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**SSERC Risk Assessment** (revised version March 2018)

(based on HSE’s INDG 163 ‘Risk assessment - A brief guide to controlling risks in the workplace’)

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| Activity assessed | Changing the position of an equilibrium |
| *Date of assessment* | 4th July 2022 |
| *Date of review (****Step 5****)* |  |
| *School* |  |
| *Department* |  |

| Step 1 | Step 2 | Step 3 | Step 4 | | |
| --- | --- | --- | --- | --- | --- |
| *List Significant hazards here:* | *Who might be harmed and how?* | *What are you already doing?*  *What further action is needed?* | *Actions* | | |
| *by whom?* | *Due date* | *Done* |
| Sodium hydroxide is corrosive to skin and eyes.  The 0.1 mol l-1 solution is of no significant hazard. | Technician by splashes while making up the solution. | Wear goggles (BS EN 166 3) and gloves |  |  |  |
| Hydrochloric acid is corrosive to skin and eyes and releases corrosive and choking fumes  The 0.1 mol l-1 solution is of no significant hazard. | Technician by splashes or inhaling fumes while making up the solution. | Work in a fume cupboard – or a well-ventilated laboratory if the quantities are not large. Wear goggles (BS EN 166 3) and gloves |  |  |  |
| Indicator solutions are sometimes flammable (if made up in ethanol) | Teacher, technicians or pupils by fire | Keep away from sources of ignition |  |  |  |
| Potassium chromate |  |  |  |  |  |
| Iron III chloride is harmful if swallowed and corrosive to skin and eyes.  The 0.5 mol l-1 solution if also corrosive to skin and eyes | Technician by splashes while making up the solution.  Pupils by splashes | Wear goggles (BS EN 166 3) and gloves  Wear goggles (BS EN 166 3) |  |  |  |
| Potassium thiocyanate is harmful is swallowed, inhaled or in contact with skin. It also releases toxic gas in contact with concentrated acids.  The 0.5 mol l-1 solution is of no significant hazard | Technician by splashes while making up the solution. | Wear eye protection and consider gloves. Avoid raising dust. |  |  |  |
| Ammonium chloride is harmful if swallowed and is an eye irritant. | Teacher, technicians or pupils in contact with the eye. | Wear eye protection |  |  |  |

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| **Description of activity:**  3 simple activities involving equilibria and the effect of adding reagents that ‘tilt’ these one way or the other. |

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| **Additional comments:** |