Shipping Genetically Modified Micro-Organisms (GMOs or GMMOs)

For shipping purposes genetically modified micro-organisms (GMMOs) and genetically modified organisms (GMOs) are micro-organisms and organisms in which genetic material has been purposely altered through genetic engineering in a way that does not occur naturally, classified as a UN 3245. Examples include: *E.coli* containing a foreign plasmid, transgenic mouse tissue, a bacterial strain with a gene knockout or insertion, etc. The following instructions apply to shipments containing only a GMO/GMMO, if you are shipping a chemical in addition to the GMO/GMMO there could be additional restrictions, please contact EHS 9-2553 if this is the case. The shipping form will largely depend on how you are planning to send your sample.

**Shipping a GMO/GMMO via FedEx domestically within the US (with or without dry ice).**

1. Place material in a sturdy leakproof vial or container that can be securely shut with a screw top lid. Use Parafilm or appropriate tape to wrap around the lid and provide a positive means of closure.
2. Label the container with the contents of the material.
3. Place labeled container in a sturdy secondary container such as a larger vial or tube with absorbent material (bench mat, paper towels, etc). Secure the secondary container shut.
4. Place the containers and their contents into a sturdy shipping box, i.e. cardboard or fiberboard box. Sending items in a flimsy posterboard box is not acceptable.
5. Place a printed inventory document inside the box that indicates what the material is.
6. Tape the box shut with sturdy shipping tape.
7. Filling out the domestic FedEx US Airbill:

   - Package Service is optional to your needs.
   - Check “Other” for packaging. You may not use a FedEx issued box for a GMO/GMMO.
   - For the question “Does this shipment contain dangerous goods?”. Check off “Yes, Shipper’s Declaration not required”.
   - For “Total Declared Value” we generally make it $1.00

★ = OPTIONAL-dry ice, you need to address the number of packages *x* weight in kilograms of dry ice.

**OUTSIDE OF PACKAGE:**

For both domestic and international shipments. The FedEx US Airbill should be attached on the outside of your package. You will also need the GMMO/GMO sticker on the outside of the box (1). If you are sending a Dry Ice shipment, you will also require a class 9 sticker (2). You may obtain these from EHS 9-2553.

(1) The GMMO/GMO - UN3245 sticker

(2) Class 9- Dry ice sticker.
Shipping a GMO/GMMO via FedEx internationally (with or without dry ice).

1. Same packing instructions apply as listed in the domestic shipping (steps 1-6).
2. Filling out the FedEx US Airbill and the Commercial Invoice Form:

   - Payment
     - The Sender: you will need UCSC’s Account number on the “Sender’s FedEx Account Number” Line and you will need your campus mail code to write on the “Internal Billing Reference” Line (i.e. 34-xxx)
     - The Recipient: you will need the recipient’s FedEx Account Number to write into the Payment portion of the airway bill.

   - Package Service is optional to your needs.
   - Check “Other” for packaging. You may not use a FedEx issued box for a GMO/GMMO.
   - For the question “Does this shipment contain dangerous goods?” Check “Yes, Shipper’s Declaration not required”.
   - Who is paying for this shipment? If Recipient, their account number goes here.
   - If the Sender (you) is paying this shipment, your campus mail code number goes here.
   - The Shipment Information must be written as illustrated. Including: the name of shipment contents, the UN3245 declaration, the 1.00 declared value, USA as the manufacturer and “No SED” box checked off. Include the number of packages, weight & dimensions. ★OPTIONAL: If sending Dry Ice, write it in this section.

★OPTIONAL: Dry ice. You need to address the number of packages x weight in kilograms of dry ice. [Image]

COMMERCIAL INVOICE: 3 signed copies of this form are required when shipping internationally, include with your airbill. For a fillable pdf contact EHS.