

Chemical Change & Colour: Risk Assessment

Activity	Hazard	Precaution	Risk
Chemical Reactions	<ul style="list-style-type: none"> Material spraying from test-tube 	<ul style="list-style-type: none"> Eye protection worn at all times Children instructed on safe lab practice 	Low
	<ul style="list-style-type: none"> Copper Carbonate: Harmful if swallowed 	<ul style="list-style-type: none"> Small quantities dispensed in covered tube Children warned not to eat anything in the lab 	Very low
	<ul style="list-style-type: none"> 0.5M Hydrochloric acid: Irritant 	<ul style="list-style-type: none"> Pre-dispensed into boiling tube Small volume used Irrigate if comes into contact with skin Eye protection worn Mop up spills immediately 	Low
	<ul style="list-style-type: none"> Sodium Carbonate (saturated solution): Irritant 	<ul style="list-style-type: none"> Solution clearly labelled 'Irritant' Children warned to handle with care and use dropper Eye protection worn Activity closely supervised 	Low
	<ul style="list-style-type: none"> Ammonia vapour: Irritating to eyes and lungs 	<ul style="list-style-type: none"> Only 1ml solution used Pre-dispensed into stoppered test tube Activity closely supervised 	Low
Preparation of red cabbage indicator	None identified	None required	None
pH testing	<ul style="list-style-type: none"> Vinegar (Ethanoic acid): Irritant above 1.7M 	<ul style="list-style-type: none"> Ensure that commercial product is diluted below 1.7M Eye protection worn 	Very low
	<ul style="list-style-type: none"> "Drain cleaner" (saturated Sodium carbonate): Irritant 	<ul style="list-style-type: none"> Solution clearly labelled 'Irritant' Children warned to handle with care and use dropper Eye protection worn Activity closely supervised 	Low
continued overleaf			

Flame testing (demonstration)	<ul style="list-style-type: none"> Burns from Bunsen flame 	<ul style="list-style-type: none"> Carried out by demonstrator Children at a safe distance Safety glasses worn 	Low
	<ul style="list-style-type: none"> Barium chloride: Toxic 	<ul style="list-style-type: none"> Safety glasses Use 0.2M solution Label as toxic Handle only with loop 	Low
	<ul style="list-style-type: none"> Lithium chloride: Irritant 	<ul style="list-style-type: none"> Label as irritant Use small quantity of solid 	Low
	<ul style="list-style-type: none"> Copper sulphate: Harmful at 1M and above 	<ul style="list-style-type: none"> Use 0.5M solution 	Low
	<ul style="list-style-type: none"> Sodium chloride: Non-hazardous 	None required	None