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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 | Propanone iodine reaction (AH PPA) |
| *Date of assessment* | 26th 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* |
| Iodine is harmful if swallowed or inhaled | Technician preparing solution by inhaling vapour. | Work in a well-ventilated laboratory. |  |  |  |
| 0.01 molar iodine solution is of no significant hazard |  |  |  |  |  |
| Propanone is highly flammable and an eye/respiratory irritant.  A 1.0 molar solution is of no significant hazard | Technician by fire, splashes or exposure to vapours | Keep away from sources of ignition. Work in a well-ventilated laboratory. Wear eye protection and consider wearing gloves. |  |  |  |
| Sulphuric acid is highly corrosive. | Technician while preparing the solution by splashes. | Wear goggles (BS EN166 3) or a face shield and gloves. |  |  |  |
| 1.0 molar sulphuric acid is a skin/eye irritant | Pupil/teacher while carrying out reaction by splashes | Wear eye-protection. |  |  |  |
| Sodium thiosulphate is of no significant hazard |  |  |  |  |  |
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| **Description of activity:**  Iodine is reacted with propanone in an acidic solution. The course of the reaction can be followed by monitoring the concentration of iodine This involves removing samples from the reaction mixture from time to time and analysing them for iodine. |

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| **Additional comments:** |