

Appendix 3 to the Code of Practice for Transport of Potentially Dangerous Goods

### **Guide to the transport of Infectious Substances and Excepted Quantities by Courier**

#### Introduction

In order to send infectious substances and Excepted Quantities by courier you must have attended a one day IATA Infectious Substances course within the last two years, have in place an approved checklist (Appendix 4) and to have been approved to ship those substances by the courier, this is a requirement set out by the courier. (When shipping good from the University, even within the UK it is likely they will go by air so this guide covers the requirements for shipping by air).

This guidance covers the shipping of the followings categories by courier;

- Infectious Substances Category B UN 3373
- Dry Ice UN Class 9
- Genetically Modified Microorganisms
   UN3245
- Excepted Quantities
- De Minimus Quantities

Shipping of Category A infectious substances and quantities of chemicals that don't fall under excepted quantities are not covered by this guidance. They require the authorising person to have undertaken the full three day IATA course or to use a specialist carrier who provided a packing service.

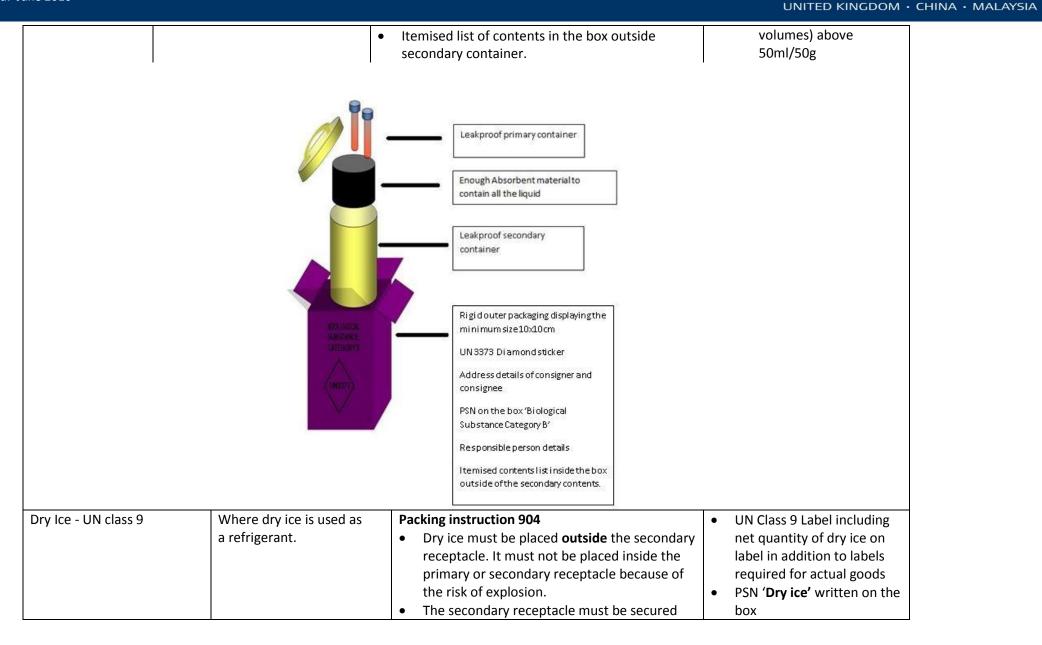
#### **Definitions and Classification**

See the UoN Code of Practice for the Transport of Potentially Dangerous Goods for information on classifying dangerous goods.



# **Packing and Labelling Requirements**

Category	Info	Packing Requirements	Labelling Requirements
Not Subject to regulations	HG1 Cell Lines, HG1 Wild Type Microorganism, Naked nucleic acid, plasmids, or liposome gene delivery systems, inactivated samples, environmental samples (water and soil),Dried blood spot samples, wild type plants and seeds.	<ul> <li>Sufficient to withstand transport</li> <li>Must pass a drop test from 1.2m and contents not leak from the container</li> <li>Inner container must be leak proof</li> </ul>	Label box and courier paperwork with proper shipping name (PSN) 'Not Subject to Regulations'
Biological Substance Category B - UN 3373	Category B infectious substances are any that do not meet the criteria of category A and include any human or animal material including but not limited to excreta, blood and its components, tissue and tissue fluids transported for purposes such as research, diagnosis, investigational activities, disease treatment or prevention.	<ul> <li>Packing instruction 650</li> <li>Packaged to survive transport</li> <li>Primary leak-proof container (e.g. universal)</li> <li>Secondary leak-proof container (e.g. zip lock bag or other container/pot with able to withstand 95KPA of pressure.</li> <li>Sufficient absorbent material to absorb all liquid</li> <li>Good quality rigid box minimum size 10cmx10cm</li> <li>The package must pass a drop test from 1.2m and contents not leak from the container.</li> <li>Contents must not rattle when box is shaken.</li> <li>NB 30ml preservative e.g. flammable/corrosive per inner package allowed without labelling or declaration on package Note Max 4 litre per outer and 1 litre per inner excluding dry ice, for quantities over 50ml/50g speak to BST</li> </ul>	<ul> <li>UN 3373 diamond label on the box</li> <li>Proper Shipping Name (PSN) 'Biological Substance Category B' Address of Consignor and Consignee, Name and Telephone number of responsible person all to be written on the box.</li> <li>PSN on courier paperwork</li> <li>Net Quantity of goods.</li> <li>Directional Labels required (for larger</li> </ul>





