



# **Dangerous Goods and Rail Safety**

**A Technical Publication from  
ALBERTA EDGE (ENVIRONMENTAL AND  
DANGEROUS GOODS EMERGENCIES)**

## **Dangerous Goods Shipments by Courier and Passenger Vehicles**

September 2018

*Alberta* 

This material is meant as a guide to certain parts of the Transportation of Dangerous Goods Regulations and is not meant to be a substitute for them. It is the responsibility of handlers, offerers and transporters of dangerous goods to consult the Regulations for the exact requirements. Alberta EDGE (Environmental and Dangerous Goods Emergencies) of Alberta Transportation can provide accurate information regarding the Regulations 24 hours a day.

**Alberta EDGE  
(Environmental and Dangerous Goods Emergencies)**

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**These telephone lines are recorded to assist in responding to the emergency (natural/manmade) and/or inquiry regarding dangerous goods and to ensure that the information is accurate. Direct any questions regarding the recording to the Regulatory Compliance Officer responding to your call or contact the Manager of Alberta EDGE at 780-427-8660. *Legal Authority: Dangerous Goods Transportation and Handling Act, Section 13(1).***

## INTRODUCTION

The Dangerous Goods and Rail Safety Section of Alberta Transportation has the responsibility of administering the TDG legislation by road in the province of Alberta. In order to assist manufacturers, shippers and carriers (transporters) with the legislation, The Section has a 24 hour, seven day emergency and information centre. Alberta EDGE (Environmental and Dangerous Goods Emergencies) can be accessed at 1-800-272-9600 (toll free within Alberta) or at (780)422-9600.

## CLASSIFICATION

Dangerous goods fall into the following nine hazard classes:

<b>Class</b>	<b>Products Included</b>
1	Explosives
2	Gases
3	Flammable Liquids
4	Flammable Solids; Substances liable to spontaneous combustion; Substances that on contact with water emit flammable gases (water-reactive substances)
5	Oxidizing Substances and Organic Peroxides
6	Toxic and Infectious Substances
7	Radioactive Materials
8	Corrosives
9	Miscellaneous Products, Substances or Organisms

Some of these classes have been broken into divisions depending upon the nature or degree of hazard they present. For example, a flammable gas such as propane is a Class 2.1 and a toxic gas such as chlorine is a Class 2.3.

The job of classifying a product is the responsibility of manufacturers or importers of that product. The manufacturer must also assign to the product a proper shipping name, a UN number and a packing group. This information is put on the shipping document by the consignor (shipper) of the shipment.

## DOCUMENTATION

It is the responsibility of the consignor to prepare a proper shipping document when offering dangerous goods for transportation. The document is similar to a standard bill of lading but must contain information describing the dangerous goods. According to Section 1.4 of the Transportation of Dangerous Goods Regulations, the definition of the shipping document must be in paper format; electronic format is not acceptable. The shipping document is handed over to the initial carrier and must accompany the consignment throughout its journey [Section 3.1]. The consignor and each carrier involved in transport shall retain a copy of the shipping document for a period of two years [Section 3.11].

This is the minimum required information, which must appear on a shipping document:

Shipping Document Information	When Required	Section in the Regulations
Name and address of Consignor	Always	3.5(1)(a)
Date	Always	3.5(1)(b)
<i>Description of goods in the following order</i>	-	-
a. UN Number	Always	3.5(1)(c)(i)
b. Shipping Name	Always	3.5(1)(c)(ii)
c. The technical name of the most dangerous substance related to the primary classification	If Provision 16 of Schedule 2 applies	3.5(1)(c)(ii)(A)
d. The words "Not Odorized"	For liquefied petroleum gas that has not been odorized	3.5(1)(c)(ii)(B)
e. Primary classification	Always	3.5(1)(c)(iii)
f. Compatibility group	For Class 1	3.5(1)(c)(iv)
g. Subsidiary classifications	If Any	3.5(1)(c)(v)
h. Packing group	If Any	3.5(1)(c)(vi)
i. The words 'Toxic by inhalation' or toxic – inhalation hazard'	If Provision 23 of Schedule 2 applies	3.5(1)(c)(vii)
The quantity in the International System of Units (SI) for each shipping name *1, *2	Always	3.5(1)(d)
The net explosive quantity	For Class 1 as per Provision 85 and 86 of Schedule 2	3.5(1)(d)
The words "24-Hour Number" followed by a telephone number where the consignor can easily be reached *3	Always	3.5(1)(f)
Consignor's Certification *4	All loads [does not apply to empty large means of	3.6.1 [3.6.1(3)]

	containment not clean and purged]	
Emergency Response Assistance Plan (ERAP) number and telephone number to activate it	If Required	3.6(1)
The control and emergency temperatures	For products in Classes 4.1 and 5.2	3.6(3)
The words "Fumigated Unit"	As required	3.5(3)
Additional information for Class 7 *5	As required	3.6(3)(d)

