# 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’)

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| Activity assessed | Electrolysis in 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* |
| Phenolphthalein (solid) is a carcinogen, mutagen and reproductive toxin. | Technician preparing solution. | Avoid raising dust. Wear goggles (BS EN166 3)  |  |  |  |
| Phenolphthalein solution is flammable. | Technician (preparing) teacher/pupil using solution. | Keep away from sources of ignition. |  |  |  |
| Tin II chloride (solid) is corrosive and harmful. | Technician preparing solution. | Avoid raising dust. Wear goggles (BS EN166 3) and gloves. |  |  |  |
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| **Description of activity:**A few drops of different solutions are placed on laminated sheets and electrolysed with a 9V power pack or a battery, using graphite electrodes. |
| **Additional comments:**All the working solutions are of low hazard.A couple of the experiments produce chlorine gas [toxic] but it is in very small quantities and is not a significant hazard. |