



## Training for how to ship ‘excepted quantities’ of regulated chemicals

### Addendum 1 to the Shipping Biological Materials – Quick Reference Guide

#### **Purpose**

International and federal shipping laws require appropriate training for anyone who transports, or packages for transport, regulated ‘hazardous materials’. Training ensures that packages are packed, marked, and labeled so that contents are unlikely to harm people or the environment throughout the shipment.

If you ship regulated chemicals, you normally need to 1) attend multiple-day, vendor-taught training or 2) request EH&S assistance at least two weeks prior to your shipment. If you follow this guide, in conjunction with the Office of the Vice Chancellor for Research’s ‘Exporting, Importing, and Shipping Biological Research Materials - Regulatory Review Checklist and Record’, you can expediently, but compliantly, ship small quantities (< 30 ml per vial) of some regulated chemicals (but not dry ice).

#### **Biological shipments, that may include chemicals, described in this Addendum**

Category	Shipping requirements	Page
Unregulated	Do not require special training, packaging, marking or labeling	1
‘Biological products’	Many chemicals included in commercial non-infectious biological products do not require special training, packaging, marking or labeling	1
‘Infectious substances’	Preservatives, stabilizers, and neutralizers can generally be included with infectious agents and ‘exempt patient specimens’	2
‘Excepted quantities’	For many other chemicals, quantities < 30 ml have fewer requirements.	3

#### **Chemicals that do not require special training, packaging, marking, or labeling for shipping**

The following chemicals are not regulated as ‘hazardous materials’ and can be shipped without special training, packaging, marking, or labeling. Imports and exports may still require permits and/or licenses.

<b>Common names</b>	
Boric acid, Glycerol, Non-toxic salt solutions, Sodium borate, Tris base, Triton X-100, Urea, Vitamins	
Common name	Additional description
Environmental samples	Those that do not pose significant risk of infection and do not contain regulated hazardous chemicals, i.e. food and water samples
Ethanol solutions ≤ 24% v/v	<u>International</u> - not regulated in any quantity, unless solution contains another regulated material (if ship with ‘infectious substances’, see page 2) <u>Domestic</u> - same as above if also ≥ 50% water [DOT section 173.150(e)]
Formaldehyde solutions < 10% v/v, unbuffered	<u>International</u> – same as for ethanol solutions ≤ 24% v/v <u>Domestic</u> - ground transport only (regulated as “Aviation regulated liquid, n.o.s.” by air)
Isoflurane liquid	Ground transport only (regulated as “Aviation regulated liquid, n.o.s.” by air)
Sodium azide solutions ≤ 1.5% v/v	Ground transport only (regulated as “Environmentally hazardous substance, liquid, n.o.s.” by air)

#### **‘Biological Products’ shipments**

‘Biological products’ is the shipping term for non-infectious products derived from biological systems (e.g. antitoxins, blood components/derivatives). If they are 1) commercially produced in the United States, and 2) used for the prevention, treatment or cure of humans or animals, they may sometimes be sent without special training, packaging, marking, or labeling even if they contain normally-regulated chemicals. Additional permits or licenses may still be required (see the main Quick Reference Guide).

#### *How to ship:*

1. International shipments – no special requirements, unless indicated by the product manufacturer.
2. Domestic shipments – review the chemical components, and follow this Addendum.



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**'Infectious Substance' shipments** (infectious agents, 'biological products', 'exempt patient specimens')  
'Infectious substances' is a shipping category that includes all biological materials, with the exception of genetically modified micro-organisms/organisms. The laws allow selected preservatives, stabilizers, and neutralizers to be included with shipments of 'infectious substances' without additional marking or labeling. Additional permits or licenses may still be required (see the main Quick Reference Guide).

#### How to ship:

1. All shipments - If the preservative, stabilizer or neutralizer is in hazard class 3, 8, or 9 (see below), then package, mark and label for the 'infectious substance' only.
  - a. Infectious agents or dry ice require specialized shipping training every two years. Contact EH&S to schedule an appointment (see <http://ehs.berkeley.edu/hazmat/hazshipping.html>). Note: the self-tutorial CD takes about 2 hours to complete.
  - b. 'Biological products' – If the preservative, stabilizer or neutralizer is in hazard class 3, 8, or 9 (see below), no additional shipping requirements apply.
  - c. 'Exempt patient specimens' – If the preservative, stabilizer or neutralizer is in hazard class 3, 8, or 9 (see below), ship as an 'exempt patient specimen' (see page 3 of the main Quick Reference Guide). No additional shipping requirements apply. DOT 173.24a also allows anticoagulants.
2. International shipments (regulated by the International Air Transport Association, IATA)

