Handling of Freezing Mixture and High Pressured Gas



- 1. First-time users of high-pressure gas cylinders (O₂, He, N₂, Ar, CO₂, etc.) and/or cryogens (liquid nitrogen/helium) at Kashiwa Campus are required to take a high-pressure gas safety education that Cryogenic Service Lab (CSL) of ISSP will host, including those who have previously used high-pressure gas or cryogens at Hongo Campus. For more information, please check the website of <u>Cryogenic Service Lab</u>.
- 2. Helium gas recovery

In order to use liquid helium, recovery facilities must be in place and pass a piping inspection by Kibantou Cryogen Superviser and CSL inspector. Please refer to <u>CSL website</u> for information on required equipment and registration procedures.

Send the following information to Kibantou Cryogen Superviser for processing.

- Name of lab (and GSFS department) Lab supervisor (incl. extension and e-mail address)
- Helium usage supervisor (incl. extension and e-mail address)
- Number of room where recovery will take place Preferred date for start of recovery
- Preferred date for inspection Current recovery meter reading
- 3. Carrying liquid nitrogen and/or liquid helium on the elevator
 - In the Kibantou building, use only the large-sized elevator.
 - When carrying the liquid nitrogen / liquid helium using the elevator, always have two people to attend the liquid nitrogen / liquid helium, one of them should wait at the receiving floor. Nobody should be in the elevator whenever liquid nitrogen / liquid helium is in there. To avoid other people to get on the elevator when liquid nitrogen / liquid helium is on, use the installed plastic chain and block the entrance of the elevator.
 - When carrying containers on a cart, take care to secure the containers so that they do not fall over. Refer to <u>the Safety Manual</u>.
- 4. Dry ice procurement

You can have dry ice delivered to your lab by a designated supplier if you apply to the Contracts Team. Deliveries are made at around 9 a.m. If no one is present, the supplier will leave the delivery at the lab entrance.

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