**Note:**

1. If the quantity of dangerous goods is less than 10% of the container's maximum fill limit then the words "Residue – Last Contained" may be added before or after the description of the dangerous goods. This does not apply to Class 2 gases in small means of containment or Class 7, radioactive substances [Section 3.5(4)].
2. Multiple Deliveries: If the quantity of dangerous goods or the number of small means of containment changes during transport, the carrier must show the change on the shipping document or on a document attached to the shipping document. [Section 3.5(5)].
3. A consignor can use the telephone number of a person who is not the consignor, but who is competent to give the technical information required, such as CANUTEC. To use CANUTEC's telephone number, the consignor must receive permission, in writing, from CANUTEC. A consignor who uses the telephone number of an organization or agency other than CANUTEC must ensure that they have current, accurate information on the dangerous goods the consignor offers for transport and, if the organization or agency is located outside Canada, the telephone number must include the country code, and if required, the city code. [Section 3.5(2)].
4. After the information required by Section 3.5 the shipping document must include a consignor's certification listed in Section 3.3.1(1)a-e and the name of an individual who is the consignor or acting on behalf of the consignor. [Section 3.6.1(2)].  
The most common consignor's certification: "I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, are properly classified and packaged, have dangerous goods safety marks properly affixed or displayed on them, and are in all respects in proper condition for transport according to the Transportation of Dangerous Goods Regulations." [Section 3.6.1(1)(a)]
5. For Class 7, Radioactive Materials, any additional information required for transport documents under the "Packaging and Transport of Nuclear Substances Regulations".

## **WASTE MANIFEST**

Currently a waste manifest produced by Alberta Environment and Parks is an accepted dangerous goods shipping document.

Currently a waste manifest or recycling docket produced by Alberta Energy Regulators (AER) is also an accepted dangerous goods shipping document.

Infectious substances and radioactive materials have special documentation requirements. Dangerous goods shipped by air must be documented in a prescribed form known as "Shipper's Declaration of Dangerous Goods". For details of alternate and additional documentation requirements, consult Part 3 of the TDG Regulations or call Alberta EDGE (Environmental and Dangerous Goods Emergencies).

## SAFETY MARKS

Safety marks are labels, placards, UN numbers and package markings. They are described in Part 4 of the TDG Regulations. The consignor is responsible for displaying or ensuring the display of safety marks on each and all means of containment carrying dangerous goods. [Section 4.4]

The carrier is responsible for making sure that the safety marks remain displayed during transport. The carrier is also responsible for removing or changing the safety marks if the requirements for dangerous goods safety marks change during transport. [Section 4.5]

### Small Means of Containment

A small means of containment has a capacity of 450 L or less. A container that is a small means of containment must display the dangerous goods label(s), the shipping name and the UN number of the product [Sections 4.10 to 4.12]. The label is 100 mm on each side. If the container is too small or it has an irregular shape, the label can be reduced in size up to a dimension of 30 mm on each side [Section 4.7(2)].

The UN number for a dangerous goods label can be placed inside the label or next to the label as shown below [Section 4.8(1)]. If the UN number is inside the label the letters “UN” must be omitted.

<b>Example of Safety Marks for a Small Means of Containment</b> In this case the product is compressed air		
	<table border="1"><tr><td>AIR, COMPRESSED</td></tr></table>	AIR, COMPRESSED
AIR, COMPRESSED		
	<table border="1"><tr><td><b>UN 1002</b> AIR, COMPRESSED</td></tr></table>	<b>UN 1002</b> AIR, COMPRESSED
<b>UN 1002</b> AIR, COMPRESSED		
Class 2.2 safety label is green with a white cylinder symbol		

## Large Means of Containment

A large means of containment has a capacity greater than 450 L. A large means of containment must display dangerous goods placard(s). Each side of a placard must be at least 250 mm in length. Except for the DANGER placard, all placards have a line running 12.5mm inside the edge. If the large means of containment has an irregular shape or its size is too small, the placard can be reduced in size but the dimensions must never be less than 100 mm on each side [Section 4.7(3)].

A UN number required to be displayed on large means of containment must be displayed inside the placard omitting the letters "UN" or on an orange panel next to the placard. [Section 4.8(2)].

The primary class placard for each of the dangerous goods contained in a large means of containment, other than a ship or an aircraft, must be displayed on each side and end of the containment [Section 4.15(1)]. If two or more dangerous goods have different UN numbers but are identified by the same placard or placards, the placard or placards are required to be displayed only once on each side and on each end of the large means [Section 4.5].