From the IATA Dangerous Goods Regulations: "(o)ther dangerous goods must not be packed in the same packaging as...Infectious Substances unless they are necessary for maintaining the viability, stabilizing or preventing degradation or neutralizing the hazards of the infectious substances. A quantity of 30 ml or less of dangerous goods included in Classes 3, 8, or 9 may be packed in each primary receptacle containing infectious substances provided (the chemical is one that can be shipped in 'excepted quantities')." Note: 'Dangerous goods' is the IATA term for materials that are regulated when put on an airplane.

Class	Description	Definition	Examples
3	Flammable liquids	Flash point (closed cup) $\leq 60^{\circ}\text{C}$ ; Packing Group (PG) II and III have initial boiling point $> 35^{\circ}\text{C}$ – see Material Safety Data Sheet (MSDS) section 5	Ethanol, formaldehyde solutions that are flammable, isopropyl alcohol, methanol, pyridine
8	Corrosives	Packing Group (PG) II and III, i.e. only those that cause full thickness destruction of intact skin tissue in $> 3$ minutes but $\leq 4$ hours in $\leq 14$ days, or are corrosive to stainless steel/ aluminum at a rate of $> 6.25$ mm a year at $55^{\circ}\text{C}$	Formaldehyde solutions $> 25\%$ v/v, but non- flammable
9	Miscellaneous hazardous materials	Materials, which during air transport, present a danger not covered by other classes; Packing Groups do not apply	Sodium azide solutions $\leq 1.5\%$ v/v

3. Domestic shipments (regulated by the United States Department of Transportation, DOT)

Any Packing Group (PG) II or III material, except dry ice, can be shipped within the inner packaging (i.e. tube or plate). A maximum of 30 ml (or 30g for a solid) is allowed per inner packaging, with not more than 4 L (or 4kg for a solid) total in the entire package. For examples of Packing Group II or III materials, see table, on the next page, of chemicals that can be shipped as 'excepted quantities'.



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#### Chemicals that can be shipped as ‘excepted quantities’

The table below lists the chemicals that can be shipped under the laws for ‘excepted quantities’, i.e. under fewer requirements (DOT - 49 Code of Federal Regulations Part 173.4, and IATA - 2007 Dangerous Goods Regulations, Section 2.7). If your material is not listed, or is in two classes, contact EH&S.

Class/ Division	Description	Criteria for excepted quantities*	Examples
3	Flammable liquids	IATA – all Packing Groups DOT – Packing Group II or III only (see page 6 for examples)	Ethanol, methanol, isopropyl alcohol, formaldehyde solutions that are flammable, pyridine
5.1	Oxidizing substances	Packing Group II or III; if MSDS says material is an oxidizer, but does not give a Packing Group in ‘Section 14-Transportation’, contact EH&S for assistance	Atypical for biological shipments (inorganic: bromates, chlorites, hypochlorites, nitrates, nitrites, perchlorates, permanganates, peroxides, and persulphates)
5.2	Organic peroxide	Only when contained in a chemical kit** or first aid kit	Only when contained in a chemical kit** or first aid kit
6.1	Toxic substances (IATA), Poisonous materials (DOT)	Packing Group II or III; if MSDS says material is a toxic or poisonous material, but does not give a Packing Group in ‘Section 14-Transportation’, contact EH&S for assistance	Some alkaloids, arsenic compounds, inorganic cyanides, lead compounds, mercury compounds, pesticides, sodium azide > 1.5% v/v, toxins
8	Corrosive material	Packing Group II or III, i.e. only those that cause full thickness destruction of intact skin tissue in > 3 minutes but ≤ 4 hours in ≤ 14 days, or are corrosive to stainless steel/aluminum at a rate of > 6.25 mm a year at 55 °C	Bleach (hypochlorite solution), some formaldehyde solutions (> 25% formaldehyde, but non-flammable)  Gallium and mercury are not allowed.
9	Miscellaneous hazardous material	Restricted to: ‘aviation regulated liquids’ (UN3334), toxics for the aquatic environment only, chemical kits**, first aid kits	Isoflurane liquid, sodium azide solutions ≤ 1.5% v/v, formaldehyde solutions < 25% v/v

\* Some materials are not allowed on passenger aircraft; do not deviate from this Addendum.

