

Transporting samples to and from ACNS

The information provided is general advice. All efforts have been made to obtain accurate information but in all cases you should seek out appropriate information for your situation. The ACNS laboratory manager can provide assistance. The information included here relates mainly to aircraft transport.

Prior to sending samples

After you have registered your samples in your proposal on the ACNS Customer Portal, you will need to arrange the transport of the samples to the facility (and from the facility, if you are planning to take them back with you). ACNS will not arrange transport or provide packaging materials.

It is advisable to begin organising sample transport as early as possible to account for any special conditions you may be required to follow. Contact the relevant authorities in the country you are shipping or travelling from regarding regulations for exporting (and importing, if you are returning to that country with the samples). Importing/exporting information for Australia can be obtained from [Australian Border Force](#). Other authorisations may be required, including domestic. More information is on the following pages.

Your local contact and the ACNS laboratory manager must be contacted prior to sending samples. Failure to notify prior to sending may result in the disposal of your sample.

All samples must be listed in an approved proposal prior to shipping. If your sample list has changed since submitting the proposal, the list must be updated and a new safety review must be conducted. Samples must not be sent unless they have been approved.

Before transporting samples or chemicals, either by courier, mail or on your person, it is strongly recommended that you contact your carrier/airline for any regulations, including any packaging requirements. If the carrier/airline, courier or Australian (or other country) authorities require a statement regarding the intended use of the samples from ACNS, please contact the [ACNS laboratory manager](#).

ACNS will not accept deliveries of goods which have not been packaged and transported lawfully. The ACNS laboratory manager can provide assistance but the ultimate responsibility is yours.

ACNS delivery address

ANSTO

Attention: <Your local contact name>

Phone: <Your local contact phone number>

Proposal number: <Your proposal number>

The Australian Centre for Neutron Scattering, B82
New Illawarra Rd

Lucas Heights, New South Wales, 2234
Australia.

Packaging and labelling

Please ensure samples are appropriately packaged: a leak-proof or spill-proof container sealed in a plastic bag (if the sample is a liquid, wrap the container in enough absorbent material to absorb the full volume before sealing). Place in a box with cushioning material.

Minimum sample labelling requirements are your name, chemical/sample name and hazard statements. If a code is used for sample name due to label size restrictions, please provide a clear list of code meanings.

If your samples require refrigerated, freezer (-18°C), ultralow temperature (-80°C) or liquid nitrogen storage please contact the [ACNS laboratory manager](#) ahead of shipment. Please ensure packages contain enough cooling material to account for shipping delays and are clearly marked urgent and require refrigeration/freezer in clear and large letters on the package.

Documentation

The following documentation must be available on both the exterior and interior of the package, including if you are carrying the samples on your person. If documentation is not readily available, it will result in your shipment being delayed or destroyed. This may incur additional costs payable by you.

Covering letter

A covering letter on the organisational letterhead of the sender and signed by a group/research leader should be included with all shipments of research samples and have the following information:

- Why the samples are being exported and where are they going to be used (i.e. for an approved research experiment at ACNS)
- Their end use (i.e. returning with you, being sent back, disposed or kept by ACNS or other collaborator)
- Dates of export and import (if returning)
- Details of chemicals (chemical name, CAS number, formula, quantities/volumes, hazards). The list of chemicals must be easily matched to the contents of the package.

Safety data sheets

A safety data sheet (SDS) must be included for all samples and reagents you are transporting.

Proforma invoice for customs declaration

All international shipments will require a proforma invoice for customs declaration. Please note that a nil value for samples will NOT be accepted by the Australian Border Force.

Import permits

Some international shipments may require an import permit. Please refer to the following sections.

Transporting samples to and from ACNS

Non-dangerous goods

These substances may be transported without the conditions and documentation required for dangerous goods. However the following points should be followed:

Contact the courier/postal service (for mailing) or airline (if carrying on your person) that you intend to use. Different companies have different requirements for the transport of chemicals, even if they are not considered hazardous or dangerous. This applies to domestic and international shipments.

Pack the sample in a leak-proof or spill-proof container sealed in a plastic bag (if the sample is a liquid, wrap the container in enough absorbent material to absorb the full volume before sealing). Place in a box with cushioning material.

All samples must be labelled with the minimum requirements.

All documentation, including SDSs, statement of contents and proforma invoice for customs declaration (for international shipments) must still be included with the package. The statement of contents should include a statement that the goods are non-hazardous.