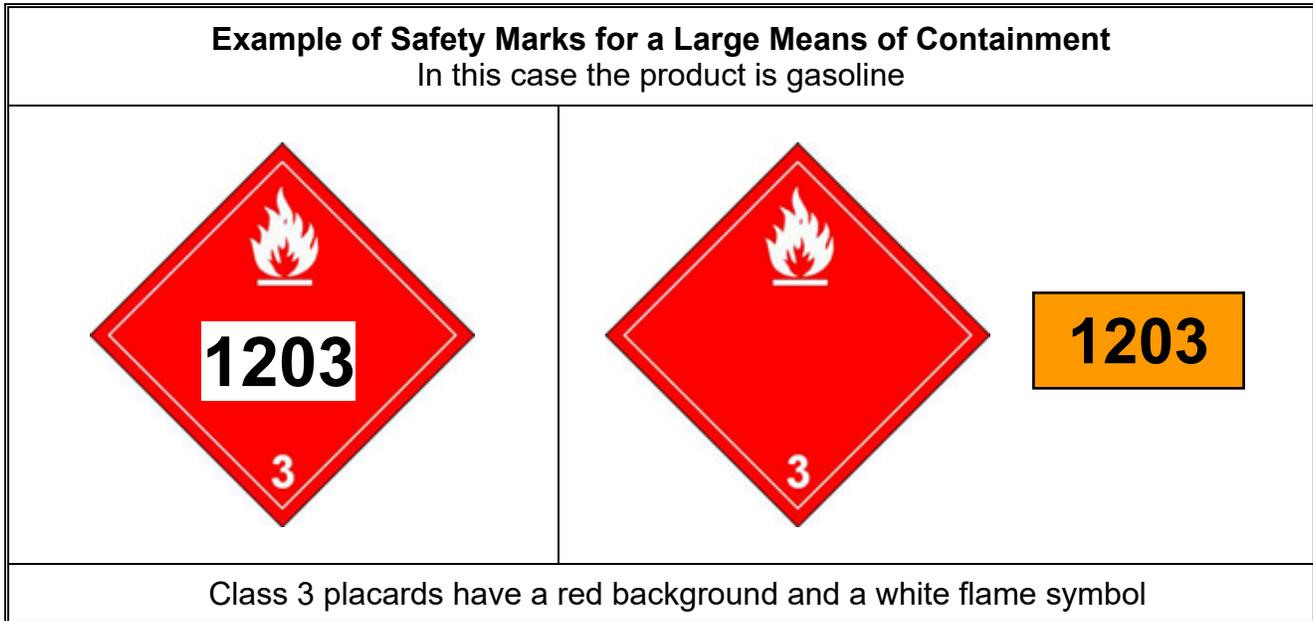
A subsidiary class placard for dangerous goods must be displayed, next to the primary class placard if the dangerous goods requires an Emergency Response Assistance Plan (ERAP) and;

- a) Have a subsidiary class of Class 1, Explosives;
- b) Have a subsidiary class of Class 4.3, Water-reactive Substances;
- c) Have a subsidiary class of Class 6.1, Toxic Substances, and are included in packing group I due to inhalation toxicity; or
- d) Have a subsidiary class of Class 8, Corrosives and are UN 2977 or UN 2978 RADIOACTIVE MATERIAL, URANIUM HEXAFLUORIDE, FISSILE, or UN 2978, RADIOACTIVE MATERIAL, URANIUM HEXAFLUORIDE, non-fissile or fissile excepted. [Section 4.15.1]

A large means of containment must be placarded with a UN Number if the dangerous goods are in quantities or concentrations requiring an ERAP are liquids or a gas in contact with a large means of containment. This does not apply to Class 1, Explosives. [Section 4.15.2]

In the case of means of containment that use a trailer unit, the placard or placard and UN Number may be displayed on the front of the vehicle attached to the trailer, rather than on the lead trailer. [Section 4.15.3(a)(b)] Placards may be attached to a frame which is permanently connected to the large means of containment.

An intermediate bulk container (IBC) with a capacity between 450 L and 3000 L can either display a placard and UN Number, or a label for each primary and subsidiary class as well as the UN Number and shipping name on two opposite sides of the IBC. [Section 4.15.3(c)]



For additional information about safety marks, refer to the Alberta EDGE information bulletin entitled [Safety Marks](#).

### **TRAINING**

Unless there is an exemption under the TDG Regulations, anyone who handles, offers for transport or transports dangerous goods must have a valid Transportation of Dangerous Goods Training Certificate or must be under the direct supervision of a trained person [Section 6.1].

The employer issues a training certificate when they have reasonable grounds to believe that an employee possesses adequate training. The training certificate may be in paper or electronic format [Section 6.3]. Self-employed people can issue training certificates for themselves. The employer must keep a record of the training that the employee has received and a copy of their training certificate [Section 6.6]. The training certificate must be immediately presented to an inspector who requests it [Section 6.8].