\*\* Per IATA, chemical kits are defined as “boxes, cases, etc., containing small amounts of one or more compatible items of dangerous goods used for analytical or other purposes”.

#### Training requirements

Unless otherwise noted (see the ‘infectious substances’ section on page 2 of this Addendum), all hazardous chemicals are regulated for shipping. Therefore, shipping training is required, even for small amounts.

1. Read this entire Addendum so that all required training components are reviewed, and
2. Take the online quiz “Shipping ‘excepted quantities’ of regulated chemicals” at <https://etrain.berkeley.edu>. Keep a copy of the training certificate in your training records, and re-take the training as needed (see certificate for date).

Note: Additional training or EH&S assistance is required before shipping other regulated ‘hazardous materials’, or in quantities greater than those allowed for ‘excepted quantities’.



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#### Training - overview of international and domestic transport regulations

International and federal shipping laws require appropriate training for anyone who transports, or packages for transport, regulated ‘hazardous materials’. Training ensures that packages are packed, marked, and labeled so that contents are unlikely to harm people or the environment during the entire shipping process. Note: all shipping documents are to be in English; if required, an additional language can supplement only.

#### Regulatory agencies

The United States Department of Transportation (DOT) ensures the safe and secure transportation (by all methods) of ‘hazardous materials’ in the United States. For air transport, DOT and IATA regulations are generally the same. For transport by motor vehicle on public roadways (i.e. ground transport), DOT may have different requirements. Regulations are at <http://hazmat.dot.gov/regs/rules.htm>. In California, DOT standards are enforced by the California Highway Patrol and the California Vehicle Code.

The International Air Transport Association (IATA) is an international organization of commercial airlines. Every year, IATA publishes a new edition of the Dangerous Goods Regulations (DGR), based on regulations from the International Civil Aviation Organization. The DGR provides procedures for the safe transportation of materials that may be hazardous on an airplane, either to the airplane or to air personnel/passengers. The DGR can be purchased at [www.iata.org/dgr](http://www.iata.org/dgr), and EH&S also retains copies for internal use by EH&S staff. These regulations apply whenever you ship internationally.

#### ‘Hazard classes/divisions’ and ‘packing groups’

Regulated ‘hazardous materials’ are divided into hazard classes and divisions, by both IATA and DOT:

Class	Division	Description	Class	Division	Description
1		Explosive	5	5.1	Oxidizer
2	2.1	Flammable Gas	5	5.2	Organic Peroxide
2	2.2	Non-Flammable Gas	6	6.1	Toxic substances (IATA)
2	2.3	Poison Gas			Poisonous materials (DOT)
3		Flammable Liquid	6	6.2	Infectious substances
4	4.1	Flammable Solid	7		Radioactive
4	4.2	Spontaneously Combustible	8		Corrosive
4	4.3	Dangerous When Wet	9		Miscellaneous hazards

Hazard classes/divisions may further be broken down into ‘packing groups’. Packing groups (PG) are assigned based on the relative degree of danger presented by the material being shipped. Roman numerals I, II and III are used to represent “high danger”, “medium danger”, and “low danger” respectively.

#### IATA ‘packing instructions’, including ‘state variations’ and ‘operator variations’ (for international shipments)

For air transport, depending on the hazard class and packing group, there will be a corresponding ‘packing instruction XXX’, and maximum quantities that can be accepted per package for 1) passenger and/or 2) cargo aircraft. In addition, different countries and airlines may have their own restrictions for travel, termed ‘state variations’ and ‘operator variations’ respectively.

For air transport, the international community has also assigned each regulated ‘hazardous material’ a ‘UN number’ and a ‘proper shipping name’. The UN number is a four digit unique identifier assigned to the material by the United Nations, and is therefore the same around the world, including in the United States. A ‘proper shipping name’ is the internationally-decided name to be used to describe a particular substance in all shipping documents and notifications and, where appropriate, on packages.



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If you needed to determine IATA transport requirements for a material, you would find it in Section 4.2, the list of ‘dangerous goods’, in the IATA Dangerous Goods Regulations (DGR). The list includes the UN number, proper shipping name, hazard class, hazard label, packing group, maximum quantities for passenger or cargo aircraft, packing instruction, special provisions, and emergency response drill codes to be used for each material that may be hazardous on an airplane, either to the airplane or to air personnel/passengers. General transport information for the hazard classes/divisions is in IATA’s DGR Section 3.

