#

**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 web : [www.sserc.org.uk](http://www.sserc.org.uk)

#

|  |  |
| --- | --- |
| Activity assessed | Int2 PPA1-1 - Effect of Concentration on Reaction Rate |
| *Date of assessment* | 8th 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 peroxodisulphate (persulphate) is harmful if swallowed, a skin / eye / respiratory irritant, a skin / respiratory sensitiser and an oxidiser. | Technician preparing solution | Wear eye protection and gloves. Avoid raising dust. Keep away from combustible materials. |  |  |  |
| 0.1 mol l-1 sodium peroxidisulphate solution is a skin / respiratory sensitiser. | Pupils by splashes while carrying out experiment | Wash off any spills as soon as possible. Consider gloves – though the risk from small-scale single exposure is extremely low. |  |  |  |
| Potassium iodide is an eye irritant | Technician preparing solution | Wear eye protection |  |  |  |
| The other materials are of no significant hazard. |  |  |  |  |  |

|  |
| --- |
| **Description of activity:**This is an iodine clock reaction. The only variable is the concentration of the sodium peroxodisulphate. The time required for the mixture to turn black is recorded as an indicator of the rate of reaction. |

|  |
| --- |
| **Additional comments:** |