

# Science Practical Risk Assessment

<b>School of Maths &amp; Science</b>	<b>Practical Activity Title</b>	<b>Estimation of Fe(II) Using Potassium Dichromate</b> (MAS_SP_2501_Fe(ii)_with_potassium_dichromate)		<b>Risk Assessment No.</b> MAS_RA_2501_Fe(ii)_with_potassium_dichromate	
Location	<b>Chemistry Labs. NB236 / 237</b>			<b>Revision level: 1</b>	
Assessment Performed By	<b>Samantha Oxley</b>	Signature:		Date:	<b>28 Sep 2009</b>
Supported By	<b>Gareth John</b>	Signature:		Date:	<b>28 Sep 2009</b>
Approved By	<b>Kelly Gay (H.o.S.)</b>	Signature:		Date:	<b>28 Sep 2009</b>
Date of Re-assessment (if necessary)	<b>Re-assess if any changes to procedure or equipment / chemicals are made.</b>				

HAZARDS TO BE CONSIDERED	WHO MIGHT BE HARMED?	IS THE RISK ADEQUATELY CONTROLLED?	WHAT FURTHER ACTION IS NECESSARY TO CONTROL THE RISK?
1. Slipping / Tripping	Staff		
2. Fire	Students		
3. Chemicals / drugs			
4. Moving parts of machinery			
5. Pressure systems		<i>Please complete overleaf</i>	<i>Please complete overleaf</i>
6. Electricity			
7. Dust			
8. Fumes			
9. Manual Handling			
10. Noise			
11. Lighting			
12. Computers			
13. Any other hazards			

**(Please refer to Risk Assessment Matrix to indicate how Severity and Likelihood combine to produce a Risk score)**  
**Likelihood x Severity = Risk Score, = Low, Medium or High risk**

Type & Source Of Hazard	Nature Of The Risk	Type Of Activity In Which Risks May Arise	Control Measures	Risk Rating			L M H	Any Further Control Measures Required
				L	S	R		
Bags and coats	Trip Hazard	Any activity which involves movement around the laboratory	Place all bags and coats in lockers provided.	1	1	1	L	
Stools	Trip Hazard	Any activity which involves movement around the laboratory	All stools to be stacked and placed at the back / sides of the lab to ensure no obstructions	1	1	1	L	
Sulphuric acid	Corrosive and Irritant, splash to the eyes/skin irritation.	Pouring, mixing and measuring.	The wearing of safety goggles is mandatory at all times during practical activities in the laboratory. Concentrations of less than $2\text{mol dm}^{-3}$ will be used which is an irritant but not corrosive. Any splashes to skin should be washed off.	2	1	2	L	
Potassium dichromate(VI)	Toxic/Irritant Splash to the eyes/skin irritation.	Pouring, mixing and measuring.	Concentration is kept below $0.2\text{mol dm}^{-3}$ in the liquid state which is less toxic. The wearing of safety goggles is mandatory at all times during practical activities and gloves will be made available to avoid skin contact. Any splashes to skin should be washed off.	2	1	2	L	
Iron(II) salt	Harmful/Irritant May cause irritation to the eyes	Weighing and mixing	Small amounts will be weighed out. The wearing of safety goggles is mandatory at all times during practical activities in the laboratory.	1	1	1	L	

Type & Source Of Hazard	Nature Of The Risk	Type Of Activity In Which Risks May Arise	Control Measures	Risk Rating			L M H	Any Further Control Measures Required
				L	S	R		
N-phenylanthranilic acid	Irritant to skin/eyes	Measuring and mixing	Used as an indicator so only small amounts required. The wearing of safety goggles is mandatory at all times during practical activities in the laboratory	1	1	1	L	
Glass Pipettes	Cuts	Attaching pipette fillers to pipette	Good technique is important, ensure the pipette is held as close to the top as possible when attaching pipette filler	2	2	4	L	
General Glassware	Cuts	Handling	Ensure good technique is used, take care when handling glassware to avoid any breakages.	2	2	4	L	

INDICATE WHAT FIRST AID ARRANGEMENTS ARE IN PLACE

A science technician (qualified first aid at work) shall be present during all science practical lessons.  
First aid kit available in all science prep rooms (Physics NB232, Chemistry NB237B & Biology NB124A).

Assessment performed by : (Please Print Name)	<b>Samantha Oxley</b>	Position :	<b>Chemistry Lecturer</b>
Date of Assessment :	<b>28<sup>th</sup> September 2009</b>		
Signed :			

ACTION LIST RECOMMENDATIONS	Risk Rating			L M H	TO BE ACTIONED BY	DATE ACTION COMPLETED	SIGNATURE
	L	S	R				