

Packing and Labelling Dangerous Goods for Transport

1.0 Scope

This document is meant to provide guidance to allow for the safe handling, packaging, and labelling of Dangerous Goods, as defined by the Transportation of Dangerous Goods Regulations (TDGR), at Thompson Rivers University (TRU). The regulations apply when dangerous goods are received and/or shipped by TRU personnel, when moving dangerous goods across a public road at TRU, and when shipping dangerous goods within Canada or internationally.

The legislation governing transportation of dangerous goods for the above listed procedures is governed by the following acts, regulations, and technical documents:

[Transportation of Dangerous Goods Act and Regulations](#) (Canada, 1992)
[ICAO Technical Instructions for the Safe Transport of Dangerous Goods by Air](#)
[IATA Dangerous Goods Regulations](#) (International Air Transport Association, 1999)
[The Canadian Environmental Protection Act](#) (Canada, 1999)
[CNSC Transport Packaging of Radioactive Materials Regulation](#) (Canada, 2000)
[British Columbia Environmental Management Act](#) (2003)
[British Columbia Waste Discharge Regulation](#) (2004)
[IAEA Regulations for the Safe Transport of Radioactive Material TS-R-1](#) (2005)
[British Columbia Hazardous Waste Regulation](#) (2009)
[Human Pathogens and Toxins Act](#) (2015)
[Human Pathogens and Toxins Regulations](#) (2015)
[Canadian Biosafety Standard](#), 2nd ed. (2015)
[Canadian Biosafety Handbook](#), 2nd ed. (2016)

2.0 Compliance

Department heads and directors are responsible for ensuring designated personnel responsible for safely handling dangerous goods as outlined in this document, comply with TDGR and are adequately trained.

3.0 Training

TDG training and demonstrated competency are mandatory for any individual shipping or receiving dangerous goods at TRU. Following training program completion, TGD certificates are valid for 3 years. After expiry, retraining is required. Untrained individuals may handle dangerous goods in the absence of certification, however, this is only permissible in the presence of a trained and certified individual.

Please contact the Biosafety Officer about TDG training at TRU.

4.0 Shipping and Receiving

At TRU, dangerous goods may only be shipped and/or received by TDG trained personnel or individuals under the supervision of TDG certified individuals.

4.1 Damaged Packages

Damaged or non-compliant packages are to be accepted by TRU receivers.

However, after accepting the package, the receiver(s) should note any damage or non-compliance on the accompanying shipping document and report the same to the shipper for reimbursement if applicable.

If the package is damaged to such an extent that the contents are compromised, the package and its contents will be disposed of as hazardous waste as per TRU's waste disposal policies.

If the damage results in a large spill, contact the TRU OSEM.

4.2 Material Classification

Certified TRU shippers/receivers are responsible for proper material classification under Canada's TDGR. If unsure of the designation, related shipping documentation, Safety Data Sheets (SDS), contacting the manufacturer, and OSEM consultation may aid in classifying the material in question. A guide to classifying infectious substances and toxin classifications can be found in this document in Appendix A.

Individuals shipping dangerous goods must keep a "proof of classification" for all dangerous goods offered for transport or imported into Canada for a 5-year period after shipping.

Proof of classification must include the date of classification, the technical name of the dangerous goods, and the classification of dangerous goods.

Proof of classification can include the following:

- A test report
- A lab report
- An SDS with a matching Chemical Abstracts Service (CAS) number or [PSDS](#) from the Public Health Agency of Canada (PHAC)

TDGR divide dangerous goods into 9 classes, based on the type of hazard they present. These divisions are outlined in Table 1 below:

Table 1: Classification of Dangerous Goods

Class	Division	Characteristics
1 Explosives (Sections 2.9 – 2.12)	1.1	A substance or article with a mass explosion hazard.
	1.2	A substance with a projection hazard but not a mass explosion hazard.
	1.3	A substance or article which has a fire hazard and either a minor blast hazard or a minor projection hazard, or both, but does not have a mass explosion hazard.
	1.4	A substance or article which presents no significant hazard beyond the package in the event of ignition or initiation during transport.
	1.5	A very insensitive substance with a mass explosion hazard.
	1.6	Extremely insensitive article with no mass explosion hazard.
2 Gases (Sections 2.13 – 2.17)	2.1	A flammable gas which is easily ignited and burns.
	2.2	A non-flammable, non-toxic, non-corrosive gas.
	2.3	A toxic gas.
3 Flammable Liquids (Sections 2.18 – 2.22)	None	A flammable liquid with a closed-cup flash point less than or equal to 60.0°C.
4 Flammable Solids (Sections 2.20 – 2.22)	4.1	A flammable solid which is readily combustible and may cause fire through friction or from heat retained from manufacturing.
	4.2	A spontaneously combustible substance that ignites when exposed to air.
	4.3	A water-reactive substance which emits flammable gas when it comes into contact with water.
5 Oxidizing Substances, Organic Peroxides (Sections 2.37 – 2.39)	5.1	An oxidizing substance which may yield oxygen and contribute to the combustion of other material.
	5.2	An organic peroxide which releases oxygen readily and may be liable to explosive decomposition, or sensitive to heat, shock, or friction.
6 Toxic and Infectious Substances (Sections 2.26 – 2.36)	6.1	A toxic substance that is liable to cause harm to human health.
	6.2	An infectious substance.
7 Radioactive Materials (Sections 2.37 – 2.39)	None	Radioactive materials as defined in the Packaging and Transport of Nuclear Substance Regulations.
8 Corrosive Substances (Sections 2.40 – 2.42)	None	Solids or liquids such as acids or alkali materials that cause destruction of the skin or corrode metals.
9 Miscellaneous Products, Substances, or Organisms	None	A regulated substance that cannot be assigned to any other class. It includes genetically modified organisms (GMOs), marine pollutants, and substances transported at elevated temperatures.

As well, some dangerous goods from each group are assigned packing classes. These classes are determined by physical and chemical testing described in Part 2 of the TDGR. Table 2 below briefly outlines the packing classes used by Transport Canada to classify materials.

Table 2: Packing Groups

Packing Group	Level of Hazard
I	Very hazardous substance
II	Hazardous substance
III	Moderately hazardous substance

4.3 Packaging Regulations

As per TDGR, shipping of some dangerous goods above certain specified quantities, is prohibited in the absence of a developed Emergency Response Assistance Plan (ERAP). Consultation with the TDG Handbook will help determine if shipments fall under or are in excess of the value published in column 7 of schedule 1. If an ERAP is required, consultation with TRU’s OSEM is required.

Means of transport determines the packaging that is required for shipment to be in compliance with TDGR. Packages shipped exclusively via terrestrial means must meet the packaging instructions as stated in the TDG Clear Language Regulation and Transport Canada’s Standard: [“Small containers for Transport of Dangerous Goods, Classes 3, 4, 5, 6.1, 8, and 9.”](#)

If transporting by air, the packaging must meet International Air Transport Association (IATA) requirements which can be purchased from IATA. OSEM can also be contacted to obtain the correct information.

If transporting via marine means, if solely domestic, the TDGR are adequate guidance for shipping and receiving dangerous goods. On the other hand, if the package it to be shipped internationally, the [International Maritime Dangerous Goods \(IMDG\)](#) code must also followed.

Importantly, the OSEM at TRU can always be contacted to aid in obtaining the required information, depending on the shipping circumstances and concerns.

4.4 Shipping Steps

Step 1: Determine the proper shipping name

The shipper must determine the proper shipping name of the materials according to TDGR, Schedule 1, Column 2. An example is provided in Figure 4.0 below:

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 Ship Index	Col.9 Passenger Carrying Road Vehicle or Passenger Carrying Railway Vehicle Index
UN2811	INFECTIOUS SUBSTANCE, AFFECTING HUMANS	6.2	Category A	16 38 84	0	E0	See SP84		0.05 kg or 0.05 L

Figure 4.0: Schedule 1 Infectious Substance, Affecting Humans Output

Step 2: Determine the class

Refer to TDGR Column 3 to identify the material classification and any subsidiary classification(s) of the material. An example is provided in Figure 4.1 below:

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 Ship Index	Col.9 Passenger Carrying Road Vehicle or Passenger Carrying Railway Vehicle Index
UN2814	INFECTIOUS SUBSTANCE, AFFECTING HUMANS	6.2	Category A	16 38 84	0	E0	See SP84		0.05 kg or 0.05 L

Figure 4.1: Schedule 1 Infectious Substance, Affecting Humans Output

Step 3: Select the UN Number

Refer to Column 1 in Schedule 1 in the TDGR for the required UN number. An example is provided in Figure 4.2 below:

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 Ship Index	Col.9 Passenger Carrying Road Vehicle or Passenger Carrying Railway Vehicle Index
UN2814	INFECTIOUS SUBSTANCE, AFFECTING HUMANS	6.2	Category A	16 38 84	0	E0	See SP84		0.05 kg or 0.05 L

Figure 4.2: Schedule 1 Infectious Substance, Affecting Humans Output

Step 4: Determine the mode(s) of transport to the final destination

The shipper must ensure that the shipment complies with various modal requirements which can “what” exactly one can ship in the proposed manner and can affect packaging, quantity per package, markings, and shipping documentation.

Step 5: Determine and select proper packaging

Packaging requirements will vary depending on the utilized mode of transportation and both the type and nature of the material to be transported.

Some exemptions may apply (See Part 1 and Schedule 2 of the TDG Regulations). As may some [incompatibilities](#).

Select a container safety standard from sections [5.10](#), [5.11](#), [5.12](#), or [5.14](#) the TDGR in conjunction with the [National Standard of Canada](#). If your material is infectious (Division 6.2, consult section [5.16](#) and sections describing Type [1A](#), [1B](#), and [1C](#) containers in the TDGR.

Step 6: Labelling the package

Once the correct packaging has been identified and selected, the shipper must first ensure that only relevant markings are present on the outside of the package. If markings exist that are unnecessary for shipment, these should be removed or obliterated. Once this is done, the following information must be clearly present and easy to read on the outside of the package:

Proper shipping name in upper case letters, Hazard class label(s), UN identification number, packing group, orientation label for liquids, the CORRECT standardized UN certification mark, and any additional required information, depending on the material.

None of the above information is to be obscured or placed in the incorrect orientation. They also must be able to withstand open weather exposure without a substantial reduction in effectiveness and be displayed on a background of contrasting colour. An example of a properly packaged and labelled dangerous good can be found in Figure 4.3 below.

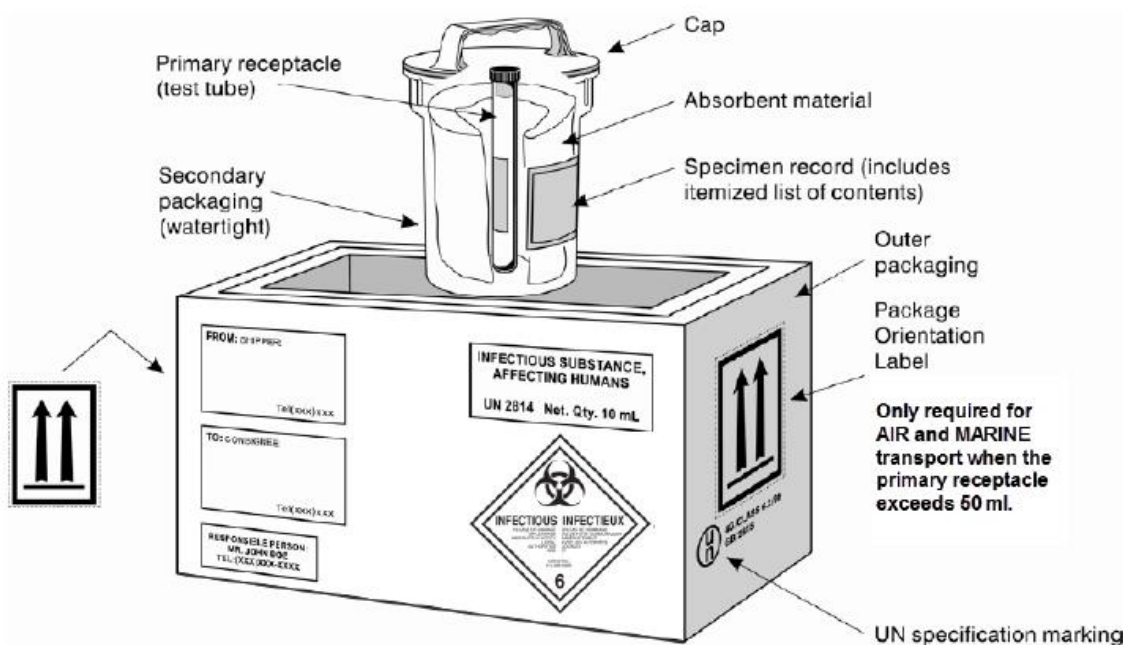


Figure 4.3: A properly packaged and labelled Small Means of Containment for a Category A Infectious Substance, affecting humans, UN2814 (Figure provided by IATA, Montreal, Canada).