## RELEASE OR ANTICIPATED RELEASE REPORT REQUIREMENT (PART 8)

In the event of a release or anticipated release of dangerous goods (herein referred to as an event), the person in possession of the dangerous goods at the time of the event must make an Emergency Report to the local authorities as soon as possible. An emergency report is required when the quantity of dangerous goods that was or may have been released exceeds the amount set out in the following table (Section 8.2) or for any potential release of dangerous goods. For more information on reporting requirements, request Alberta EDGE information bulletin entitled Reporting an Accidental Release of Dangerous Goods.

Class	Packing Group or Category	Quantity
1	II	Any quantity
2	Not Applicable	Any quantity
3, 4, 5, 6.1 or 8	I or II	Any quantity
3, 4, 5, 6.1 or 8	III	30 L or 30 kg
6.2	A or B	Any quantity
7	Not Applicable	A level of ionizing radiation greater than the level established in Section 39 of the "Packing and Transport of Nuclear Substances Regulations, 2015"
6.1		5 kg or 5 L
6.2		Any quantity
9	II or III or without packing group	30 L or 30 kg

A local authority is any organization which may be responsible for emergency response at the location of the release or anticipated release. In Alberta, these include:

- the local police or RCMP, and
- Alberta EDGE (Environmental and Dangerous Goods Emergencies)

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The person making the Emergency Report must also make a Release or Anticipated Release Report as per Section 8.4 to CANUTEC (1-888-226-8832 or 613-996-6666) if:

- a fatality occurred;
- there were any injuries caused by exposure to the dangerous goods which required medical treatment by a health care provider;
- an evacuation occurred or people sheltered in place;
- a loading or unloading facility, road, main rail line or main waterway was closed;
- the container became damaged enough to compromise its integrity; or
- the centre sill or stub sill of a tank car was broken or there is a crack in the metal equal to or greater than 15 cm (6 in.)

If a report is required to CANUTEC, the person must also report the incident to the consignor of the dangerous goods.

The information that must be included in the Emergency or Release or Anticipated Release Report is:

- the name and contact information of the person making the report;
- the date, time and location of the event;
- the mode of transport used (including a description of the container);
- the shipping name or UN number of the dangerous goods;
- the quantity of dangerous goods initially in the container;
- the quantity of dangerous goods released (if applicable);
- the type of incident leading to the event (for example: collision, roll-over, derailment, overfill, fire, explosion or load-shift);
- the name and geographic location of any road, main railway or main waterway that was closed (if applicable);
- the number of people evacuated or sheltered in place (if applicable); and
- the number of fatalities or injures (if applicable).

A report can also include other information not required by the regulations (for example, any cleanup arrangements, or involvement of other emergency response agencies like the police, fire department, Alberta Environment and Parks or the Alberta Energy Regulator).

After submitting a Release or Anticipated Release report to CANUTEC, the person or employer of the person who made the report must submit a 30-day follow-up report to the Dangerous Goods Directorate of Transport Canada [Section 8.8]. The 30-Day Follow-up Report must include the following information:

- name and contact information of the person submitting the report;
- date, time and location of the event;
- names and contact information of the consignor, carrier and consignee;
- the mode of transport;
- classification of the dangerous goods;
- quantity of dangerous goods in the container before the event occurred;
- the quantity of dangerous goods released (if applicable)

- a description of the container involved and a description of the failure or damage including how the event occurred;
- information about the conditions leading to the event;
- information on any fire or explosion (if applicable);
- the name and location of any facility that was closed, and the duration of the closure;
- the name and location of any road, main railway line or main waterway that was closed, and the duration of the closure
- number of deaths and injuries (if applicable);
- an estimate of the number of people evacuated, if any; and
- the ERAP reference number (if applicable);
- the date the initial verbal report was made; and
- an estimate of the financial loss as a result of the release/anticipated release and any associated, emergency response or remediation.

A 30 day report must be kept for two years after the day which it was made. They must make the report available to an inspector within 15 days after the day on which the person receives a written request from the inspector.

### **LOSS OR THEFT OF DANGEROUS GOODS (PART 8.16)**

A person is required to report by telephone the loss or theft of dangerous goods, or finding lost or stolen dangerous goods as soon as possible to:

- CANUTEC, at 1-888-CANUTEC (1-888-226-8832) or 613-996-6666;
- in the case of dangerous goods included in Class 1, Explosives, or referred to in paragraph (2)(a) or subparagraph (2)(b)(i) or (c)(i), a Natural Resources Canada inspector, at 613-995-5555; and
- in the case of dangerous goods included in Class 7, Radioactive Materials, the Canadian Nuclear Safety Commission.