Example: A hepatitis B virus culture would be identified by the UN number “UN 2900”, the ‘proper shipping name’ “Infectious substance, affecting humans”, and would require packaging, marking, and labeling in accordance with IATA Packing Instruction 602. At the top of the Packing Instruction (detailed in DGR Section 5) are the state and operator variations.

The maximum amount in a package allowed on a passenger aircraft is 50 ml, and on a cargo aircraft is 4 L; the latter would require a “Cargo Aircraft Only” label on the package in addition to the required “Infectious substance” label. Two ‘special provisions’ apply (A81 for body parts, and A140 for how to put the ‘technical name’ on the ‘Shipper’s Declaration’).

#### DOT regulations (for domestic shipments)

For domestic air or ground shipments, DOT publishes their regulations in the Code of Federal Regulations, online at <http://hazmat.dot.gov/regs/rules.htm>. DOT’s general instructions and requirements for shipping are in sections 171, 172, 173.1-173.13, and for non-bulk research packages, 178.600-178.609. Section 173.134 gives the specific instructions for shipping ‘infectious substances’ and other biological materials.

#### Penalties of noncompliance

Beside the risk of having your package rejected, held up in customs, or damaged, DOT (section 107.329) may fine your department up to \$50,000 for each violation of their regulations, with a maximum of \$100,000 if the violation results in death, serious illness or severe injury to any person, or substantial destruction of property. A minimum \$450 fine applies to training violations.

Other federal and international agencies may levy fines if the proper permits and licenses are not obtained. Refer to the main portion of this Quick Reference Guide for a quick overview of government requirements and internal policy for transporting biological materials, either to or from campus.

#### **Training – how to determine if a material is regulated**

For every shipment, the following questions must be answered for each component, media, and refrigerant.

1. Is the material or component regulated for shipping?
2. What packaging, marking, labeling, and transport restrictions correspond to the amount and/or concentration of that material in the shipment?

To answer those questions, you must review the following for each individual component.

1. Material Safety Data Sheet (MSDS), <http://ucmsds.chemwatchna.com> (hint: ‘Section 14 – Transportation’ includes the manufacturer’s interpretation on what shipping regulations apply),
2. IATA’s Dangerous Goods Regulations (DGR) for international shipments (not available electronically, but ordering information is at [www.iata.org/dgr](http://www.iata.org/dgr); EH&S also has copies for internal use), and/or
3. DOT’s Hazardous Materials Regulations for domestic air or ground shipments, regulations available online at <http://hazmat.dot.gov/regs/rules.htm>.

#### **Training – shipping safety**

Shipping laws require that you know the hazards of the materials you are sending, and how to handle them, including in emergencies. Ensure that you have read and signed your Chemical Hygiene Plan, and that you



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have read the applicable MSDS for any regulated chemical(s), within the last year. Safety training for infectious agents and ‘exempt human specimens’ is accomplished by the EH&S course “Biosafety for Human, Animal, and Plant Pathogens”, required for all authorized users on Biological Use Authorizations.

#### **Training – shipping security**

In order to keep regulated ‘hazardous materials’ away from persons who may use them to harm others, shipping laws require that ‘hazardous material’ packages are secure. To meet the requirement:

1. If using a shipping company, only schedule direct pickups from the laboratory, or from an attended storeroom. After pickup, security requirements are met by the shipping company’s security plan.
2. If you use a vehicle to transport a regulated ‘hazardous material’ yourself, keep the package secure within the vehicle. If you leave the vehicle, lock the vehicle and ensure the package is not visible.
3. If you suspect a regulated ‘hazardous material’ has been lost or stolen, contact EH&S at 642-3073.

#### **How to ship – packaging and shipping ‘excepted quantities’ of regulated chemicals**

##### *General*

1. The United States Postal Service has its own regulations, and you may not be able to use the mail. See the Domestic Mail Manual at <http://pe.usps.gov/text/dmm300/601.htm#wp1064962> first.
2. The package must weigh less than 29 kg (64 pounds), per DOT.
3. Triple packaging is used – see [www.iata.org/nr/rdonlyres/2f939c1e-b406-4ece-adb9-922f867803c5/0/guidance\\_doc62dgr\\_48.pdf](http://www.iata.org/nr/rdonlyres/2f939c1e-b406-4ece-adb9-922f867803c5/0/guidance_doc62dgr_48.pdf) for diagrams of triple packaging.
4. The package cannot be opened or otherwise altered until it arrives at its destination.
5. You cannot transport, or offer for transport, liquids  $\geq 100^{\circ}\text{C}$  ( $212^{\circ}\text{F}$ ), or solids  $\geq 240^{\circ}\text{C}$  ( $464^{\circ}\text{F}$ ).
6. Packaging reuse – plastic bags and paper pouches cannot be reused. For others, contact EH&S first.

