

Standard Operating Procedure for Handling Carcinogens



1. Designated Areas and Qualified Personnel
Unpacking and preparing the carcinogens will take place in the HPCAT chemistry laboratory (room 434 E030) with representatives from both HPCAT (Curtis Kenney-Benson) and the experimental group.
2. Description of Operations Involving the Sample
Carcinogenic material will consist of _____
Samples will be prepared by placing a small amount (a few micrograms) into a pre-drilled hole in either a rhenium or steel gasket. The samples will be sealed by closing the anvils of a diamond anvil cell (DAC) on either side of the gasket. Sample preparation will be done in the HPCAT fume hood. Impervious gloves, protective eyewear and face masks will be worn. The microscope and loading area will be cleaned of beryllium contaminants before loading of the carcinogen, and a clean Benchkote liner placed in the loading area to collect any spill. The liner will be removed immediately after loading and discarded in a separate waste stream from the beryllium contaminated waste usually generated in the fume hood (see point 6 below). The DAC will be wiped with isopropanol soaked Kimwipes, and removed from the fume hood in a fashion consistent with the HPCAT Beryllium SOP.
3. Hazard Information Training
MSDSs will be available upon request. Chemical containers will bear appropriate labels. "Danger – Cancer Hazard" signs and copies of this SOP will be posted on the fume hood and all entrances to the Sample Lab to provide notification of the hazards. The experimenters listed above will review the MSDSs and understand the hazards and safety procedures prior to starting work.
4. Engineering Exposure Controls
All sample preparation will be done within the HPCAT fume hood to prevent dispersion. Sample containers will remain closed when not in immediate use and will be properly labeled. Containers will be stored within the hood for the duration of the experiment. Any incidental waste will be disposed of in accordance with point 6.
5. Personal Protective Equipment
Impervious gloves and protective eyewear and facemasks will be worn when preparing materials. Gloves will continue to be worn for any and all additional handling.
6. Disposal
Gloves, task wipes and other waste will be stored under the fume hood in a sealed plastic bag, which will bear the required "Cancer hazard" labels. At the conclusion of the experiment, all waste and excess sample materials will be returned to the owner's home institution for disposition, or disposed of according to ANL-WMO guidelines.