Dangerous goods

If your sample is regulated for transport as a dangerous good, as listed in the transport section of the SDS (section 14), you will need to be a certified shipper of dangerous goods or have someone in your organisation who is one and can pack the items and prepare the documents. This applies to domestic and international shipments. Penalties apply for incorrect declaration and shipment of dangerous goods.

Dangerous goods are generally not acceptable to be carried on your person. You must speak with your airline prior to ascertain if your samples can be carried. This applies to domestic and international flights. Penalties apply if you are found to be carrying prohibited goods.

ACNS will not accept delivery of dangerous goods which have not been packaged and transported lawfully.

Certified shippers are required to pack all shipments they complete the documentation for. Do not expect them to send something that you have packaged. It is best to approach them, in advance, with the information about what you want to transport. A certified shipper will have completed and passed a 3 day course on the shipment of dangerous goods by air. This certification, as well as the laws regarding air transport of dangerous goods, is international, so you will need a certified shipper regardless of which country you are in or which country you are sending to. If you do not have access to a certified shipper, there are a number of companies that provide dangerous goods shipping services that can organise all aspects of the transport of dangerous goods.

In general, a dangerous good will need to be packed and transported in accordance with the IATA Dangerous Goods Regulations. Small volumes of some classes of dangerous goods can be transported in excepted quantities or in limited quantities. For these items UN specification packaging materials are not required. In all cases a certified shipper is required.

The ACNS laboratory manager is a certified shipper and is available for advice. They cannot provide shipping documentation to send samples to ACNS.

Biological samples

You MUST contact the [ACNS laboratory manager](#) before sending or bringing on your person any biological samples. The ACNS laboratory manager has completed the approved course for biological material transportation, complying with regulations which state an element of professional judgment is required to determine if a biological substance is exempt. Therefore, ACNS expects persons wanting to transport biological material to use the advice of the ACNS laboratory manager, even if the sample is not considered a biological hazard. More information on biological/infectious goods can be found here: [IATA Division 6.2 - Infectious Substances](#).

Domestic shipping/transport of biological samples

Australia has rules and regulations about the movement of biological materials between, or within, states. This applies to both mailing and carrying samples on your person. Penalties can apply. More information can be found at the [Australian Interstate Quarantine](#) website.

International shipping/transport of biological samples

The import of biological materials into Australia is regulated by the [Department of Agriculture, Water and the Environment](#). This applies to both mailing and carrying samples on your person. Biological materials that may require an import permit include food samples, animal tissues/cells, plant material, proteins, microorganisms and antibodies. Further information on importing biological laboratory materials is available from the Importing section of the Department of Agriculture, Water and the Environment website. The ACNS has an import permit that covers a range of biological materials. Contact the [ACNS laboratory manager](#) for a copy of the permit. Biological material not included on this permit may require an import permit to be applied for and received before samples are sent. This can take several weeks. If you require use of the ACNS permit, you will also require a letter from ACNS authorising you to use the permit. A lack of a permit and authorisation letter may result in a sample being stopped at Australian Customs and returned to the sender (at the sender's cost) or destroyed. Penalties can apply. Import permit application details are available from the Department of Agriculture, Water and the Environment website or from the ACNS laboratory manager.

Transporting samples to and from ACNS

Genetically modified organisms (GMOs)

You MUST contact the ACNS laboratory manager before sending or bringing on your person any GMO samples. The transport of GMOs is regulated by the [Office of the Gene Technology Regulator](#) (OGTR). International shipping/transport of GMOs will require an import permit and authorisation letter to use the permit. This is available from the ACNS laboratory manager. Transport and shipping regulations also apply within Australia. Failure to have the correct documentation may result in a sample being stopped at Australian Customs and returned to the sender (at the sender's cost) or destroyed. Penalties can apply.

Pharmaceuticals

Pharmaceuticals include medicines, drugs and drug precursors, and antibiotics. It also applies to some medical equipment. These samples may require a permit through the Department of Health – [Therapeutic Goods Administration](#) or the [Office of Drug Control](#) before entry into Australia and applies to both sending samples and bringing samples on your person. Failure to have the correct documentation may result in a sample being stopped at Australian Customs and returned to the sender (at the sender's cost) or destroyed. Penalties can apply. The ACNS laboratory manager can assist with permit requirements for pharmaceutical samples.

Strategic goods

[Defence Export Controls](#) (DEC) is responsible for regulating the export of defence and strategic goods and technologies. The [Defence and Strategic Goods List](#) (DSGL) is the list that specifies the goods, software or technology that are regulated when exported, supplied, brokered or published. Goods included in the DSGL may not be exported, either by sending the samples via courier/post or carrying the samples on your person, from Australia unless a licence or permission has been granted by the Minister for Defence, or an authorised person, and that licence or permission is produced to a collector of customs before exportation. This applies to deuterated material, including deuterium oxide (heavy water, D₂O) and deuterium gas (D₂). It also includes some biological materials and toxins. Failure to have the correct documentation may result in penalties.

