) at Receipt Verification Units (RVUs) and Commercial Deposit Centres (CDCs), keep an eye out for the presence of dangerous goods marks/labels. **Commercial parcels are not to be accepted if dangerous goods marks/labels are present.** Place the shipment on hold and create a service ticket.

Sales and customer service

When speaking with customers, be sure to ask them if they will be mailing dangerous goods and review the mailing rules with them. The **Dangerous Goods Acceptance Program for Commercial Customers** can be found on the Service Zone landing page for Dangerous Goods.



Operations and delivery

When sorting the mail, make sure at every touchpoint to **inspect all sides of the parcel for dangerous goods marks/labels**. When loading the mail in monos, or for transport and delivery, make sure it is secure, so damage does not occur during normal transport conditions. If an unacceptable dangerous goods is found, inform your Team Leader and refer to CMS 1605.01.

Did you know?

You, or the customer, may wonder why certain dangerous goods are OK to take on board an aircraft if you are a passenger but are regulated for transport, such as phones and laptops.

The answer is quite simple: dangerous goods incidents in the passenger cabin of an aircraft can be noticed and dealt with promptly, while incidents below may linger and cause extensive damage before it is ever noticed; by that time, it is often too late. Be on the lookout for dangerous goods during acceptance, processing and delivery.

Packaging, Marking and Labelling

In general, **all dangerous goods must be in a strong package or container, referred to as the means of containment.**

The means of containment should be able to withstand normal mail processing and transportation conditions. The packaging should not react to or be affected, weakened or permeated by the dangerous goods. The contents of the package should be secured and cushioned in the package to prevent movement.

In addition, the means of containment should also be:

- Closed securely to prevent opening and loss of contents under normal conditions of transport
- Free of residue, spills or leaks

The marks/labels on the package should be:

- Unobscured
- Durable, affixed to the outer surface
- Displayed on a background of contrasting colour
- Easily visible and legible
- Able to withstand open weather exposure

More detail on packaging, marking and labelling will be reviewed as we go over

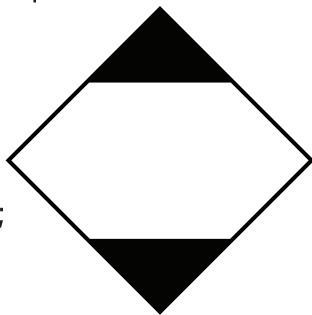
the mailing requirements for each of the acceptable dangerous goods in the mail.

Limited Quantities and Excepted Quantities

In some situations, commercial customers may acquire permission to mail a **small quantity of dangerous goods that are normally available to the general public**. These are referred to as **Limited Quantities** and/or **Excepted Quantities**.

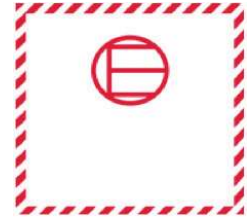
Limited Quantities

Limited Quantities are identified with the diamond-shaped (square on point) mark/label with black in the upper and lower points. The **Limited Quantities mark or label is the ONLY diamond-shaped label that is acceptable**; all other diamond-shaped dangerous goods marks/labels are NOT permitted in the mail.



Excepted Quantities

An Excepted Quantity is a smaller quantity of dangerous goods than a Limited Quantity and is identified by a white square mark/label with a red hatched border.



Limited Quantities and Excepted Quantities are only permitted for shipment within Canada using our ground products (Expedited Parcel™ or Regular Parcel™) and cannot be mailed to an Air Stage Office.

An Air Stage Office is a Post Office where all mail to or from must be airlifted for more than six months of every year, as a viable surface transportation alternative is not available. Air Stage Offices are generally confined to remote or isolated communities.

Note: Common examples of Limited Quantities and Excepted Quantities are perfume, nail polish, aerosol cans and cleaning products.

You will see this type of mail from online purchases from cosmetic companies and mass merchants. You may also sometimes see this type of mail with Personalized Mail™ product.

Dry Ice

Dry ice, although a Class 9 dangerous goods, is **maailable when used as a refrigerant**. It is commonly used to keep perishable items such as fish, game, meat, fruit and vegetables cool during transport.

Similar to Limited Quantities, dry ice is accepted from commercial customers, and can be mailed domestically (within Canada) using our ground products (Expedited Parcel™ or Regular Parcel™).

Dry ice cannot be mailed to an Air Stage Office.

The packaging must allow for the release of carbon dioxide gas to prevent the build-up of pressure that could rupture the packaging. An example of packaging is a foam container inside a cardboard box. To ensure that carbon dioxide build-up does not occur, the foam container and box cannot be taped all around.

The phrase “Dry ice as refrigerant” or “Neige carbonique comme réfrigérant” must be marked on the outer packaging.

Dangerous Goods Accepted by Air

By air, Canada Post is permitted to accept a short list of dangerous goods. This list includes infectious substance (Category B UN3373), patient specimens, radioactive material and lithium batteries.

Out of these, Canada Post accepts only patient specimens and lithium batteries by air, which we will review in detail later on.

Lithium Batteries— Overview

Lithium batteries are Class 9 dangerous goods, and they are found in our everyday equipment. Equipment is an apparatus for which the lithium cells or batteries will provide electrical power for its operation.

Here are several examples of **common everyday equipment powered by lithium batteries**:

- Mobile phones
- Laptops
- Tablets
- Rechargeable earbuds
- E-readers
- Cameras
- Rechargeable watches

For the most part, lithium batteries found in these items would be acceptable in the mail since they contain small-capacity lithium batteries. However, **large capacity lithium batteries** used to power vehicles, such as hoverboards, self-balancing boards/wheels, electric bicycles and wheelchairs **are NOT permitted**.

Lithium batteries can be contained in equipment (installed), meaning the battery is fitted or joined to the actual device that it will power (laptops, phones, calculators), **or packed with equipment**, not fitted or joined to the device, but are packed in the same box (a power tool with a spare battery, for example).

In all cases, **lithium batteries or the equipment containing lithium batteries cannot be mailed and are banned from air transport if:**

- Damaged, defective or recalled; or
- Transported for the purposes of recycling or disposal.

Lithium Batteries

A **lithium cell** is a single encased unit consisting of one positive and one negative electrode that exhibits a voltage differential across the two terminals (such as an AA battery).



Common types of lithium cells

A **lithium battery** is one or more cells electrically connected (such as a laptop battery). Moving forward, lithium batteries will be used to refer to both batteries and cells unless specified.



A common type of lithium battery

There are two types of lithium batteries: ion and metal.

Lithium-ion

A lithium-ion battery is a rechargeable battery and includes lithium polymer batteries. Lithium-ion batteries are generally used to power devices such as mobile telephones, laptop computers, tablets and power tools.



Common types of lithium-ion batteries

Lithium metal

Lithium metal batteries are usually non-rechargeable batteries that have lithium metal or lithium compounds. Lithium metal



Common types of lithium metal batteries

batteries are normally found in watches, calculators, car key fobs and defibrillators.

Lithium Batteries— Shipping within Canada and to the USA

Lithium batteries are only permitted to be shipped within Canada and to the USA. The following general requirements must be followed.

Preventing accidental activation

Equipment must have an effective means of preventing accidental activation. In certain cases, equipment may need to be active during transport but should not generate a dangerous amount of heat, interfere with the systems or emit alarming sounds, specifically on an aircraft.

Using appropriate packaging

Batteries/equipment must be shipped in strong and rigid outer packaging that can withstand normal conditions of transport.

Equipment must be packaged in a way to prevent movement of the batteries and avoid breakage under normal conditions of transport/handling.

Batteries should be completely enclosed in the means of containment. The package should be capable of withstanding a 1.2 m drop test in any orientation without:

- Damage to the batteries contained inside
- A resulting shift of the contents allowing battery-to-battery (or cell-to-cell) contact
- Release of content

Preventing short circuits

Battery and cell terminals must always be protected to prevent short circuits by covering the terminals with an insulating material (e.g., by using electrical tape or enclosing each battery separately in a plastic bag) or by shipping in original manufacturer packaging.

Meeting regulation requirements

The mailer is responsible for classifying and determining if the lithium battery meets the requirements of the applicable regulations.

Lithium Batteries—Acceptance for Mailing within Canada

When shipping within Canada, lithium batteries mailed on their own, packed with or installed in equipment, are accepted for ground transport as long as they meet the requirements outlined in Special Provision 34 of the *Transport of Dangerous Goods (TDG) Regulations*.

Lithium battery mark

The lithium battery mark is required on all lithium battery packages except when containing only button cell batteries installed in equipment, or no more than four cells



Lithium Battery Mark

or two batteries installed in equipment. The lithium battery mark must fit on one side of the package without the mark being folded. The customer must fill in the UN number and phone number for the lithium battery mailing.

Lithium batteries installed in or packaged with equipment

When UN3481 (lithium ion) or UN3091 (lithium metal) are used, this signifies that the batteries are installed in or packed with equipment.



Lithium batteries on their own

Lithium batteries on their own, including portable charging devices (power banks), are only permitted to be shipped within Canada, and by ground services only (Expedited Parcel™ or Regular Parcel™). These must not be sent to Air Stage Offices. If presented for Priority™ or Xpresspost™ shipping, refuse the mailing and inform the customer of the ground shipping options if they are available.



When UN3480 (lithium ion) or UN3090 (lithium metal) are used, this signifies that the batteries are on their own. In addition to UN3480 and UN3090, the Cargo Aircraft Only label is also a good indication of a mailing containing lithium batteries on their own.



Cargo Aircraft Only label

Within Canada, consumer and commercial mailers can ship lithium batteries installed in equipment, having four or fewer cells or two or fewer batteries using our air products (Priority™ and Xpresspost™).

From commercial customers, Canada Post accepts lithium batteries that are packed with equipment or installed in equipment containing more than four lithium cells or more than two lithium batteries in domestic airmail (Priority™ and Xpresspost™).

To be able to carry these lithium batteries by airmail, Canada Post obtained an Equivalency Certificate (SA11568) from Transport Canada.

An Equivalency Certificate allows the transporting of dangerous goods in a way that is not compliant with the *Transportation of Dangerous Goods (TDG) Regulations* but provides an equivalent level of safety.

In this case, **all lithium battery air mailings must meet the requirements in Section II of the Packing Instructions (PI) in the ICAO Technical Instructions.**

Did you know?

You may see the word "Overpack" on lithium battery air mailings. An overpack is an enclosure used by a single sender to contain their packages for the convenience of handling and stowage.



The lithium battery mark must be visible or affixed to the outside of the overpack, with the word "Overpack" in lettering at least 12 mm high.

Section II lithium batteries

This table defines **Section II lithium batteries**, which are small capacity batteries found in everyday equipment.

The larger capacity batteries are known as Section I, which have a larger cell and battery rating than Section II batteries, and are not acceptable in the mail.

Description	UN Number	Cell rating (watt-hour Wh)	Battery rating (watt-hour Wh)	Total mass of batteries per package	ICAO Technical Instructions Reference
Lithium-ion packed with equipment, not installed (see Note 1 and 2)	UN3481	20 Wh or less	100 Wh or less	5 kg	Section II 966
Lithium-ion installed, more than 4 cells or 2 batteries (see Note 2)					Section II 967
Lithium-ion installed, maximum 4 cells or 2 batteries (see Note 2)					Section II 967
Lithium metal packed with equipment, not installed (see Note 1 and 2)	UN3091	1 g or less	2 g or less	5 kg	Section II 969
Lithium metal installed, more than 4 cells or 2 batteries (see Note 2)					Section II 970
Lithium metal installed, maximum 4 cells or 2 batteries (see Note 2)					Section II 970

Note 1: For lithium batteries packed with equipment, the number of cells or batteries in each package cannot be more than what is required to operate the equipment, plus two spare sets. A “set” is the number of cells or batteries that are required to operate the equipment.

Note 2: For packages containing a combination of lithium batteries or cells installed in equipment and packed with equipment, all applicable parts of both packing instructions are to be met, and the total mass of lithium batteries or cells cannot exceed 5 kg.