Step 7: Documentation

Proper shipping documentation can only be signed by a trained employee, or an untrained employee working in the presence and under the supervision of a certificate holding individual. Depending on the nature of the goods being shipped, three documents may be necessary:

1. The Straight Bill of Lading Form which is required by Transport Canada for ground shipments.
2. The Shippers Declaration of Dangerous Goods Form which is required by IATA for air transport.
3. The Waste Manifest for shipments of hazardous waste which is required by both Transport Canada and the Province of British Columbia.

With respect to hazardous waste disposal at TRU, complete assistance to ensure compliance can be found here: <https://acm.tru.ca/Page2802.aspx?PageMode=Hybrid>.

5.0 Exemptions

5.1 Dry Ice

If used in a small means of containment as a refrigerant, TDGR do not apply to dry ice (UN1845). However, the words, “Dry ice as refrigerant” or “Neige carbonique comme réfrigérant,” must be included on the outside of the package. Also, the small means of containment must allow for the release of sublimating carbon dioxide, to prevent pressure build up.

5.2 Test Samples

This exemption applies to TDG ground transportation only and not to radioactive, infectious, and explosive materials. To qualify for this status, the gross package mass must be less than 10kg and must be goods used to classify, analyze, test, or demonstrate. The name of the consignor and the words “test samples” must also be on an accompanying shipping document. Additionally, the package itself must be designed, constructed, filled, closed, secured, and maintained to avoid any accidental release. Finally, the packaged must be externally marked with the words, “test samples”.

5.3 Limited Quantities

Except for radioactive, infectious, and explosive materials, some dangerous goods are partially exempt from TDG regulations. To qualify, the package must weigh less than or equal to 30kg and the package itself must be designed, constructed, filled, closed, secured, and maintained to avoid any accidental release. The respective masses or volumes for materials to qualify for exempt status can be found in column 6 of Schedule 1 of the TDG regulations. If air travel is a component of shipping, section 2.6.4 of IATA Regulations must be consulted.

5.4 Dangerous Goods in an Instrument or in Equipment (ground and domestic marine shipping only)

TDG documentation, safety marks, and means of containment do not apply to the handling or offering for transport dangerous goods that are contained in and are not intended to be discharged from an instrument or equipment that is not dangerous goods itself and that is designed to perform a function other than solely to contain the dangerous goods. However, the good must have a number in column 6a of Schedule 1 in the TDGR and the amount of material must not exceed that

quantity.

5.4 Dangerous Goods in Excepted Quantities by air (IATA compliant)

If shipping by air, guides regarding exempted quantities of certain goods can be found in section 2.6 in IATA's Shipping Regulations. However, the package itself must be marked with an Excepted Quantities Label in Figure 5.1 below. Extra care should be taken when assuming exception to IATA Regulations.

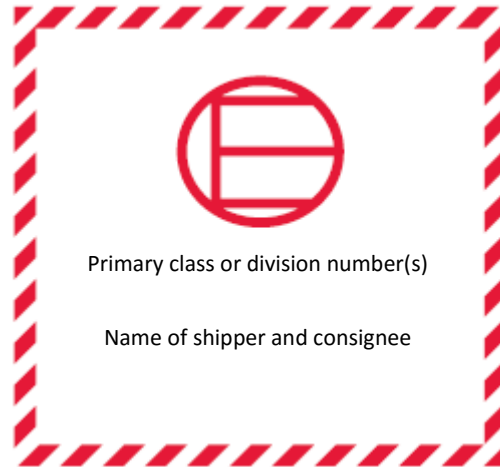


Figure 5.1: An IATA Excepted Quantity Package Mark

6.0 Packing and Labelling Requirements for Class 6 Dangerous Goods:

6.1 Packing and Labelling of Class 6 Dangerous Goods for Transport

- Packaging of toxins and infectious materials for transportation should be performed by or supervised by certified containment zone personnel in a containment zone of appropriate containment level;
- Final packaging (i.e. placement inside secondary shipping container, labelling) of sealed shipping containers of toxins or infectious materials may be acceptably performed outside of the containment zone – this is ONLY if the primary container is sealed and thoroughly surface decontaminated;
- In addition to receiving appropriate TDG training, personnel responsible for shipments involving security sensitive biological agents (SSBAs) require a valid Human Pathogens and Toxins Act Security Clearance issued by the PHAC;
- Packaging standards vary dependent on the biological material in specific categories with specific packaging requirements as outlined in section 5.6 in IATA Regulations and in [Section 5.16 in Class 6.2, Infectious Substances](#);

