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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 | Preparation of aspirin (AH PPA) |
| *Date of assessment* | 26the Feb 2021 |
| *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* |
| 2-hydroxybenzoic acid is harmful if swallowed, causes serious eye damage and is a reproductive toxin. | Pupil or teacher while carrying out experiment.  | Wear goggles (BS EN166 3)  |  |  |  |
| Ethanoic anhydride is flammable, corrosive to skin and eyes and harmful if swallowed or inhaled. And is severely lachrymatory. | Pupil or teacher while carrying out experiment by splashes or (more likely) exposure to fumes. | Wear goggles (BS EN166 3) and nitrile gloves, and handle in a fume cupboard. |  |  |  |
| Phosphoric acid is corrosive – but quantities are very small. | Pupils (possibly teachers) by splashes. | Wear goggles (BS EN166 3) and consider gloves  |  |  |  |
| Ethanol (IDA) is highly flammable, harmful if swallowed and can cause damage to eyes on prolonged or repeated exposure (due to methanol content)  | Technicians while preparing Brady’s reagent by ignition.Pupils or teachers while using it by ignition. | Keep away from sources of ignition. Work in a well ventilated laboratory. |  |  |  |
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| **Description of activity:**Hydroxy benzoic acid and ethanol are heated with a few drops of phosphoric acid. It is mixed with cold water and filtered. It is then redissolved in ethanol and recrystallized. |

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| **Additional comments:**Ethanoic acid hydrolyses quite rapidly. Use as fresh a sample as possible. |