Lithium Batteries—Acceptance for Shipping to the USA

Lithium batteries being shipped to the USA can only be accepted if they are installed in the equipment. It is not permitted to ship lithium batteries alone—including in portable charging devices (power banks) or packaged with the equipment. Customers must be advised of the following information.

Permitted number of lithium cells

There can only be four or fewer lithium cells or two or fewer lithium batteries per postal item, and they must be properly installed in the equipment to prevent movement.

Customs declaration form



















The Customs Declaration Form must be completed in full by the customer, and the lithium battery contents of the package must be declared.

Lithium battery mark

The package should NOT be labelled with the Lithium Battery Mark. Items with the lithium battery mark destined to the USA are to be refused when presented for mailing, and if found at the Exchange Office, they are to be Returned to Sender (RTS) back to the customer.

Lithium Battery Mailing Rules

Here is a breakdown of lithium battery mailing rules. The ABCs of Mailing in the Postal Guide provides up-to-date information on the acceptance of lithium batteries.

Description of content	UN number	Mark/label needed	Canada 		USA 
			Xpresspost™/ Priority™ (Air)	Regular™/ Expedited™ (Ground)	Parcels only
Batteries installed in equipment (maximum of 4 cells or 2 batteries)	UN 3481 – Lithium Ion UN 3091 – Lithium Metal		 See Note 3		
Batteries installed in equipment (more than 4 cells or 2 batteries)	UN 3481 – Lithium Ion UN 3091 – Lithium Metal		 See Note 1	 See Note 2	
Packed with, not installed in equipment	UN 3481 – Lithium Ion UN 3091 – Lithium Metal		 See Note 1	 See Note 2	
Batteries on their own	UN 3480 – Lithium Ion UN 3090 – Lithium Metal			 See Note 2	

Note 1: Not accepted, except from commercial customers, where they can send by air using Xpresspost™ and Priority™ service.

Note 2: Must not be shipped to an Air Stage Location.

Note 3: When a customer mails more than 2 of these packages to the same addressee then they must apply the Lithium Battery Mark.

Exempt Specimens

Next, let's look at exempt specimens.

Canada Post **only accepts exempt specimens** for domestic transport within Canada for air or surface transport.

The package being mailed must be marked:

- EXEMPT HUMAN SPECIMEN or
- EXEMPT ANIMAL SPECIMEN

What **IS** allowed?

Human and animal specimens with a minimum likelihood of containing infectious pathogens (e.g., specimens tested for cancer cells) are permitted to be mailed.

What **IS NOT** allowed?

Human or animal specimens being tested for a contagious pathogen that has a higher risk of being infectious (e.g., HIV or the flu virus) are not acceptable for mailing.

When an exempt specimen is mailed, special packaging is required:

- A leak-proof **primary** receptacle (vial)
- Leak-proof **secondary** packaging (plastic baggie)
- When specimen is a liquid, there must be enough absorbent material between the primary and secondary packaging to absorb the entire contents
- Outer packaging of adequate strength for its capacity, mass and intended use, and with at least one surface having minimum dimensions of 100 mm x 100 mm

Dry ice is not permitted in air mailings of Exempt Human or Animal Specimens.



Recognizing Undeclared Dangerous Goods

Here is a list of clues that could indicate that a parcel may contain dangerous goods that have not been declared. It is important to be aware of and vigilant about unusual packages.

- 1 The package includes dangerous goods marks/labels.
- 2 There is a chemical name on the box.
- 3 There is a description, such as automotive parts, cosmetics or cleaning supplies that indicates that the package may contain dangerous goods.
- 4 The box is marked with a four-digit number preceded by UN.
- 5 The UN standardized means of containment is used.
- 6 There is a strong odour from the parcel or evidence of leakage.
- 7 The address information indicates the shipper or receiver is a chemical manufacturer, laboratory, hospital or other organization that is likely to ship dangerous goods.
- 8 The customs declaration indicates the presence of dangerous goods.
- 9 The package is emitting a buzzing or ticking sound.
- 10 There is a shifting weight or liquid sound inside the package.
- 11 There is the presence of other warning labels on the package.

