

SAMPLE RISK ASSESSMENT (inc COSHH)



Prussian Blue – For Demonstration/Class Activity

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	
Potassium ferrocyanide	Contact with very strong acids liberates toxic gas. Light sensitive.	
Ammonium Iron(III) Citrate	Hygroscopic (absorbs moisture from the air). Light sensitive.	
1 M HCl	Irritant	
Equipment used & Hazards Identified (Please Tick)		
Apparatus ✓	Cryogenic	Electrical
Scheme of Work/Procedure This is made up in the jar in advance! Dissolve the $K_3[Fe(CN)_6]$ and the iron(III) citrate in the water and soak the filter paper in the resulting (yellow) mixture. Dry off the filter paper (carefully, not to allow any creases) and place the stencil over the top. When the light is shone on, the paper exposed to the light will turn blue while the paper under the stencil will remain yellow. Picture can be fixed by soaking in HCl and rinsing.		



Particular Control/Safety Measures to be Adopted: Both Engineering and Personnel, e.g. Fume Cupboard, Gloves, Blast screen

Safety goggles, lab coat, gloves (Prussian blue solution stains skin)

EMERGENCY PROCEDURES (a) Spillage (b) Fire (c) Other

- a) Vacuum or sweep up material and place into a suitable disposal container. Avoid runoff into storm sewers and ditches which lead to waterways. Avoid generating dusty conditions. Provide ventilation.
- b) Use In case of fire, use water, dry chemical, chemical foam, or alcohol-resistant foam. Do NOT use carbon dioxide.

First Aid Treatment

In case of contact, immediately flush eyes or skin with copious amounts of water. Seek medical aid if necessary.

Waste Disposal Procedures

Solution is retained for future use. Filter paper is safe when “fixed” with HCl and rinsed with plenty water..

Information Sources

Material Safety Data Sheets

Name of Assessor

Signature