##### *Air transport (international regulated by IATA, domestic regulated by DOT)*

1. Use a shipping company; you cannot hand-carry these, check them in your baggage, or use airmail.
2. Check with your shipping company for any additional requirements; some follow IATA for domestic.
3. Only certain amounts are allowed as ‘excepted quantities’. If your chemical is not listed, or you want to ship greater quantities, contact EH&S.

Chemical	Pack- ing Group	Maximum quantity per inner packaging	Maximum quantity per package	“Dangerous Goods in Excepted Quantities” label	
				Class	UN number
Ethanol solutions $\leq 24\%$ v/v	May not be regulated in any quantity – see page 1 of this Addendum				
Ethanol solutions $> 24\%$ (and flash point $< 23^{\circ}\text{C}$ )	II	30 ml (30g for solids)	500 ml (500g for solids)	3	1170
Ethanol solutions $> 24\%$ (and closed-cup flash point $\geq 23^{\circ}\text{C}$ but $\leq 60^{\circ}\text{C}$ )	III	30 ml (30g for solids)	1 liter (1 kg for solids)	3	1170
Formaldehyde solutions $< 10\%$ v/v	May not be regulated in any quantity – see page 1 of this Addendum				
Formaldehyde solutions $\geq 10\%$ but $< 25\%$ v/v	none	30 ml (30g for solids)	none	9	3334
Isopropyl alcohol	II	30 ml (30g for solids)	500 ml (500g for solids)	3	1219



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4. Per IATA Dangerous Goods Regulations Section 2.7.4, the shipper must ensure that a package containing dangerous goods in 'excepted quantities' will withstand normal conditions of air transport (listed in Section 5.04) and will not require any special handling, stowage or storage conditions which might necessitate shading from direct sunlight, ventilation, storage away from source of heat, etc.
  - a. Section 5.0.4.1 Temperature – The extremes of temperature which may be encountered in international transportation are in the order of -40°C and 55°C (-40°F and 130°F).
    - Since inner packagings may be filled at low temperatures and then exposed in transit in tropical areas, the increase in temperature may lead to liquid discharge or bursting, unless 1) you leave enough room for expansion in the inner packaging (DOT 173.24a), and 2) the inner or intermediate packaging can withstand a pressure differential of 95 kPa [DOT 173.27(c)(2)].
    - 95 kPa pouches are available (e.g. Fisher 22-130-021 and 22-130-037, or VWR 82031-426).
  - b. Section 5.0.4.2 Pressure - Due to altitude, pressure reductions will be encountered during flight which may, in extreme conditions, be of the order of 68 kPa. Since inner packagings will generally be filled at normal atmospheric pressure of approximately 100 kPa, these pressure reductions will tend to cause packages that don't meet required tests to discharge liquid contents or burst.
  - c. Section 5.0.4.3 Vibrations - Vibrations in commercial aircraft to which packagings may be exposed range from 5 mm amplitude at 7 Hz (corresponding to 1 g acceleration) to 0.05 mm amplitude at 200 Hz (corresponding to 8 g acceleration). DOT test methods are in section 178.608.

#### *Ground transport (regulated by DOT)*

1. Follow this Addendum and all DOT regulations, where specified.
2. Keep in mind that if you are a university employee and transport materials by car, you need to use a University vehicle. You or your department may be liable if you use a non-University vehicle and, during transport, an accident occurs involving the material.

#### *Inner packaging (primary receptacle)*

1. The inner packaging is the vial, tube, jar, etc. that contains what you're shipping (except refrigerant).
2. The maximum quantity of material per inner packaging is limited to:
  - a. 30ml (liquids) or 30g (solids), or
  - b. 1 ml (liquids) or 1g (solids) in Division 6.1.
3. Each inner packaging is:
  - a. Not liquid-full at 55°C (130°F), and
  - b. Constructed of plastic having a minimum thickness of  $\geq 0.2$  mm (0.008 inch), or is earthenware, glass, or metal. Plastic centrifuge tubes meet this requirement.
4. For air transport, inner packagings and lids must be compatible with and resistant to the contents. Lids/caps must be leak-proof under conditions of travel (temperature, pressure and vibration), e.g. leak-tight, screw-top lids. If stoppers, flip-cap lids, or other friction-type closures are used, they must be secured against loosening with wire, adhesive tape, or other positive means (e.g. taut parafilm).