 4G/Y30/S/12/USA/BS 809

Did you know?

Not all symbols are dangerous goods marks/labels. Some products bearing other types of symbols, such as Workplace Hazardous Materials Information System (WHMIS) symbols or Consumer Safety symbols, can be mailed safely and legally.

If you are uncertain about the nature of a symbol, refer to the Corporate Manual System (CMS) and confirm with the customer that they are not mailing dangerous goods. You can refer to the Retail CMS 1605.20 (D) Appendix B and C, or call the Retail Helpline.

Operations employees can refer to CMS Procedure 1605.01 Appendix B.

Dangerous Goods Found in the Mail

When dangerous goods are found in your facility, immediately inform your Team Leader, Retail Business Manager, or the Area Performance Centre.

In the case of a leak or spill, **DO NOT handle the item, and always avoid contact with package contents or inhaling any vapours.** Refer to the Corporate Manual System (CMS) Procedure 1605.20 (1605.20D for dealers) or CMS Procedure 1605.01 for Operations employees.

Assess the situation, follow the CMS and if necessary, **call 911!**

Case Study

To understand the impact of allowing dangerous goods into the mail stream, take a look at this case study of an incident that occurred in one of our Post Offices.

Today in the Post Office at 08:30 NST, there was a loud “BANG” and smoke coming from one of the Postal Boxes in the lobby. I was shaken but immediately contacted my Area Superintendent. My Superintendent notified the Area Performance Centre, who sent Security & Investigation and the RCMP to investigate. I restricted access to the Postal Boxes and once Security & Investigation arrived, they closed the Post Office for the day to secure the building.

A small international packet from Hong Kong—containing 10 loose lithium batteries—was found in the Postal Box. One of the batteries short-circuited due to improper packaging, which caused the explosion and smoke. Although the packet was badly burnt with no tracking ID, the addressee information was still intact. Security & Investigation was able to contact the addressee for more information.

It turned out that these lithium batteries were purchased online, and the addressee was able to provide the purchase information. This incident was reported to Transport Canada who worked with the CBSA, targeting this online store to prevent these items from entering the mail stream in Canada.

The contents of the packet were declared as a gift, and there was no indication that the package contained lithium batteries. The Hong Kong Post was notified, and they further investigated to determine why the batteries were not detected through their security screening process. The Hong Kong Post also contacted the mailer to address the improper packaging and to inform them of the mailing rules.

This was an unfortunate situation that took place in the Post Office. Had this occurred while on the flight from Hong Kong to Canada, the result could have been devastating.

The case study that you just reviewed illustrates the extreme importance of the need for ALL employees to be on the lookout for dangerous goods.

Allowing dangerous goods into the mail stream not only jeopardizes the safety of our staff, our customers and you, it also has a very real and direct financial consequences.

Impacts in this case include:

- The RCMP and the Bomb Squad were called to assist.
- The Post Office was closed for the day, and the Postmaster's safety was threatened.
- Closing the Post Office caused an inconvenience to our customers since they could not access their Postal Boxes or mail any items.
- Clean-up and repair to the damaged Postal Boxes and the floor in the Post Office were required.

Induction points are the first line of defence. **It's your job to refuse dangerous goods BEFORE they get into the mail stream.**

It is everyone's responsibility to be on the lookout and recognize dangerous goods.

Remember, you must refuse or intercept any parcel that is:

- Labelled with ANY dangerous goods labels or marked with a proper shipping name or UN number, whether the parcel contains dangerous goods or not
- Improperly packaged
- Deemed suspicious by you or your supervisor

Dangerous goods must not be accepted at the Post Office. If a parcel is suspected of containing a dangerous goods, you must refer the customer to the **Dangerous Goods: What Not to Mail** brochure and explain that mailing dangerous goods is prohibited.

Don't forget to always ask the customer, "Does your package contain dangerous goods, such as lithium batteries, aerosol cans or perfume?" while providing them with common dangerous goods examples.

