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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 | Sugar Snake |
| *Date of assessment* | November 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* |
| Sulphuric acid is an oxidiser and highly corrosive | Teacher during demonstration by spills | Wear a face mask or goggles (EN 166 3) and gloves. |  |  |  |
| Sulphur dioxide given off in the reaction is toxic and a asthmagen. | Teacher or others by inhalation. | Reaction should be carried out in a fume cupboard. |  |  |  |
| Reaction produces a significant amount of heat. | Teacher or technician by burns while clearing up. | Leave to cool before clearing away. |  |  |  |

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| **Description of activity:**  Sucrose is placed in a beaker in a fume cupboard and concentrated sulphuric acid added. The mixture goes yellow then brown to black and eventually gets hot enough that the water released turns to steam which “aerates” the mixture producing a honeycomb ‘snake’ of carbon. |

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| **Additional comments:**  Disposal – The Carbon will still contain unreacted acid. The mixture should be placed in a large bowl of water and left to dilute the acid. It can then be roughly neutralised and washed to waste. The solid lumps of carbon can either be broken up and go sown the drain or removed with a sieve and put in the domestic waste. |