# COSHH Process Safety Assessment

## Name of Process
| HEAT MEDIATED ANTIGEN RETRIEVAL USING A MICROWAVE OR PRESSURE COOKER. |

## Brief Description
Heating of formalin fixed, paraffin wax sections in a buffer, in a microwave or pressure cooker.

## Locations used
| RKCSB: 335, 314 |

## Hazards Involved
1. Hot buffer solution
2. 10mM citrate buffer pH6
3. 1xTE pH9

## Nature of Hazards
1. Hot buffer solution:
   a) Possibility of hot splashes and scalding
2. 10mM citrate buffer:
   a) see CPA 018
3. 1xTE buffer:
   a) see CPA 015

## Precautions Required
Gloves are worn throughout the procedure
Heat protection gloves worn whilst buffers are hot

## Monitoring
Nil
**Spillage Handling and Emergency Procedures**

If necessary the microwave is stopped quickly by pressing the **STOP** button, rather than the door open button to minimise risk of splashes of hot buffer onto skin or eyes.

Worse case spillage would be 500ml of hot buffer when removing from the microwave. Cover with tissue roll until cool enough to mop up. Place tissues in an autoclave bag.

The pressure cooker cools before opening so there should not be any hot splash risks. Any spillage should be mopped up with tissues and placed in an autoclave bag.

If any scalding occurs, wash affected area with cold water immediately. Seek medical attention if necessary.

**Disposal of Waste Materials**

Tissues, gloves, etc are sent for autoclaving.
Solutions can be washed down the sink with copious amounts of water.

**Local Exhaust Ventilation Used**

Fume hood room 335

**Documentation Issued**

SOPs
Laboratory Safety book
MSDS

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**THE ASSESSMENT**

In the opinion of the Assessor, taking into account the toxic nature of the substances and the way they are used and controlled does a risk to health occur?

If yes describe how, where and what improvements are required to minimise those hazards or to achieve satisfactory control,

Taking into account the hazards of the substances and the way they are used and controlled, a risk to health does not occur.

**ASSESSOR:**

<table>
<thead>
<tr>
<th>Name</th>
<th>A Gillies</th>
<th>Position</th>
<th>Section Safety Officer</th>
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<tr>
<td>Signature</td>
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<td>Date</td>
<td>16.01.2009</td>
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Is the work likely to change significantly in the foreseeable future? No

If yes, give date for re-assessment