

Safe Working Procedure for Elemental Halogens

Fluorine

Anyone wishing to work with fluorine gas must first prepare safety guidelines and arrange for their approval by the Division, School and OHS.

Chlorine

Chlorine may be supplied in a cylinder or generated chemically. Chlorine is a highly toxic and irritating gas. Chlorine gas may only be used in a well ventilated fume cupboard. If large quantities are to be used, a suitable respirator must be available.

Reducing agents (e.g. aq. sodium sulfite) for the destruction of excess chlorine must be on hand.

In the event of inhalation of chlorine gas, immediate medical attention must be sought.

Bromine

Bromine is a toxic and irritating liquid with a high vapour pressure. Elemental bromine is widely used. Bromine may only be used in a well ventilated fume cupboard. Reducing agents (e.g. aq. sodium sulfite) for the destruction of excess bromine must be on hand.

In the event of exposure to bromine vapour, immediate medical attention must be sought.

Iodine

Iodine is a crystalline solid. Skin contact with iodine will leave a (temporary) brown discolouration of the skin and may cause irritation (although iodine is well known as a topical antiseptic). Iodine should be used in a well ventilated fume cupboard. Reducing agents (e.g. aq. sodium sulfite) for the destruction of excess bromine must be on hand.

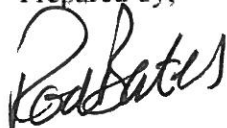
Interhalogen Compounds

Some interhalogen compounds, such as iodine chloride and iodine bromide, are useful reagents. As they are either liquids or solids, the same precautions should be taken as for bromine.

PPE

PPE must be worn when handling these reagents: safety glasses, lab coat, long trousers and covered shoes. Gloves are strongly recommended.

Prepared by,



Approved by,

