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Letters to the Editor

THE USE OF XYLENE (XYLOL) IN MEDICAL LABORATORIES

Sir,

Coincidentally I have recently received two items of information concerning xylene (xylol) which may be of interest to laboratory workers, especially when large volumes are used for histopathology processing or other purposes.

1 The use of xylene to remove (clean) immersion oil from microscope slides after examination for acid-fast bacilli

Some months ago a medical student in Oxford asked me if the use of xylene for this purpose, especially if repeated, could impair the red (carbol fuchsin) staining of mycobacteria. I have never noted such an effect, nor heard of it from those with experience over many years in the examination and re-examination of slit-skin smears for leprosy bacilli. With regard to the use of xylene for cleaning microscope slides in tuberculosis, Dr B W Allen (Royal Postgraduate Medical School, Hammersmith Hospital, Ducane Road, London W12 0NN) has written to say that he has never noticed deterioration in acid-fastness, even after several cleanings. Nevertheless the question remains somewhat disconcerting, since slides in both leprosy and tuberculosis are often re-examined, sometimes several times, by supervisors or reference laboratories. I would be most interested to know if any of your readers have carried out a systematic study to see if there is in fact any recordable deterioration, especially after repeated use of xylene.

2 A xylene substitute

Xylene (xylol) is classified by the Health and Safety Factory Inspectorate of the United Kingdom as a material of 'medium' danger in laboratory, commercial or industrial situations. Apart from its hazard to health from inhalation or accidental ingestion, it is also highly flammable. It may be helpful to know that a substitute has been produced (Shandon Southern Products Ltd, 93–96 Chadwick Road, Astmoor, Runcorn, Cheshire WA7 1PR, England) which is non-flammable; readily distillable for re-cycling; not harmful to plastic parts of processors, etc; non-sensitizing to normal skin. It also has an airborne exposure limit three times safer than xylene (TLV is 300 ppm). Price: UK £27.00 for 4 litres.

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