



LOCATION DETAILS

School/Branch: School of Molecular & Biomedical Science

SAFE OPERATING PROCEDURE DETAILS

Disposing of soda lime waste

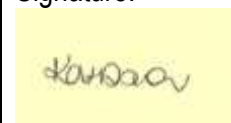
Date Prepared: 18/01/2008

Date Reviewed: 28/08/2009

PREPARED BY: Name, position, & Signature (insert names of supervisor, HSO, subject matter expert)

Tony Richardson – School Health & Safety Coordinator
Kate Dixon – School Health & Safety Officer

Signature:



RISK ASSESSMENT

Has a risk assessment been completed and all other environmental considerations been made?

See risk assessment dated:

27th August 2009

Risk Rating:

- Low
- Medium
- High
- Very High

YES

RISKS IDENTIFIED

- Exothermic reaction on contact with water
- Physical reaction to being splashed with calcium hydroxide as chemical is washed down the drain

SAFETY PRECAUTIONS

The following control measures **MUST** be adhered to:

- Person wishing to undertake this activity must be trained by a competent person in the safe operating procedures
- Conduct activity in a large laboratory sink

PERSONAL PROTECTIVE EQUIPMENT REQUIRED

The following PPE must be worn at all times:

- Full length lab coat
- Full length gloves
- Safety Visor

SAFE OPERATING PROCEDURE

1. Select a beaker large enough to place the tray complete with soda lime on the bottom.
2. Ensure no skin is exposed e.g. ensure wrists are covered with gloves and lab coat
3. Place the soda lime tray in the beaker.
4. Transfer the beaker to the lab sink.
5. Place the hose from the tap into the beaker (the hose must extend at least 75% of the way into the beaker, ideally to 3cm above the soda lime).
6. Run tap water, very slowly at first, increasing the flow rate to moderate when the hose end is under water.

7. Run the water for more than 5 minutes.
8. Pour off the water but do not let the lime pellets go down the drain.
9. Place the beaker in a 37C room to dry the lime.
10. Recover the tray if needed.
11. Place the lime in a dustbin.

OTHER INFORMATION

- This procedure is designed to dispose of soda lime used to absorb acid vapour in DG class 8 storage cabinets.
- Soda Lime is a mixture of 90% calcium hydroxide (Quick Lime) and 10% sodium hydroxide; on contact with water, the sodium hydroxide will dissolve and the calcium hydroxide will convert to slaked lime. Both reactions are exothermic (i.e. liberate heat).
- If the water flows continuously, dilute sodium hydroxide solution will be washed to waste and harmless lime pellets will remain.

ADMINISTRATION

Note: This Safe Operating Procedure must be reviewed :

- a) after any accident, incident or near miss;
- b) when training new staff;
- c) if adopted by new work group;
- d) if equipment, substances or processes change; or
- e) within 5 years of date of issue.