

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.

File ref: Carbencillin
Date: February 2016

Department: NDM,
NDMRB

Persons involved: All NDMRB Laboratory Staff

Location of work:
NDMRB Laboratories

NDMRB, 1st Floor

Description of procedure:

Molecular work – selection media

Substances used	Quantities used	Frequency of use	Hazards identified	Exposure route
Carbencillin disodium salt (BP2648-1/BP2648-250/BP2648-5) <u>Synonyms:</u> Fugacillin, Disodium Alpha-Carboxybenzylpenicillin Molecular Formula: C ₁₇ H ₁₆ N ₂ Na ₂ O ₆ S	100mgs	Weekly/monthly	(list GHS hazard statements) H317: May cause an allergic skin reaction (Category 1) H334: May cause allergy, asthma symptoms or breathing difficulties if inhaled (Category 1)	Inhalation; Ingestion; contact with skin and eyes.

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:

Prepare stocks in a chemical fume hood. Whenever possible, ensure that the eye stations and safety showers are close to the workstation location. When working with diluted stocks, avoid inhalation of vapour or mist and ensure adequate ventilation.

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

Management measures:

Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin and eyes. Keep away from sources of ignition (Bunsen burners, etc.). Take measures to prevent the build-up of electrostatic charge. Incompatible with strong oxidising agents - only dilute into chemically characterised buffers and media. Store in cool, dry place. Keep stock container tightly closed in a dry and well-ventilated place. Once opened, stock containers must be carefully resealed and kept upright to prevent leakage. Recommended storage temperature -20°C. Store liquid stocks as 1mL aliquots upright in clearly labelled screw-top tubes at -20°C.

Most important symptoms and effects, both acute and delayed:

If inhaled, may cause allergy, asthma symptoms or breathing difficulties. May cause allergic skin reaction with symptoms that include rash, itching, swelling, breathing difficulties, tingling of hands/feet, dizziness, chest/muscle pain.

Accidental release measures:

Use PPE. Avoid breathing vapours/mist/gas. Ensure adequate ventilation, remove all sources of ignition, and evacuate personnel to safe areas.

Methods and materials for containment and cleaning up

Prevent further leakage or spillage if safe to do so. Contain spillage, collect with an electrically protected vacuum cleaner or by wet brushing and place in a container for disposal according to local regulations. Do not allow to enter drains.

Environmental precautions

Prevent further leakage of spillage if safe to do so. Do not let the product enter the drains. Avoid discharge into the environment.

Checks on control measures:

LeV checked regularly as part of servicing contract.

Is health surveillance required? No	Training requirements: None
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Emergency procedures:

General: Consult a physician. Show this safety data sheet to the doctor in attendance. Ensure that medical personnel take appropriate safety precaution to protect themselves and prevent spread of the contaminant.

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

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact: Flush eyes with water as a precaution.

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: Thermal decomposition can lead to the release of irritant gases and vapours. Hazardous combustion products include Carbon monoxide, Carbon dioxide, Nitrogen oxides and Sulphur oxides.

Advice for Fire fighters: Hazardous combustion products include Carbon monoxide, Carbon dioxide, Nitrogen oxides and Sulphur oxides. Wear self-contained breathing apparatus, MSHA/NIOSH approved or equivalent and full protective gear.

Other info: use water spray to cool other unopened containers

Waste disposal:

Disposal: Dispose of any un-used media containing small quantities of Carbenicillin (~10mgs) down the drains, and flush with copious volumes of water. Used or spent media should be decontaminated using 2% (w/v) Virkon overnight and then disposed of to drains with copious rinsing with water. All excess product, all glassware and items used in conjunction must be subjected to autoclave at 136 °C for 12 minutes.

All unused stockpots should be disposed of via the University Safety Office.

Name and position of assessor:

Geraldine Gillespie, Group Head

Signature:



Name of supervisor (student work only):

Signature:

Name of head of department or nominee:

Signature: