# SSERC logo

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

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

2 Pitreavie Court, South Pitreavie Business Park, Dunfermline KY11 8UU

tel : 01383 626070 e-mail : [enquiries@sserc.org.uk](mailto:enquiries@sserc.org.uk) web : [www.sserc.org.uk](http://www.sserc.org.uk)

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| Activity assessed | Iron Drops - Microscale |
| *Date of assessment* | 30th June 2020 |
| *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* |
| Hydrochloric acid is corrosive and gives off irritating fumes.  1 M hydrochloric acid is of no significant hazard | Technician, preparing 1M solution. | Wear goggles (BS EN166 3) and gloves. Work in a fume cupboard or a well-ventilated laboratory/prep room. |  |  | |  | |
| Sodium hydroxide is corrosive | Technician, by splashes while preparing 0.4M solution. | Wear goggles (BS EN166 3) and gloves. |  |  | |  | |
| 0.4M sodium hydroxide is irritant | Pupil / teachers during experiment by splashing | Wear eye protection |  |  | |  | |
| Iron II sulphate is harmful by ingestion and irritant, ammonium (or potassium) thiocyanate is harmful by ingestion, skin contact or inhalation. | Technician, making up solutions. | and possibly gloves. Avoid raising dust. |  |  | |  | |
| 20vol hydrogen peroxide is an irritant | Pupil / teachers during experiment by splashing | Wear eye protection. Avoid splashing. |  |  | |  | |
| The other solutions are all of no hazard at the concentrations used. |  |  |  |  | |  | |

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| **Description of activity:**  A laminated sheet (or a paper one inside a poly pocket) is used as a base for a series of reactions of Iron compounds reactions to be carried out on a microscale using drops of reagents with the instruction sheet as the reaction ‘vessel’. |
| **Additional comments:**  At the end of the experiment, the sheet can simply be wiped clean with paper towel. |