Reportable loss or theft amounts are any

- quantity listed in Section 8.16(2)(a)
- any quantity, in the case of dangerous goods in the following primary and subsidiary classes:
  - (i) explosives included in Class 1.1, 1.2 or 1.3,
  - (ii) toxic gases included in Class 2.3,
  - (iii) organic peroxides included in Class 5.2, Type B, liquid or solid, temperature controlled,
  - (iv) toxic substances included in Class 6.1 and Packing Group I,
  - (v) infectious substances included in Class 6.2, and
  - (vi) radioactive materials included in Class 7; and
- A total quantity of 450 kg or more, in the case of dangerous goods in the following primary and subsidiary classes:
  - (i) explosives included in Class 1.4 (except for 1.4S), 1.5 or 1.6,
  - (ii) flammable gases included in Class 2.1,

- (iii) flammable liquids included in Class 3,
- (iv) desensitized explosives included in Class 3 or 4.1,
- (v) substances liable to spontaneous combustion, pyrophoric solids or liquids, included in Class 4.2 and Packing Group I or II,
- (vi) water-reactive substances included in Class 4.3 and Packing Group I or II,
- (vii) oxidizing substances included in Class 5.1 and Packing Group I or II, and
- (viii) corrosives included in Class 8 and Packing Group I or II.

Information which must be included in the loss or theft report:

- The name and contact information of the person making the report;
- The names and contact information of the consignor, consignee and the carrier;
- Information as to whether the dangerous goods were lost or stolen;
- The shipping name or UN number of the dangerous goods
- The quantity of the lost or stolen dangerous goods
- A description of the container of the dangerous goods
- The approximate date, time and location of the loss or theft.

## EXEMPTIONS

Following are some exemptions in the TDG Regulations for transporting dangerous goods.

### **500 Kg Gross Mass Exemption (Section 1.16)**

**(1)** Part 3 (Documentation), Part 4 (Dangerous Goods Safety Marks) and Part 5 (Means of Containment) do not apply to the handling, offering for transport or transporting of dangerous goods on a road vehicle, a railway vehicle or a ship on a domestic voyage if

**(a)** in the case of

**(i)** dangerous goods included in Class 2, Gases, they are in one or more small means of containment in compliance with the requirements for transporting gases in Part 5, Means of Containment; or

**(ii)** dangerous goods not included in Class 2, Gases, they are in one or more means of containment

**(A)** each of which has a gross mass less than or equal to 30 kg and that is designed, constructed, filled, closed, secured and maintained so that under normal conditions of transport, including handling, there will be no accidental release of the dangerous goods that could endanger public safety; or

**(B)** that are drums in compliance with the requirements of section 5.12 of Part 5, Means of Containment, for transporting dangerous goods in drums;

**(b)** the gross mass of all dangerous goods

**(i)** transported on the road vehicle or the railway vehicle is less than or equal to 500 kg; and

**(ii)** transported on the ship on a domestic voyage is less than or equal to 500 kg, excluding the dangerous goods in a road vehicle or railway vehicle being transported on the ship;

**(c)** each means of containment has displayed on one side, other than a side on which it is intended to rest or to be stacked during transport,

**(i)** the dangerous goods safety marks required by Part 4, Dangerous Goods Safety Marks; or

**(ii)** for dangerous goods, other than dangerous goods included in Class 2, Gases, the shipping name of the dangerous goods and the marks required for them in one of the following Acts and regulations, as long as those marks are legible and visible during handling and transporting in the same manner as dangerous goods safety marks:

**(A)** the “Pest Control Products Act” and its regulations; or

**(B)** the “Hazardous Products Act” and its regulations;

**(d)** the dangerous goods are accompanied by a shipping document or document that is located, for a road or railway vehicle or a ship, in accordance with the requirements for location of a shipping document in sections 3.7 to 3.9 of Part 3, Documentation; and

**(e)** any document referred to in paragraph (d), other than a shipping document, includes the following information in the following order:

**(i)** the primary class of the dangerous goods, following the word “Class”; and

**(ii)** the total number of means of containment, on which a dangerous goods safety mark is required to be displayed, for each primary class, following the words “number of means of containment”.