Deuterated materials

Australian Safeguards and Non-proliferation Office (ASNO) regulate the importing, ordering, storage and usage of deuterium oxide (heavy water, D₂O) and deuterium gas (D₂) and some deuterated materials. If you are sending or bringing D₂O or D₂ gas to ANSTO, you MUST notify the ACNS laboratory manager in advance. This applies to both international and domestic users.

Importing to Australia

Contact your country's authorities to obtain any necessary approvals to export deuterated material. Contact the carrier (airline) or courier for any requirements. Contact the [Australian Safeguards and Non-proliferation Office](#) (ASNO) to determine if your material is a trackable quantity. Deuterium gas and deuterium oxide will usually require tracking.

Exporting from Australia

Deuterated materials (including D₂ and D₂O) may require a Defence Export Permit. Contact [Defence Export Controls](#) (DEC) for more information.

Radioactive materials

The ACNS laboratory manager must be contacted prior to sending or bringing radioactive samples to ANSTO. This applies to domestic and international users. A permit is required to import any radioactive material to Australia and is regulated by the [Australia Radiation Protection and Nuclear Safety Agency](#) (ARPANSA) and [Australian Border Force](#). Furthermore, if your sample contains fissionable isotopes you will also require a permit from the [Australian Safeguards and Non-proliferation Office](#) (ASNO). ACNS can apply for these permits on your behalf (at your cost). The processing time for an ARPANSA permit is generally 5 days but can be longer depending on demand. Waiting time for an ASNO permit is generally 14 days but can be longer depending on demand. Please note that the required permits must be approved BEFORE shipping your sample to ANSTO. Radioactive samples MUST NOT be carried on your person. Failure to have the correct documentation may result in a sample being stopped at Australian Customs and returned to the sender (at the sender's cost) or destroyed. Penalties can apply.

Other samples requiring permits

Some chemicals, biological materials, and other samples are restricted for use within Australia and the regulations may vary from state to state. This can include substances considered a health risk or security sensitive biological or chemical agents. These materials may require a permit before you can transport or carry them domestically or internationally.

You may also require a permit to use certain chemicals/materials at ACNS (e.g. benzene). Contact the ACNS laboratory manager for further information.

Transport within Australia

If you are sending samples within Australia by Australia Post you will need to consult [the Australia Post dangerous and prohibited items](#) guide. Please note that Australia Post interstate mail services within Australia are generally by air transport. You may require the services of a dangerous goods or specialist courier.

Transporting samples to and from ACNS

Dry ice

The shipment of dry ice for refrigeration purposes on aircraft does not require a certified shipper provided that the samples it is cooling are non-dangerous goods (see information above). However, there are certain requirements which must be followed.

The net weight of the dry ice must be marked on the outside of the package along with the words "Carbon dioxide, solid", UN 1845 and a miscellaneous dangerous goods class diamond (class 9).

The packaging instruction from the current IATA Dangerous Goods Regulations should be consulted.

Extracts from packaging instruction 904

Carbon dioxide, solid must be in packaging designed and constructed to permit the release of carbon dioxide gas and to prevent a build-up of pressure that could rupture the packaging.

A shipper's declaration is only required when the carbon dioxide, solid is used as a refrigerant for dangerous goods that require a shipper's declaration.

When a shipper's declaration is not required, the following information, required for the carbon dioxide, solid must be contained in the "Nature and Quantity of Goods" box on the airway bill:

- Proper shipping name: Carbon dioxide, solid
- Class 9
- UN 1845
- The number of packages
- The net quantity of carbon dioxide, solid in each package.

Please note ACNS does not supply dry ice.

Transport from ACNS

All samples that have been in a neutron beam must have a radiation clearance certificate before leaving the building.

Instruction on how to obtain a clearance certificate will be given during your laboratory induction training. If a sample cannot be cleared before you are due to leave, it can be stored at ACNS until your next visit.

ACNS will not arrange transport or provide packaging materials for shipping items back to home institutes. You are to organise pick up from the ANSTO receiving dock with your carrier and provide your courier number.

The ACNS laboratory manager can assist with packing samples and signing shipper's declarations for the return of dangerous goods by prior arrangement only. You will need to provide all appropriate packaging materials, labels and documentation.