- Guides to help identify Category A, B, and biological/clinical waste can be found [Appendix 3](#) in Part 2 of TDG in SOR/2008-34;
- A list of Schedule 1 toxins in Canada can likewise be found in the [Human Pathogens and Toxins Act](#) (Subsections 3[1], 9[1] and [3] and [10]), however this is by no means an exhaustive list of toxins;
- Due to the large variety and different packing classes of toxic dangerous goods (class 6.1), packing instructions for these materials are not summarized in this document and can instead be found in section 5.6 in IATA Regulations;
- The three means of external containment (from most secure to least) for Class 6.2 Dangerous Goods (Infectious materials) set out by Transport Canada are Types [1A](#), [1B](#), and [1C](#), each with specific criteria to be met;
- In some cases, Type 1B and Type 1C packaging strategies may be appropriate, however Type 1A packaging can be used to package any infectious biological material for transport.

6.2 The following is a guide to Category A/Type 1A packaging:

- An inner packaging comprised of a primary receptacle and secondary packaging as well as an outer packaging;
- Either the secondary or the outer packaging shall be rigid;
- At least one outer packaging surface shall have a minimum dimension of 100 mm x 100 mm;
- For liquid infectious substances, both the primary receptacle and the secondary packaging will be leakproof;
- For solid infectious substances, both the primary receptacle and the secondary packaging will be siftproof;
- If multiple primary fragile primary receptacles are placed in the secondary packaging, each must be individually wrapped or otherwise separated to prevent contact between them;
- If the package is consigned to ambient or higher temperatures, primary packaging must be made of glass, metal, or plastics with a positive means of ensuring a leak-proof seal (e.g. a heat seal, a skirted stopper, or a metal crimp seal). Alternately, if screw caps are used, they shall be secured positive means themselves via tape, paraffin tape, or manufactured locking closure;
- Substances consigned in liquid nitrogen primary packaging must consist of plastic receptacles capable of withstanding very low temperature. The secondary packaging shall also be capable of withstanding very low temperatures, and in most cases will need to be fitted over the primary receptacle individually. Provisions for the consignment of liquid nitrogen shall also be fulfilled;
- Lyophilized substances may also be carried in primary receptacles that are flame-sealed glass ampoules or rubber-stoppered glass vials fitted with metal seals;
- Under normal conditions of transport, the primary packaging should be unable to break, be punctured, or leak their contents into the secondary packaging;
- The primary packaging must also withstand without leakage, an internal pressure differential of 95kPa in a range of -40°C to +55°C;
- Place the secondary container inside an outer package for protection from physical damage and water while in transit;
- If substances are to be shipped frozen or refrigerated, dry ice is to be placed outside of the secondary package which itself must have additional support to ensure no movement of the secondary package after the dry ice has dissipated;

- If the shipment is sent on dry ice by air, notification to that effect must appear on the outer package and accompanying documents. Containers shipped with dry ice must be designed to release carbon dioxide gas that could otherwise build up and cause the package to rupture;
- TDGR Type 1A packing instructions are identical to that of UN P620 instructions.

