The Department of Transportation (DOT) has regulations governing the movement of hazardous materials by motor vehicle. The DOT regulations have some exceptions, one of which is Materials of Trade (MOT). The MOT exception provides relief from many DOT regulations, as long as employees receive MOT awareness training and follow the requirements below.

**Material of Trade**: means a hazardous material (other than a hazardous waste) that is carried on a motor vehicle by a private motor carrier in direct support of a principal business other than transportation by motor vehicle.

Cryogenic materials, including liquid nitrogen and helium are regulated as DOT hazard class 2.2 and can be transported under the MOT exemption.

Under University Policy 3.2, if you use your own vehicle, it is your responsibility to carry adequate personal insurance coverage for yourself, your vehicle and any hazardous material damage.

**Liquid Helium and Nitrogen**

**Material of Trade Requirements**: (CU Learn Course #1333 required)

- **Container limits**
  - 220 pounds (includes container / cylinder weight)
- **Packaging requirements**
  - Constructed so that pressure will not exceed 25.3 psig
  - Closures secured (held in place)
  - Secured against shifting in vehicle
  - Manufacturers original or equivalent
  - For cylinders only, must meet full DOT requirements
- **Marking requirements**
  - Common name or proper shipping name
  - Cylinders must have DOT marking
- **Vehicle limits (total MOT on board)**
  - 440 pounds

**Liquid Nitrogen Only < 1 liter**

**DOT Exempt**:

- **Container limits**
  - 1 liter capacity
- **Packaging requirements**
  - Open receptacle (non-pressurizing)
  - Double glass wall, insulated construction
  - Strong outer packaging (placed in box with cushioning)
- **Marking requirements**
  - Common name (liquid nitrogen)
- **Vehicle limits**
  - Cannot be transported in closed vehicles

**Safety Information**: Laboratory Safety Manuel and Chemical Hygiene Plan / Chapter 16.10

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