

Diamond User Code 10: Flow Cells





Hazards

High pressures and explosions – noise and fragmentation

Hazardous substances – toxic, oxidising and flammable gases

High temperatures

Risks

Gas leaks could lead to explosive , flammable or toxic atmospheres

Cells can become pressurised if blocked or gas flow is too high –

causing explosions

Persons come into contact with hot surfaces causing burns

Controls

Leak test the rig before use and after making changes e.g. sample manipulation

Limitation of the gas flow to the minimum allowable for the reaction Ensure that there is an extract system for the exhaust and this works Use a gas monitor if one exists for the gas species you are using Purge the system of hazardous gases before making changes to samples or dismantling the rig

Know what to do in the event something goes wrong.

Contact

If you have any questions regarding flow cell safety, contact the SHE group.

<u>Diamondshe@diamond.ac.uk</u>.

