SAMPLE RISK ASSESSMENT (inc COSHH)

Flame Colours – For demonstration only

Specific ✓ **Generic** ☐ **Please tick** **Date:** 02/04/15

Attach additional sheets if required at any section.

Substances Involved and Hazards Identified: e.g. Biological*; Radioactive*; Toxic, Explosive, Inflammable, Carcinogenic	
Substance	**Hazard**
Calcium Acetate	May act as an eye, skin or repiratory irritant. Ingestion of large amounts may lead to gastrointestinal irritation.
Ethanol	Flammable. May be harmful by inhalation, ingestion or skin absorption. May act as an irritant.
Lithium Chloride	Harmful if swallowed, inhaled or absorbed through skin. May cause harm to breastfed babies.
Copper(II) Chloride	Harmful by inhalation and ingestion.
Sodium Chloride	No significant risk

Equipment used & Hazards Identified (Please Tick)		
Apparatus ✓	**Cryogenic**	**Electrical**

Scheme of Work/Procedure

About 50 ml of saturated calcium acetate solution is added to the beaker. Ethanol is added and the solution stirred until a solid is formed. The solid is scooped out and placed on a heatproof mat. The solid is lit. The solid is sprayed with lithium salt solution (pink flame), copper salt solution (green flame) and sodium salt solution (yellow flame). Flame can be extinguished by placing a second heatproof mat or left to burn out.

Particular Control/Safety Measures to be Adopted: Both Engineering and Personnel, e.g. Fume Cupboard, Gloves, Blast screen
Safety goggles, lab coat
EMERGENCY PROCEDURES (a) Spillage (b) Fire (c) Other a) Wipe up and rinse affected area b) In case of fire, extinguish with either powder, CO_2 or Foam extinguisher
First Aid Treatment In case of contact, immediately flush eyes or skin with copious amounts of water. If swallowed, wash out mouth with water provided person is conscious. Call a physician immediately.
Waste Disposal Procedures Wash down sink with plenty of water
Information Sources Material Safety Data Sheets
Name of Assessor **Signature**