# 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 | Ion Migration |
| *Date of assessment* | 3rd February 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* |
| Lead nitrate is harmful and a reproductive toxin. It is also an oxidising agent. | Technician preparing solutions. | Avoid raising or inhaling dust.Appropriate eye protection should be worn.If solution is splashed on skin, wash off with copious amounts of water.Keep away from combustible materials and sources of ignition. |  |  |  |

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| **Description of activity:**Small amounts of solid lead nitrate and potassium iodide are placed at opposite sides of a petri dish with a layer of water in.The ions diffuse across and layer of yellow lead iodide is produced where they meet. |
| **Additional comments:**Lead compounds are environmental toxins. Solutions and precipitates must be kept for uplift.This experiment is safer if carried out with compounds that are less environmentally harmful . . .though not as strikingly coloured. |