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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 | Chemical Car |
| *Date of assessment* | 29/01/2013 |
| *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 persulphate: is and oxidiser and is Harmful if swallowed, a skin/eye/respiratory irritant and a skin/respiratory sensitiser | Teacher/technician making up the solutions. | Wear eye protection and consider wearing gloves when making solutions. Avoid raising dust when weighing. |  |  |  |
| Potassium persulphate solution is a skin/respiratory sensitiser. | Teacher/pupils carrying out experiment. | Avoid skin contact (consider wearing gloves) and avoid creating aerosols – this will not happen during normal use. |  |  |  |
| Inhalation of potassium iodide dust may irritate respiratory tract. May act as a skin or eye irritant. | Teacher/technician making up the solutions. | Wear goggles (BS EN166 3) when making solutions. Avoid raising dust. |  |  |  |
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| **Description of activity:**  This is a variation of “The Iodine Clock” experiment  One solution contains potassium iodide and sodium thiosulphate. The other solution contains potassium persulphate and starch.  Potassium iodide reacts with potassium persulphate to form iodine. The sodium thiosulphate reacts with the newly formed iodine to turn it back into iodide. These reactions keep happening until all the sodium thiosulphate has been used up. With no more sodium thiosulphate, the iodine is free to react with the starch and we then see the solution turn a dark blue. |

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| **Additional comments:** |