#### *Intermediate packaging (secondary receptacle)*

1. Each inner packaging must be securely packed in an intermediate packaging with cushioning material.
2. The intermediate packaging must completely contain the contents in case of breakage or leakage, regardless of package orientation.
3. For liquids, the intermediate packaging must contain sufficient absorbent material to absorb the entire contents of the inner packaging. In such cases, the absorbent material may be the cushioning material.
4. The contents of the inner packagings must not react dangerously with cushioning or absorbent materials or adversely affect their properties.
5. The inside (inner and intermediate) packaging is securely packed in a strong outer packaging.
6. The intermediate packaging is commonly the one that meets the pressure requirements for air transport.



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#### *Outer packaging*

1. The maximum amount of material that can be included in the package is:
  - a. Packing Group II – 500 ml (liquids) or 500g (solids), or
  - b. Packing Group III – 1 liter (liquids) or 1 kg (solids), or
  - c. Exception for Division 5.2 hazards – 250ml (liquids) or 500g (solids).
2. Minimum size of the package - if a box shape, two of the three outside dimensions of the package must be at least 100 mm (4 inches) each to accommodate required label(s). If a cylinder shape, the package must have a minimum height of 100 mm and a diameter of at least 100 mm.
3. The package cannot contain other materials that require a 'Shipper's Declaration for Dangerous Goods' form, except when allowed for infectious agents (met if you do not deviate from this Addendum).
4. The completed package, as demonstrated by the manufacturer, is capable of sustaining:
  - a. Each of the following free drops made from a height of 1.8 m (5.9 feet) directly onto a solid unyielding surface without breakage or leakage from any inner packaging and without a substantial reduction in the effectiveness of the package (DOT 173.4(a)(6)(1), IATA 2.7.9.2.1)
    - For boxes, one drop flat on bottom, flat on top, flat on the long side, flat on the short side, and on a corner at the junction of three intersecting edges, or
    - For a cylindrical packaging, one drop diagonally on a circumferential seam or edge; and one drop on the weakest part not tested by the first drop, e.g. the closure.
  - b. A stacking test with a force applied to the top surface for a duration of 24 hours equivalent to the total weight of identical packages if stacked to a height of 3 meters (IATA 2.7.9.2.2).
  - c. Hint: the bottom of the box may have the manufacturer's certifications that the above are met.
5. Cardboard boxes (excerpted from IATA DGR Section 6.2.12) – must be strong, good quality corrugated cardboard without cracks, surface breaks or undue bending. Use water-resistant tape to close.
6. Do not reuse boxes if torn, cut, stained, have broken insulation, or missing components/instructions.
7. Do not violate DOT 173.21 (forbidden materials/packages, met if don't deviate from this Addendum).
8. Do not pack more than one regulated material [different UN number, packing group, or physical state (solid or liquid)] or outer package together. If you need to, contact EH&S for assistance.

#### *Marking (i.e. durable and legible writing, printing, or information affixed to the package)*

1. Ensure the to/from name/address information is completed.
2. For domestic shipments only, the shipper certifies conformance with DOT regulations by marking the outside of the package with the statement "This package conforms to 49 CFR 173.4."

#### *Labeling (international shipments, or if requested by your commercial shipping company)*

1. A label must be affixed to the outer package for 'excepted quantities' of regulated materials.
2. The label must be 100 × 100 mm (4 × 4 inches), and include specific information (see page 6). "Dangerous Goods in Excepted Quantities" labels are available from Fisher (NC9281104), VWR (101376-266), Labelmaster (L350 series), and other shipping supply vendors.
3. The signature may be hand-written, or be a stamped/printed facsimile, but not typewritten.

#### *Air waybills*

1. The 'Shipper's Declaration for Dangerous Goods' is not required.
2. The "Nature and Quantity of Goods" box of the air waybill must be completed with the words "Dangerous Goods in Excepted Quantities".

#### **Records and Quiz**

1. Keep all records related to the shipment for at least 2 years from the date of shipment (5 for exports).
2. Make sure you take the quiz. The shipping laws require that compliant training includes a test.