*For example,*

*Class 3, number of means of containment, 10*

*Class 8, number of means of containment, 12*

**(2)** Subsection (1) does not apply to dangerous goods that

**(a)** are in a quantity or concentration that requires an Emergency Response Assistance Plan (ERAP);

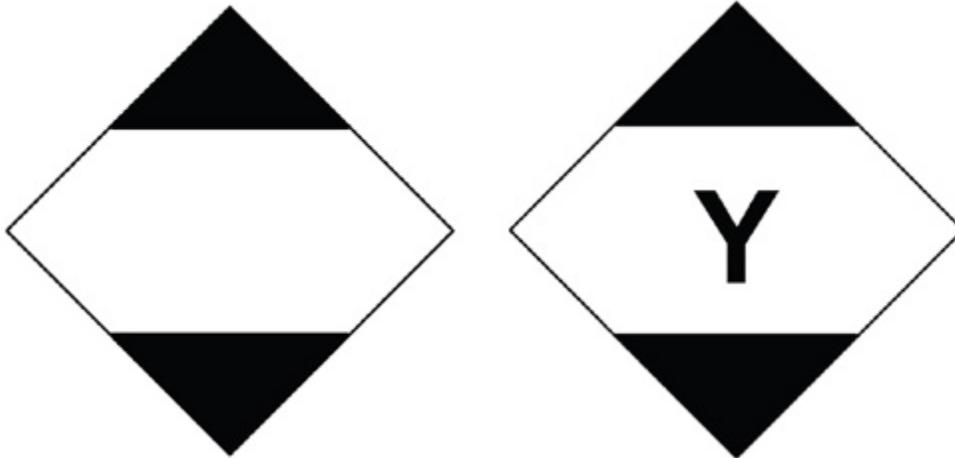
**(b)** require a control or emergency temperature;

- (c)** are included in Class 1, Explosives, except for
  - (i)** explosives included in Class 1.4S; or
  - (ii)** UN numbers UN0191, UN0197, UN0276, UN0312, UN0336, UN0403, UN0431, UN0453 and UN0493;
- (d)** are included in Class 2.1, Flammable Gases, and are in a cylinder with a capacity greater than 46 L;
- (e)** are included in Class 2.3, Toxic Gases;
- (f)** are included in Class 4, Flammable Solids; Substances Liable to Spontaneous Combustion; Substances that on Contact with Water Emit Flammable Gases (Water-reactive Substances); and in Packing Group I;
- (g)** are included in Class 5.2, Organic Peroxides, unless they are allowed to be transported as limited quantities in accordance with section 1.17 and column 6(a) of Schedule 1;
- (h)** are liquids included in Class 6.1, Toxic Substances, and Packing Group I;
- (i)** are included in Class 6.2, Infectious Substances; or
- (j)** are included in Class 7, Radioactive Materials, and are required to be licensed by the Canadian Nuclear Safety Commission.

### **Limited Quantities Exemption (Section 1.17)**

- (1)** A quantity of dangerous goods, other than explosives, is a limited quantity if
  - (a)** the dangerous goods are in one or more means of containment designed, constructed, filled, closed, secured and maintained so that under normal conditions of transport, including handling, there will be no accidental release of the dangerous goods that could endanger public safety; and
  - (b)** each means of containment has a gross mass less than or equal to 30 kg and the dangerous goods in the inner means of containment
    - (i)** if a solid, have a mass that is less than or equal to the number shown in column 6(a) of Schedule 1, when that number is expressed in kilograms;
    - (ii)** if a liquid, have a volume that is less than or equal to the number shown column 6(a) of Schedule 1, when that number is expressed in litres; or
    - (iii)** if a gas, including a gas in a liquefied form, are contained in one or more means of containment each of which has a capacity less than or equal to the number shown in column 6(a) of Schedule 1, when that number is expressed in litres.
- (2)** Part 3 (Documentation), Part 4 (Dangerous Goods Safety Marks), Part 5 (Means of Containment), Part 6 (Training), Part 7 (Emergency Response Assistance Plan) and Part 8

(Reporting Requirements) do not apply to the handling, offering for transport or transporting of limited quantities of dangerous goods on a road vehicle, a railway vehicle or a ship on a domestic voyage if each means of containment is legibly and durably marked on one side, other than a side on which it is intended to rest or to be stacked during transport, with one of the following illustrated marks:



**(3)** When a limited quantity of dangerous goods is in a means of containment that is inside another means of containment, the inner means of containment is not required to be marked if the gross mass of the outer means of containment is less than/equal to 30 kg, the outer means of containment is not intended to be opened during transport, and the outer means of containment is legibly and visibly marked, with the illustration in Subsection (5).

**(4)** The mark is a square on point, and the line forming the square on point must be at least 2 mm wide. The top and bottom portions must be black and the central portion must be white or a contrasting colour. Each side of the mark must be at least 100 mm long. The letter "Y" may be displayed in the centre of the mark if the limited quantity is in compliance with the ICAO Technical Instructions. If the size of the means of containment so requires, the length of each side may be reduced to not less than 50 mm, provided that the mark remains clearly visible.

**(5)** Until December 31, 2020, instead of being marked with the mark illustrated in subsection (5), a means of containment may have displayed on it

**(a)** the words "Limited Quantity"; or

**(b)** the abbreviation "Ltd. Qty."; or

**(c)** the words "Consumer Commodity"; and

**(d)** the UN number of each limited quantity of dangerous goods preceded by the letters "UN", placed within a square on point. [Section 1.17(6)]

**(6)** For the purposes of paragraph (d), the line forming the square on point must be black and be at least 2 mm wide. If the dangerous goods have different UN numbers, the square on point must be large enough to include each UN number, but in any case each side must be not less than 50 mm long. The UN numbers and letters must be at least 6 mm high. The line, UN numbers and letters must be on a contrasting background.