It all starts with YOU!



Summary

You've almost completed this guide on dangerous goods. Here's a recap of what we've covered.

So far, we've reviewed:

- The definition of dangerous goods
- How to recognize dangerous goods when presented with them
- Your responsibilities at acceptance, processing and delivery
- Our customers' responsibilities
- Packaging, marking and labelling requirements
- Our limitations on acceptance of certain dangerous goods
- Clues on how to recognize undeclared dangerous goods
- What to do when dangerous goods are found

Remember, **when a dangerous goods is offered to you for mailing, you must investigate further and, if necessary, refuse the item.**

The 9 classes of dangerous goods

Class 1	Class 2	Class 3	Class 4	Class 5	Class 6	Class 7	Class 8	Class 9

Assessment

answers on page 32

This assessment is intended to confirm your knowledge of dangerous goods at Canada Post. You must correctly answer 16 out of 20 questions to pass the final assessment. Once you have successfully completed the course, inform your Team Leader so your Dangerous Goods Certificate can be issued.

Once you've completed the guide, remember to record your completion by calling the eSolutions Self-Serve Line at **1-855-833-8809** for Corporate Employees or, the **1-855-689-8503** number for Authorized Dealerships.

Let's see what you've learned.

1 Common reasons as to why an item is considered non-mailable.

- a. Item is too large
- b. Prohibited by law
- c. Poses a risk to employee and public safety
- d. Answers b and c

2 Dangerous goods incidents can occur:

- a. While in transport in an aircraft or ship
- b. While in transport in a road vehicle or rail car
- c. While being handled
- d. In all of these scenarios

3 The different classes of dangerous goods are identified by dangerous goods class marks/labels, but a four-digit number preceded by **UN** also indicates dangerous goods.

- a. True
- b. False

4 Lithium batteries on their own (not installed or packed with a device UN3480/UN3090) can be mailed if:

- a. They are properly marked/labelled and mailed to anywhere in the world using any of our products.
- b. They are properly marked/labelled and mailed using ground products (Expedited Parcel™ or Regular Parcel™) within Canada and are not shipped to an Air Stage Office.
- c. They are properly marked/labelled and mailed using ground products, but can only be sent within Canada and to the United States.
- d. Lithium batteries are not accepted to be mailed on their own.

5 A commercial customer is mailing a package with dry ice to keep the contents cool, and it is labelled with "Dry ice as refrigerant". The box is taped all the way around.

Can this package be mailed?

- a. Yes, it is labelled correctly and can be mailed.
- b. No, dry ice is not mailable.
- c. No, the package does not allow for the release of carbon dioxide.

6 A customer reused a box with a dangerous goods mark/label affixed to the package. The customer confirmed that the package does not contain dangerous goods.

What must the customer do for the package to be accepted for mailing?

- a. Nothing. The item is acceptable as is.
- b. Remove the dangerous goods marking.
- c. Write on the box that it does not contain dangerous goods.
- d. None of these actions.

7 When the UN3481 or UN3091 is indicated on the lithium battery mark, it means that the lithium battery is travelling on its own.

- a. True
- b. False

8 Which service can be used to mail human or animal specimens within Canada?

- a. Priority™
- b. Regular Parcel™
- c. Xpresspost™
- d. Expedited Parcel™
- e. All of these services

9 Large-capacity lithium batteries, such as those found in hoverboards or other self-balancing boards/wheels, vehicles, bicycles and wheelchairs, are permitted to be mailed.

- a. True
- b. False

10 Which of the following clues may indicate that a parcel contains undeclared dangerous goods?

- a. A chemical name on the package
- b. The box is marked with a four-digit number preceded by UN
- c. WHMIS or consumer labels on the package
- d. All of these are indicators that a parcel may contain undeclared dangerous goods

11 If an item with dangerous goods is found, you should immediately:

- a. Inform your manager, Team Leader or the Area Performance Centre.
- b. Pick up the parcel, even if it is leaking.
- c. Call 911.
- d. Let it continue in the mail stream.

