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## Science Practical Risk Assessment

NPTC

| School of Maths \& Science | Practical Activity Title | The Kinetics Of The Reaction Between Iodine And Propanone In Acid Solution (MAS_SP_2009_kinetics_of iodine_and_propanone) |  |  | Risk Assessment No. <br> MAS_RA_2009_kinetics_of_iodine_and _propanone <br> Revision level: 1 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Location | Chemistry Labs. NB236 / 237 |  |  |  |  |  |
| Assessment Performed By | Emma Morgan |  | Signature: |  | Date: | 23 Sep 2009 |
| Supported By | Gareth John |  | Signature: |  | Date: | 23 Sep 2009 |
| Approved By | Kelly Gay (H.o.S.) |  | Signature: |  | Date: | 23 Sep 2009 |
| $\begin{array}{\|l\|} \hline \begin{array}{l} \text { Date of Re-assessment } \\ \text { (if necessary) } \end{array} \\ \hline \end{array}$ | Re-assess if any changes to procedure or equipment / chemicals are made. |  |  |  |  |  |


| HAZARDS TO BE CONSIDERED | WHO MIGHT BE HARMED? | IS THE RISK ADEQUATELY CONTROLLED? | WHAT FURTHER ACTION IS NECESSARY TO CONTROL THE RISK? |
| :---: | :---: | :---: | :---: |
| 1. Slipping / Tripping | Staff | $\square \times$ |  |
| 2. Fire | Students |  |  |
| 3. Chemicals / drugs |  |  |  |
| 4. Moving parts of machinery |  |  |  |
| 5. Pressure systems |  | Please complete overleaf | Please complete overleaf |
| 6. Electricity |  |  |  |
| 7. Dust |  |  |  |
| 8. Fumes | - |  |  |
| 9. Manual Handling |  |  |  |
| 10. Noise |  |  |  |
| 11. Lighting |  |  |  |
| 12. Computers |  |  |  |
| 13. Any other hazards |  |  |  |

(Please refer to Risk Assessment Matrix to indicate how Severity and Likelihood combine to produce a Risk score)
Likelihood x Severity = Risk Score, = Low, Medium or High risk

| Type \& Source Of Hazard | Nature Of The Risk | Type Of Activity In Which Risks May Arise | Control Measures | Risk <br> Rating |  |  | $\begin{aligned} & \mathrm{L} \\ & \mathrm{M} \\ & \mathrm{H} \end{aligned}$ | Any Further Control Measures Required |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | L | S | R |  |  |
| Bags \& coats | Trip Hazard | Any activity which involves movement around the laboratory | Place all bags \& coats etc in lockers provided | 1 | 1 | 1 | L |  |
| Stools | Trip Hazard | Any activity which involves movement around the laboratory | All stools to be stacked and placed at the back / sides of the lab to ensure no obstructions | 1 | 1 | 1 | L |  |
| Glass pipettes | Cuts | Attaching pipette fillers to pipette | Good technique is important, ensure the pipette is held as close to the top as possible when attaching pipette filler | 2 | 2 | 4 | L |  |
| Glass wear | Cuts | Handling | Ensure good technique is used. Take care when handling glass wear to avoid any breakages. | 2 | 1 | 2 | L |  |
| Hydrochloric acid | Splashing eyes and skin | Pouring and mixing solutions | Wearing of safety goggles is mandatory. $2 \mathrm{~mol} \mathrm{dm}{ }^{3} \mathrm{HCl}$ is used which is an irritant not corrosive, any splashes to the skin should be washed off immediately. | 2 | 2 | 4 | L |  |

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| Type \& Source Of Hazard | Nature Of The Risk | Type Of Activity In Which Risks May Arise | Control Measures | Risk Rating |  |  | $\begin{aligned} & \mathrm{L} \\ & \mathrm{M} \\ & \mathrm{H} \end{aligned}$ | Any Further Control Measures Required |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | L | S | R |  |  |
| Propanone | Irritant | Pouring and mixing solutions | Wearing of safety goggles and lab coat is mandatory. Any splashes to the skin should be washed off immediately. | 1 | 1 | 1 | L |  |
| Iodine | Harmful by inhalation and contact to the skin | Mixing solutions | Avoid splashing. Wearing of safety goggles and lab coat is mandatory. Any splashes to the skin should be washed off immediately. | 2 | 1 | 2 | L |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
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A science technician (qualified first aid at work) shall be present during all science practical lessons.
First aid kit available in all science prep rooms (Physics NB232, Chemistry NB237B \& Biology NB124A).

| Assessment performed by : <br> (Please Print Name) | Emma Morgan | Position : | Chemistry Lecturer |
| :--- | :--- | :--- | :--- |
| Date of Assessment : | $\mathbf{2 3}^{\text {rd }}$ September 2009 |  |  |
| Signed : |  |  |  |



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