**EXCEPTED QUANTITIES EXEMPTION [Section 1.17.1]**

Part 3 (Documentation), Part 4 (Dangerous Goods Safety Marks), Part 5 (Means of Containment), Part 6 (Training), Part 7 (Emergency Response Assistance Plan) and Part 8 (Accidental Release and Imminent Accidental Release Report Requirements) do not apply to the handling, offering for transport or transporting of dangerous goods in excepted quantities if each means of containment is marked on one side, other than a side on which it is intended to rest or to be stacked during transport, with the excepted quantities mark illustrated below.



Black or red:	Hatching around edge of square and symbol
White (or a colour that is contrasts, as applicable, with black or red):	Background
Size:	Square, and each side must be at least 100 mm
The symbol is a stylized capital E enclosed in a circle and all three cross bars of the letter E must touch the perimeter of the circle	
Replace * with the primary class	
Replace ** with the name of the consignor or the consignee	

A quantity of dangerous goods, other than explosives, is an excepted quantity if the dangerous goods are in an inner means of containment and an outer means of containment that are designed, constructed, filled, closed, secured and maintained so during normal transportation, including handling, there are no accidental releases.

Dangerous Goods in inner means of containment are excepted quantities if they have a mass (in mg for solids), volume (in ml for liquids) or capacity (for gases) that is less than or equal to the number shown in column 1 of the table in subsection (2) for the corresponding alphanumeric code in column 6(b) of Schedule 1.

Dangerous Goods in the outer means of containment are excepted quantities if they have a mass (in mg for solids), volume (in ml for liquids) or capacity (for gases) that is less than or equal to the number shown in column 2 of the table in subsection (2) for the corresponding alphanumeric code in column 6(b) of Schedule 1.

When dangerous goods in excepted quantities for which different alphanumeric codes are assigned are together in an outer means of containment, the total quantity of dangerous goods must not exceed the lowest maximum net quantity per outer means of containment that is set out in column 2 of the table to this subsection for any of the dangerous goods.

<b>Alphanumeric Code</b>	<b>Column 1 Maximum net quantity per inner means of containment (in g for solids and mL for liquids and gases)</b>	<b>Column 2 Maximum net quantity per outer means of containment (in g for solids and mL for liquids and gases, or sum of g and mL in the case of mixed packing)</b>
E0	Not permitted as Excepted Quantity	
E1	30	1000
E2	30	500
E3	30	300
E4	1	500
E5	1	300

If dangerous goods in excepted quantities are in a means of containment inside an overpack the words "Overpack" and the mark illustrated in Subsection (3) must be either displayed on the overpack or on the means of containment and visible through the overpack.

The number of outer means of containment containing dangerous goods in excepted quantities on a road vehicle, a railway vehicle or an intermodal container must not exceed 1000.

When dangerous goods in excepted quantities are in an inner means of containment that is inside an outer means of containment, the inner means of containment is not required to be marked in accordance with Subsection (3) if the outer means of containment is not intended to be opened during transport and the outer means of containment is marked with the mark illustrated in that subsection.

If a shipping document or any other document accompanies dangerous goods in excepted quantities, the document must include the words “dangerous goods in excepted quantities” and must indicate the number of outer means of containment.

The TDG Regulations, except for Part 1 (Coming into Force, Repeal, Interpretation, General Provisions and Special Cases) and Part 2, (Classification), do not apply to the handling, offering for transport or transporting of dangerous goods in excepted quantities that are assigned to alphanumeric codes E1, E2, E4 and E5 in column 6(b) of Schedule 1 if the net quantity of the dangerous goods per inner means of containment is less than or equal to 1 g for solids or 1 mL for liquids and gases; and the net quantity of the dangerous goods per outer means of containment is less than or equal to 100 g for solids or 100 mL for liquids and gases.

### **BATTERIES**

The TDG Regulations do not apply to wet, non-spillable batteries that are not intended for disposal if (Schedule 2, Special Provision 39):

1. at a temperature of 55°C, electrolyte will not flow from a ruptured or cracked battery case and there is no free liquid to flow; and
2. when the battery is prepared for transport, the battery’s terminals are protected from short circuits.

The TDG Regulations do not apply to lithium cells and batteries if they meet the requirements of Special Provision 34 of Schedule 2 of the TDG Regulations.