6.3 Specific Type Category A/1A Packing Instructions and Labelling:

- External marking shall be durable, legible, and placed in a location and of such a size as to be readily visible;
- For packagings with a gross mass of more than 30 kg, the marking (or a duplicate thereof) shall appear on the top or side of the packaging. For drums and Jerrycans with a removable head, the markings shall appear on the side;
- For packagings with a gross mass of 30 kg or less, the marking (or a duplicate thereof) shall appear on the top, side or bottom. For drums and Jerrycans with a removable head, the markings shall appear on the side or bottom;
- Letters, numerals and symbols comprising the markings shall be at least 12 mm high, except that the markings on packagings of 30 L maximum capacity or 30 kg gross mass or less shall be at least 6 mm high and the markings on packagings of 5 L maximum capacity or 5 kg gross mass or less shall be at least 3 mm high;
- The following outer packing markings are required and shall be displayed in the following sequence with each of the elements clearly separated from one another:
 - a) the UN packaging symbol;
 - b) the packaging code listed in UNECE [Table 6.1.2.7](#) and, when applicable, the letter “U” or “W” assigned to the packaging code in accordance with NSA 5.1.4;
 - c) the text: “CLASS 6.2”;
 - d) the last two digits of the year of manufacture of the package;
 - e) the three-letter country code “CAN”;
 - f) the name or symbol of the manufacturer; and
 - g) the Design Registration Number.

Example of UN marking:

Solid plastic box:



4H2/CLASS6.2/15 as in 5.1.2 a), b), c), d) and e)
 CAN/ABC 8-9999 as in 5.1.2 f) and g)

For a packaging with solid plastic box outer packaging, for infectious substances of Category A and manufactured in 2015. The design was registered in Canada, by the manufacturer identified as ABC under the registration number 8-9999.

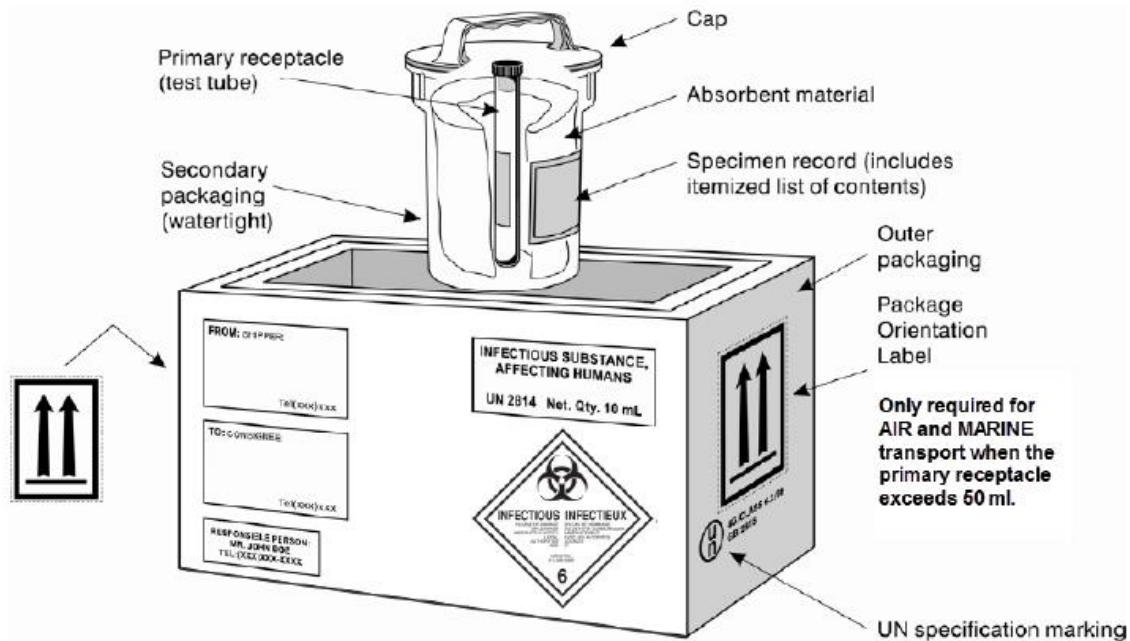
6.4 Additional labelling for Category A/Type 1A Packing:

- Sender’s name and address;
- Recipient’s name and address;
- Infectious substance label:
- Black: Symbol, number, text and line 5 mm inside the edge



- White: Background
- The symbol is three crescents superimposed on a circle
- The text is:
 INFECTIOUS IN CASE OF DAMAGE OR LEAKAGE IMMEDIATELY NOTIFY
 LOCAL AUTHORITIES AND
 INFECTIEUX EN CAS DE DOMMAGE OU DE FUITE COMMUNIQUER
 IMMÉDIATEMENT AVEC LES AUTORITÉS LOCALES ET
 CANUTEC
 1-888-CAN-UTEC (226-8832)
 or
 613-996-6666 (collect calls accepted)
 or
 *666 by cellular phone (in Canada Only) ;
- Proper shipping name, UN number (2814 if humans, 2900 if animals – if not one of these, the substance is Category B and the UN number is 3373 or 3291 for clinical waste), and net quantity of infectious substance;
- Name and telephone number of person responsible for shipment;
- Cargo Aircraft Only label when shipping over 50 ml or 50 g;
- Class 9 label, including UN 1845, and net weight if packaged with dry ice (IATA only);

