

Ordering Argon and Replacing the Dewar

by Armando Durazo

- 1) Don't order the dewar through receiving – they add on a 25% overhead to all orders that they process, this adds up over time. Instead, order the dewar directly from Airgas.
- 2) Obtain the blank Liquid Argon order form (which has been e-mailed to you separately) and fill in the account & name information. Have this approved, and then turn this into Kathy Rea (business office) like you would any other order. She will process the order and provide you with a P.O. # via email.
- 3) Call Airgas, phone # 1-562-529-8101 and tell them you want to order a high pressure (230 PSI) liquid Argon dewar. The catalog # is “AR 160LT230.” Your customer # is “1BZ41” – this will have the dewar delivered to the Chemistry loading dock. Give them the PO #, and ask for a confirmation # for the shipment.
- 4) When the dewar arrives, typically the next day ~3 PM, change the dewar. Do be sure to check that no MIC clients are using the ICP-OES, which is right across from the ICP-MS. Return the empty dewar to the loading dock. Put a piece of tape on the new dewar with the date that you changed it on.
- 5) Be sure to check the dewar after replacing it – sometimes these are defective. The dewar is feeding 2 ICPs now, and must be able to handle a situation where both instruments are in use at the same time.
- 6) Check the pressure gauge on the dewar (the one on the top of dewar, NOT the ones on the regulators). Is the pressure ~230 PSI? If not, open the pressure builder for a little bit, and check again – be sure to close the builder when done. If the tank dewar cannot maintain 230 PSI (i.e., it keeps venting slowly not allowing the pressure to get above ~130 PSI or so), it is a defective dewar and must be replaced. Call Airgas, they will send a replacement for free.
- 7) The dewar will last approximately 1 month. Be sure to check the weight of the dewar by trying to tip it – pull the rail on top towards you - (the full/empty gauges on the dewars are notoriously inaccurate). A full dewar will be essentially impossible to tip; a nearly empty one will be very easy.