### **QUANTITY RESTRICTIONS IN PASSENGER VEHICLES**

Part 1 of the TDG Regulations defines a passenger carrying road vehicle as a vehicle that is carrying one or more passengers. Bus lines and other passenger carrying companies sometimes transport dangerous goods. However, passenger carrying vehicles can carry only specified amounts of dangerous goods.

The limits for passenger-carrying vehicles are shown in Column 9 of Schedule 1 of the TDG Regulations. The limits specified are interpreted as the amount of dangerous goods in:

- kilograms, for solid dangerous goods;
- capacity of the container in litres, for liquid dangerous goods; or
- capacity of the container in litres, for compressed gas.

If the passenger-carrying vehicle limit for a dangerous goods is unknown, that limit can be obtained by calling Alberta EDGE (Environmental and Dangerous Goods Emergencies) at 1-800-272-9600.

## DOCUMENT CHECKLIST

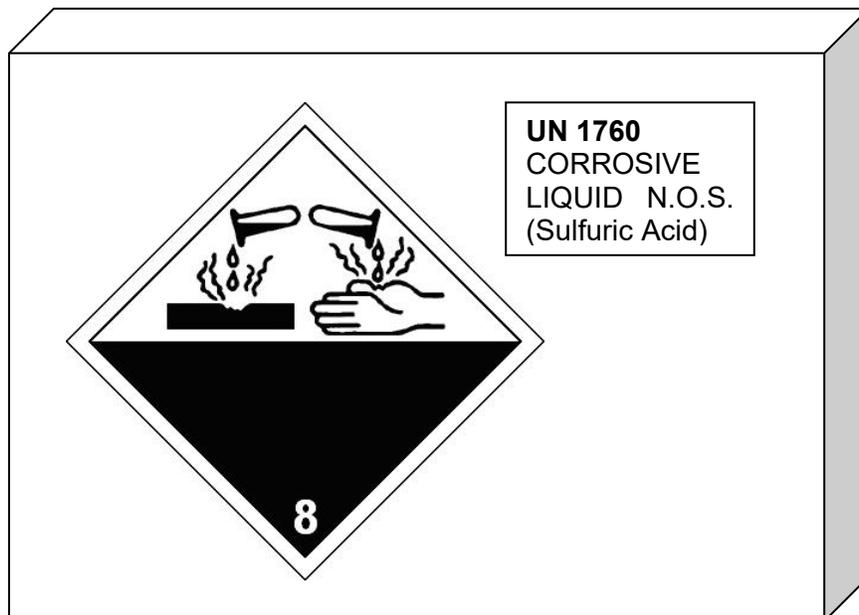
Are the following items on the dangerous goods document?

- name and address of consignor (shipper)
- date
- description of dangerous goods (in order)
  - UN Number
  - Shipping name (the dangerous goods name listed in Column 2 of Schedule 1 of the TDG Regulations)
  - Primary classification
  - Subsidiary classification in parenthesis (if any)
  - Packing group (I, II, III)
  - Compatibility group (explosives only)
- Quantity of dangerous goods using a unit of measurement included in the International System of Units
- For labeled dangerous goods in small means of containment, the number of small means of containment for each shipping name
- 24-hour number (the consignor's 24 hour emergency number)
- net explosives quantity (explosives only)
- Reference number of the ERAP (Emergency Response Assistance Plan) (if ERAP required) and ERAP telephone number
- control temperatures and emergency temperatures (if required)
- The Consignor's Certification and name of individual representing consignor

## SAFETY MARKS

Are the proper safety marks on the container?

- the hazard label for the dangerous goods class
- the shipping name of the dangerous goods
- the UN number
- the placards for the transport unit (if required)



<b>CONSIGNOR</b>			<b>DESTINATION (City-Town)</b>			
Name:			Name:			
Address:			Address:			
Name of Carrier		Prepaid <input type="checkbox"/>	Collect <input type="checkbox"/>	Transport Unit Number		
Point of Origin			Shipping Date		Shipper's No.	
<b>REGULATED DANGEROUS GOODS</b>						
UN Number	Shipping Name	Primary Class	Subsidiary Class	Packing Group	Quantity	Packages Requiring Labels
24-Hour Number: _____						
ERAP Reference _____ and Telephone Number _____						
<b>Consignor's Certification</b>						
I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, are properly classified and packaged, have dangerous goods safety marks properly affixed or displayed on them, and are in all respects in proper condition for transport according to the Transportation of Dangerous Goods Regulations.						
Name of Consignor: _____						
<b>Special Instructions</b>						
<b>NON-REGULATED GOODS</b>						
Packages	Description of Articles			Weight		
Received in apparent good order				_____ <b>Consignee's Signature</b>		_____ <b>Shipper's Signature</b>
Received in Apparent Good Order		<b>Driver's Signature</b>		<b>Driver's No.</b>		

Please note that this sample shipping document contains some information that is not required in the TDG Regulations. The additional information reflects current industry practice.