Example Packing Category A/Type 1A Packing and Labelling (Figure provided by IATA, Montreal, Canada):



6.5 The following is a guide to Category B/Type 1B packaging:

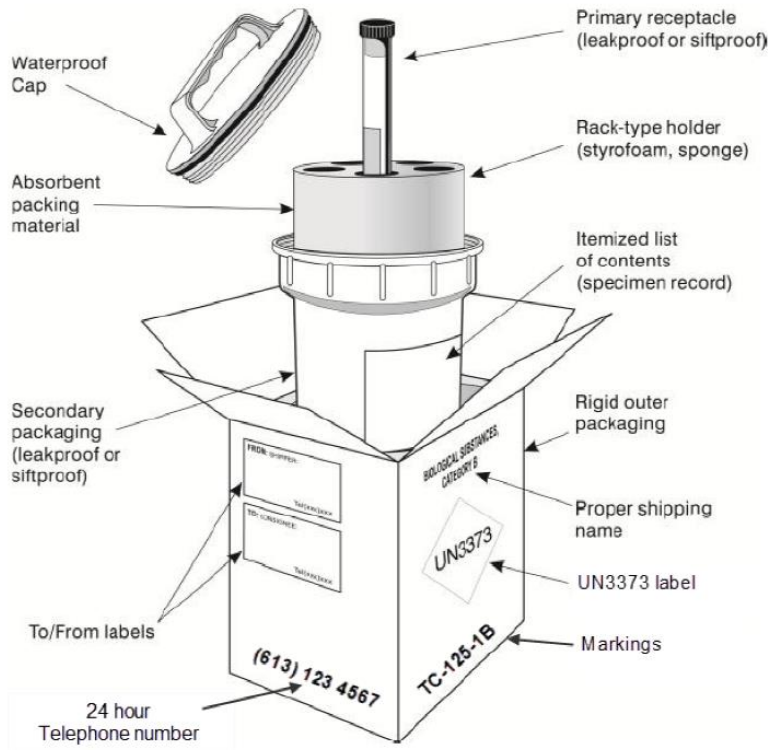
- An inner packaging comprised of a primary receptacle and secondary packaging as well as an outer packaging;

- Either the secondary or the outer packaging shall be rigid;
- For liquid infectious substances, both the primary receptacle and the secondary packaging will be leakproof;
- For solid infectious substances, both the primary receptacle and the secondary packaging will be siftproof;
- If multiple primary fragile primary receptacles are placed in the secondary packaging, each must be individually wrapped or otherwise separated to prevent contact between them;
- Substances consigned in liquid nitrogen primary packaging must consist of plastic receptacles capable of withstanding very low temperature. The secondary packaging shall also be capable of withstanding very low temperatures, and in most cases will need to be fitted over the primary receptacle individually. Provisions for the consignment of liquid nitrogen shall also be fulfilled;
- Under normal conditions of transport, the primary packaging should be unable to break, be punctured, or leak their contents into the secondary packaging;
- The primary packaging must also withstand without leakage, an internal pressure differential of 95kPa in a range of -40°C to +55°C;
- Place the secondary container inside an outer package for protection from physical damage and water while in transit;
- If substances are to be shipped frozen or refrigerated, dry ice is to be placed outside of the secondary package which itself must have additional support to ensure no movement of the secondary package after the dry ice has dissipated;
- If the shipment is sent on dry ice, notification to that effect must appear on the outer package and accompanying documents. Containers shipped with dry ice must be designed to release carbon dioxide gas that could otherwise build up and cause the package to rupture;
- Please note: TDGR Type 1B Packing is NOT equivalent to UN P650 packing;
- See Section 6.7 for the differences – if shipping by air P650 is necessary.