12 When you see UN3480 on the Lithium Battery Mark, it indicates that the lithium battery is:

- a. Installed in the device
- b. Packed with the device
- c. On its own, with no device
- d. None of the above

13 A package containing Excepted Quantity dangerous goods can be mailed within Canada by Priority™ service.

- a. True
- b. False

14 Lithium batteries can be mailed by Xpresspost™ or Priority™ by commercial mailers if they are:

- a. Installed in device/equipment
- b. Packed with device/equipment
- c. On their own, not installed in device/equipment
- d. Answers a and b

15 Which diamond-shaped dangerous goods mark/label is acceptable for mailing?

- a. Class 3, Flammable Liquids
- b. Limited Quantity
- c. Excepted Quantity
- d. Class 6 Toxic and Infectious Substances

16 In general, Canada Post does not accept dangerous goods, but there are some items that have exemptions from the regulations that can be mailed. These include:

- a. Limited Quantities, Excepted Quantities, and Ammunition
- b. Lithium batteries, Limited Quantities, and Exempt Human/Animal Specimen
- c. Excepted Quantities and Dry Ice
- d. Both b and c

17 RVUs, Depots and Retail are to refuse mailings with dangerous goods class 1-9 symbols.

- a. True
- b. False

18 Dangerous goods handled by Canada Post are regulated by:

- a. The Transportation of Dangerous Goods Act & Regulations (TDG)
- b. The Workplace Safety and Insurance Board (WSIB)
- c. The International Civil Aviation Organization (ICAO)
- d. Both a and c

19 What information is required to be completed by the sender on a lithium battery mark?

- a. The type of commodity
- b. If it is a lithium ion or lithium metal battery
- c. The UN number and phone number
- d. The number of lithium batteries in the package

20 Dangerous goods in a means of containment should:

- a. Be closed securely to prevent opening and loss of contents under normal conditions of transport
- b. Not be affected, weakened, react or permeated by the dangerous goods
- c. Be secured and cushioned in the package to prevent movement
- d. Meet all of these criteria

Answers

1. d. Answers b and c: it is prohibited by law and poses a risk to employee and public safety.
2. d. In all of these scenarios: while in transport in an aircraft or ship, in a road vehicle or rail car, or while being handled.
3. a. True. A four-digit number preceded by UN also indicates dangerous goods.
4. b. They are properly marked/labelled and mailed using ground products (Expedited Parcel™ or Regular Parcel™) within Canada and are not shipped to an Air Stage Office.
5. c. No, the package does not allow for the release of the carbon dioxide.
6. b. Remove the dangerous goods marking.
7. b. False. If UN3481 or UN3091 is indicated on the lithium battery mark, it does not mean that the lithium battery is travelling on its own.
8. e. All of these services: Priority™, Regular Parcel™, Xpresspost™ and Expedited Parcel™.
9. b. False. Large-capacity lithium batteries are not permitted to be mailed.
10. d. All of these are indicators that a parcel may contain undeclared dangerous goods.
11. a. Inform your manager, Team Leader or the Area Performance Centre.
12. c. On its own, no device
13. b. False. A package containing Excepted Quantity dangerous goods is only permitted for shipment within Canada using our ground products (Expedited Parcel™ or Regular Parcel™) and cannot be mailed to an Air Stage Office.
14. d. Answers a and b: installed in device/equipment and packed with device/equipment.
15. b. Limited Quantity
16. d. Both b and c: Lithium batteries, Limited Quantities and Exempt Human/Animal Specimen. Excepted Quantities and Dry Ice.
17. a. True. RVUs, Depots and Retail are to refuse mailings with dangerous goods class 1-9 symbols.
18. d. Both a and c: the Transportation of Dangerous Goods Act & Regulations (TDG) and the International Civil Aviation Organization (ICAO).
19. c. The UN number and phone number
20. d. Meet all of these criteria: The means of containment should be closed securely, cushioned to prevent movement and not affected by the dangerous goods.



**DOES YOUR PACKAGE
CONTAIN DANGEROUS
GOODS, SUCH AS LITHIUM
BATTERIES, AEROSOL
CANS OR PERFUME?
Ask. Always.**

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