University of Oxford COSHH Assessment Form

Read the notes on completion before attempting to fill in this form. If insufficient space is available under any section, use a separate piece of paper and attach it to the form.

Department: NDM, NDMRB

Persons involved: All NDMRB Laboratory Staff

Location of work: NDMRB Laboratories

Date: February 2016

Description of procedure: Preparing buffer solutions

<table>
<thead>
<tr>
<th>Substances used</th>
<th>Quantities used</th>
<th>Frequency of use</th>
<th>Hazards identified</th>
<th>Exposure route</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrochloric Acid</td>
<td>Liquid form 37% up to 2.5L</td>
<td>Weekly/as necessary</td>
<td>H290 May be corrosive to metals.</td>
<td>Inhalation, ingestion; contact with skin and eyes.</td>
</tr>
<tr>
<td>CAS no 7647-01-0</td>
<td></td>
<td></td>
<td>H314 Causes severe skin burns and eye damage</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>H335 May cause respiratory irritation</td>
<td></td>
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</table>

Could a less hazardous substance (or form of the substance) be used instead? Yes/No

Justify not using it:

What measures have you taken to control risk?

Engineering controls: Use only in a fume hood.

PPE: Gloves, lab coat and safety glasses to be worn at all times

Management measures: Wear respiratory protection. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

Most important symptoms and effects, both acute and delayed: Burning sensation, Cough, wheezing, laryngitis, Shortness of breath, spasm, inflammation and oedema of the larynx, spasm, inflammation and oedema of the bronchi, pneumonitis, pulmonary oedema, Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin. (Hydrochloric acid)

Accidental release measures: Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

Methods and materials for containment and cleaning up Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations. Keep in suitable, closed containers for disposal.

Environmental precautions Do not let product enter drains.

Checks on control measures:

LeV is visually checked regularly and air flow are inspected once a year as part of a servicing contract.
<table>
<thead>
<tr>
<th>Is health surveillance required?</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Training requirements:</strong></td>
<td>None</td>
</tr>
</tbody>
</table>

**Emergency procedures:**

**General advice** Consult a physician. Show this safety data sheet to the doctor in attendance.

**If inhaled if breathed in** move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact** Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.

**In case of eye contact** Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**If swallowed** Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**Fire fighting measures:** Use water spray, alcohol resistant foam, dry chemical or carbon dioxide.

**Special hazards arising from the substance or mixture:** Hydrogen chloride gas.

**Advice for Fire fighters:** Wear self-contained breathing apparatus if necessary.

**Further information** Use water spray to cool unopened containers.

Waste disposal:

Stock pot of reagent must be disposed of via the Safety Office – contact your lab manager to arrange collection.

Name and position of assessor: Tiphaine Bouriez-Jones, Lab Manager

Name of supervisor (student work only): 

Name of head of department or nominee: 

Signature: