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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’)

2 Pitreavie Court, South Pitreavie Business Park, Dunfermline KY11 8UU

tel : 01383 626070 e-mail : [enquiries@sserc.org.uk](mailto:enquiries@sserc.org.uk) web : [www.sserc.org.uk](http://www.sserc.org.uk)

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| Activity assessed | Int2 PPA3-1 - Preparation of a Salt |
| *Date of assessment* | 8th July 2022 |
| *Date of review (****Step 5****)* |  |
| *School* |  |
| *Department* |  |

| Step 1 | Step 2 | Step 3 | Step 4 | | |
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| *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* |
| Magnesium turnings are flammable. | Pupils by burns | Keep away from sources of ignition. |  |  |  |
| Magnesium carbonate is of no significant hazard. |  |  |  |  |  |
| Sulphuric acid is corrosive and oxidising. | Technician by splashes preparing dilute acid. | Wear goggles (BS EN166 3) or a face shield and gloves. |  |  |  |
| 0.5 mol l-1 sulphuric acid is irritant (just) | Pupils by splashes while carrying out the solution. | Wear eye protection. |  |  |  |
| The reaction produces an aerosol of sulphuric acid which is hazardous if inhaled | Pupils by inhalation while carrying out the solution. | Work in a well-ventilated lab. Avoid inhaling fumes as far as possible. A safer method is to use a conical flask and place a plug of cotton/mineral wool in the neck to trap the aerosol. |  |  |  |

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| **Description of activity:**  Either magnesium metal or magnesium carbonate are reacted with sulphuric acid. Excess solid is added. The solution is filtered and then evaporated to give magnesium sulphate crystals. |

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| **Additional comments:** |