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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 | Colour changing chameleon |
| *Date of assessment* | 9th April 2014 |
| *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* |
| Potassium manganate VII is harmful Cat 4 if swallowed and an oxidizing agent. | Technician/demonstrator by inhalation/ingestion while preparing the solutions. | Wear eye protection and gloves. Avoid raising dust.  Keep away from combustible materials |  |  |  |
| Sodium hydroxide is corrosive Cat 1A | Technician/demonstrator by splashing while preparing solution. | Wear goggles (BS EN166 3) and PVC gloves.  Be careful of the heating effect of diluting sodium hydroxide. |  |  |  |
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| **Description of activity:**  Sucrose is dissolved in a very dilute sodium hydroxide solution.  When dilute potassium manganate VII is added, it oxidizes the sugar being reduced itself through several oxidation states to give some attractive colour changes. |

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| **Additional comments:**  Manganese compounds are harmful to the aquatic environment. The amount discharged to the environment should be kept to a minimum. |