6.6 Required labelling for Category B/Type 1B Packaging:

- Sender's name and address, recipient's name and address;
- A label with the words "Biological Substance, Category B";
- UN 3373 label;
- Class 9 label, including UN 1845, and net weight if packaged with dry ice (IATA only);
- External marking shall be durable, legible, and placed in a location and of such a size as to be readily visible;
- The marking shall be displayed on the external surface of the outer packaging on a background of a contrasting colour;
- The marking shall be in the form of a square set at an angle of 45° (diamond-shaped) with each side having a length of at least 50 mm; the width of the line shall be at least 2 mm and the letters and numbers shall be at least 6 mm high;
- An external marking: TC-125-1B + name and address or symbol of packaging manufacturer.

Example Category B/Type 1B Packing and Labelling (Figure provided by IATA, Montreal, Canada):



6.7 Type Category B/1B Packing differs from UN P650 Packing in the following ways:

Requirement	Type 1B CGSB-43.125 + 5.16.1 of the TDG Regulations	Packing Instruction 650
Triple packaging	Yes	Yes
Primary receptacle (inner) quantity limit	None	1 L (liquid) None for solids
Outer package quantity limit	None	4 L (liquid) 4 kg (solids)
Outer packaging specifications	Must be strong	Must be rigid; Must have minimum of size of 100 mm x 100 mm
Specification marking	TC-125-1B	None
Safety marks	Diamond mark with UN3373 inside, Proper shipping name	Diamond mark with UN3373 inside, Proper shipping name
Design Tests	Drop test (1.2m), pressure capable receptacle to 95kPa (5.16.1)	Drop test (1.2m), pressure capable receptacle to 95kPa
Competent Authority Registration (i.e. TC Registration)	None (Yes if a symbol is used to identify the manufacturer)	None
Refrigerated or Frozen Specimen	No requirements	Specific requirements

http://publications.gc.ca/collections/collection_2016/tc/T44-4-2-2015-3-eng.pdf

6.8 The following is a guide to Category C/Type 1C packaging:

Type 1C packaging is suitable for the transportation of most biomedical waste, however it must be decontaminated and declared as such by an informed authority.

6.9 A Category C/Type 1C container may consist of:

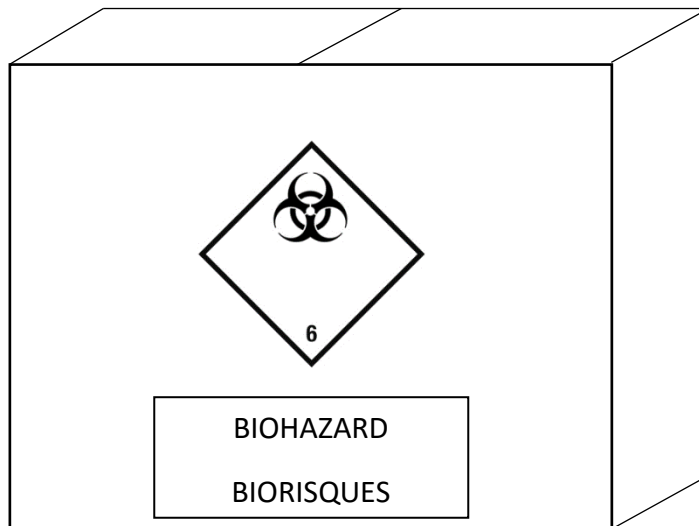
- UN11G intermediate bulk container tested to a Packing Group I or II performance level;
- UN1G fibre drum with a leak-tight liner tested to a Packing Group I or II performance level;
- A plastic film bag in a leak-tight, rigid, plastic outer packaging; or
- A plastic film bag in a fibreboard box;
- A sharps container;
- Plastic films/bags must pass the Elmendorf tear strength and the Dart impact strength tests as specified in the CAN/CGSB-43.125 standard.

***Consult the OSEM or the BSO before packaging any materials for shipping to ensure adherence to relevant Transport Canada Regulations.**

6.10 Required labelling for Category C/Type 1C Packaging:

- The biohazard symbol and the word "BIOHAZARD"

Example Category C/Type C Labelling:



Prior to shipping ANY infectious or biological materials, consultation with either the OSEM and/or the BSO is MANDATORY at TRU to ensure compliance with Transport Canada Rules and Regulations.

For extensive lists of Category A and B biological materials, please see [Appendix 3](#) in Part 2 of the TDG Regulations. Those lists are by no means exhaustive or complete and are provided solely as a means of guidance. Expert opinions and/or professional judgements may be necessary to properly categorize certain infectious materials.