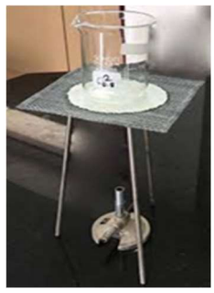
ADVICE TO USERS OF BUNSEN BURNER WIRE GAUZES THAT MAY CONTAIN ASBESTOS

Introduction

1. The Health & Safety Executive (HSE) has become aware of two suppliers of scientific equipment that have supplied mesh gauzes with asbestos-containing centres. The material on the gauzes is used for its heat resistant properties. The gauzes are conventionally used with tripods and Bunsen burners as depicted:



2. Although steps have been taken to prevent further supply by the so far known suppliers, this will however have implications for schools, colleges and other facilities which use these mesh gauzes.

3. **Any gauzes that contain asbestos should not be used, and they must be safely disposed of as asbestos waste**. As a precaution, if you are unclear as to what any gauze coating is made of then you should assume that it contains asbestos and follow the instructions below.

What is the associated risk from asbestos with use of the material?

4. Analysis of the gauze material by HSE has identified that it is fibrous in nature and that it contains some asbestos. Asbestos is a known hazardous substance. Any risk from asbestos depends on the extent of asbestos fibre release and inhalation of these very fine fibres.

5. The risk from asbestos in the gauze material from normal tripod use will generally be extremely low for several reasons. The material is predominantly non-asbestos. There is very limited physical contact with the material during use (eg essentially placing items on top) and any contact is light and momentary. Consequently any free fibre release into the air will be minimal for normal use.

6. However, the material is soft and crumbly and some small particles or fragments may detach on occasions including during use. Particles and debris may also break off over time through abrasion or impact in storage. These particles and fragments do not represent an airborne risk.

7. As a precautionary measure, and in-line with the general legal requirement to prevent exposure to asbestos, the gauzes should be disposed of (see below). Any debris in containers or boxes should be carefully cleaned up and also disposed of.

What do I need to do?

8. Although suppliers so far identified will be contacting those who they have supplied, it is advised that schools should initially adopt a precautionary approach as gauzes containing asbestos cannot be readily distinguished from those that do not. As such, teaching establishments should not handle, use or move their current stock of wire/mesh gauzes until they ascertain whether they are likely to contain asbestos by checking with their supplier.

9. Action will need to be taken where an asbestos content is confirmed or cannot be ruled out. The gauzes will need to be taken out of use and disposed of in accordance with relevant published guidance (see below). Where non asbestos-containing gauzes are stored directly alongside asbestos-containing gauzes, these should be treated as contaminated waste. Other equipment (such as clay triangles, Bunsen burners etc) which has been stored with asbestos-containing

gauzes can be wiped clean with a damp cloth if there is any visible dust present. The cloth should be disposed of as contaminated waste.

10. The work to dispose of asbestos-containing gauzes and waste items is considered to be a low risk activity but it still needs precautions and controls in line with legal requirements. The work should only be undertaken by individuals who are confident that they can adhere to relevant guidance and have access to the right equipment. Assistance can be obtained from a specialist asbestos contractor (eg a contractor holding an asbestos work licence from HSE) but this is not a legal requirement in this situation.

11. Where possible, the gauzes stored in a container should be disposed of in the container to prevent further handling of individual gauzes. Container and gauzes should be treated as asbestos-containing waste.

12. Where this is not possible, the gauzes should be carefully wetted using a hand-held spray bottle containing water with a small quantity of detergent (eg washing-up liquid) and handled carefully to prevent any further damage. They should be placed in a suitable heavy-duty polythene waste bag which is then placed in a second bag (ie double bagged) and labelled accordingly. [In accordance with the HSE's Asbestos Essentials Guidance EM9 Disposal of Asbestos Waste - http://www.hse.gov.uk/pubns/guidance/em9.pdf]. Caution will need to be taken as the corners of the gauze may be sharp and could penetrate the polythene so it may be more suitable to place the gauzes into a container such as a rigid, sealable plastic container before placing into suitable waste bags.

13. Any excess water (from spray) and dust/debris from the gauzes should be wiped up using a damp rag and the rag should be disposed of in the same manner. [In accordance with the Asbestos Essentials guidance EM7 Using damp rags to clean surfaces of minor asbestos contamination - http://www.hse.gov.uk/pubns/guidance/em7.pdf].

14. As this is low risk and short duration work, respiratory protective equipment (RPE) (ie a mask or respirator) is not legally required. However, duty-holders may wish to adopt a precautionary approach regarding the use of RPE and personal protective clothing. Where gauzes are damaged and/or there is resultant debris, a disposable coverall and a suitable dust mask (eg FFP3 or half mask with a P3 filter) could be worn. If a mask is used, the person should be face-fit tested and trained in its use [Full details in Asbestos Essentials Guidance EM6 Personal protective equipment (including RPE) - http://www.hse.gov.uk/pubns/guidance/em6.pdf].

Disposal of waste after the above clean up

15. Once the immediate clean up and containment has been completed the next stage is disposal. The material has to be classified as hazardous waste (or special waste as it referred to in Scotland) under waste legislation and so may only be transported to a licensed waste site by a waste carrier licensed by the relevant environmental regulator (ie The Environment Agency in England, the Scottish Environmental Protection Agency and Cyfoeth Naturiol Cymru).

a. In England, advice on how to do this can be found on the Environment Agency website (https://www.gov.uk/dispose-hazardous-waste),
b. in Scotland on the Scottish Environment Protection Agency website (https://www.sepa.org.uk/regulations/waste/special-waste/);
c. and in Wales on the Natural Resources Wales website (http://naturalresources.wales/guidance-and-advice/environmental-topics/waste-management/?lang=en);

Considerations when purchasing replacement gauzes

16. When sourcing replacement gauzes, buyers should seek confirmation from their suppliers that the supply chain is assured and that new gauzes do not contain any level of asbestos.

17. The only certain way of assuring this is for items originating outside the EU to be analysed by a laboratory accredited for asbestos identification by the UK Accreditation Service (UKAS). You should seek a copy of a valid UKAS test certificate for the gauze from your supplier.