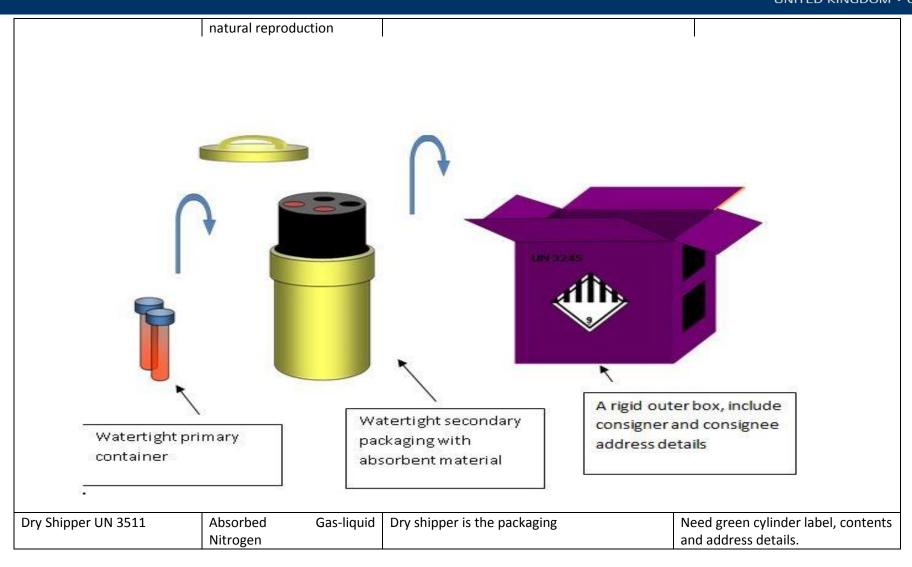
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Genetically Modified	GMMs that do not meet	<ul> <li>within the outer packaging to prevent damage after the ice has dissipated.</li> <li>Packaging must permit release of gas to prevent pressure build up. Styrofoam boxes must not be taped shut. The box must safely vent without rupturing.</li> <li>If the item is UN 3373 then the Styrofoam box must be inside the rigid cardboard box.</li> <li>Packing instruction 959</li> </ul>	<ul> <li>PSN on courier paperwork</li> <li>Consignee and Consignor written on the box</li> <li>UN 3245 diamond label</li> </ul>
Organism - UN3245 Genetically Modified organism	the definition of an infectious substance, but are capable of altering animals, plants or microbiological substances in a way not normally the result of natural reproduction are classified in Class 9 - Miscellaneous Dangerous Goods assigned to UN 3245 GENETICALLY MODIFIED MICRO-ORGANISMS. These are GMMs that can be handled at containment level 1 but which are vectors and can transfer genetic material to other organisms. Note this is in relation only to microorganisms and does not cover, for example, naked nucleic acid, plasmids or liposome gene delivery systems, none of which are	<ul> <li>Packaged to survive transport</li> <li>Primary leak-proof container (universal)</li> <li>Secondary leak-proof container (e.g. zip lock bag or other container/pot)</li> <li>Sufficient absorbent material to soak up all the liquid.</li> <li>Good quality rigid box</li> <li>The package must pass a drop test from 1.2m and contents not leak from the container</li> <li>No allowance for preservatives.</li> <li>Contents must not rattle when box is shaken.</li> </ul>	<ul> <li>Proper Shipping Name (PSN) Genetically modified organism, on the courier paperwork only.</li> <li>Address of Consignor and Consignee, Name and Telephone number of responsible person to be written on the box</li> <li>Net Quantity of goods</li> <li>Directional Labels required for larger volumes of 50ml/g or above.</li> </ul>

controlled under the transport regulations. Vectors which require containment level 2 or above for safe handling in the laboratory must be classified as infectious substances as described in the previous paragraph.

GMMs which do not meet the definition of an infectious substance and which are not vectors as described above are not subject to the provisions of the transport regulations. These would be GMMs which can be handled at containment level 1 and present no significant risks to human or animal health and safety or the environment.

GM plants and seeds which are known or suspected to be dangerous to the environment or are capable of altering animals, plants or microbiological substances in a way not normally the result of





Chemicals and Other Dangerous Goods – Excepted Quantity	There are excepted quantities for some substances where the volume is low. The excepted quantity will be listed under the substance details and again it is useful to know the CAS number for the goods.	<ul> <li>Sufficient to withstand transport</li> <li>Must pass a drop test from 1.2m and contents not leak from the container</li> <li>Inner container must be leak proof</li> <li>Contents must not rattle when box is shaken.</li> </ul>	Where goods are shipped using excepted quantities the excepted quantities label must be used along with the class of substance (e.g. 6.1 toxic, 6.8 corrosive, 6.3 flammable) and the name of the consignor and consignee displayed on the box.
De-minimus Quantities	These are very low quantities of chemicals, listed under IATA.	<ul> <li>Sufficient to withstand transport</li> <li>Must pass a drop test from 1.2m and contents not leak from the container</li> <li>Inner container must be leak proof</li> </ul>	No labelling required
Overpack	This allows for a number of packages to be shipped in one outer.	Each internal package must be packed to the packing instruction relating to its contents and be able to survive transport outside of the overpack box.	Label each box as per the packing instruction relating to its contacts and duplicated and on the outside box. Outer box must have an overpack label.

Labels must be the correct size and weather / waterproof. It is advised that labels are purchased rather than printed in-house, labels can be purchased using a university purchase card from www.fmslondon.co.uk

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## **Transport Check List**

See Appendix 4 for the UoN Approved Transport Checklist. This must be completed by the end user and signed by the transport approver before a shipment is dispatched.