FACT SHEET: **CARE AND HANDLING OF CUVETTES**

Proper maintenance of quartz cuvettes is an essential part of spectrophotometric analysis.

The following notes are based on the recommendations of Australian Standard AS 3753-2001.

Cuvettes in regular use should be stored either:

a) in a box lined with a suitably soft material (possibly one supplied by the manufacturer);
b) immersed in distilled water;
c) immersed in 1% v/v nitric acid.

Before use, cuvettes should be cleaned to remove any accumulated residue.
If the cuvettes appear clean, simply rinse several times with distilled water, then once with acetone (to prevent watermarks) and leave to air-dry in an inverted position (eg on a tissue) before use.

Repeat the same process after use, and if maintained in this manner, then drastic cleaning measures ought to be prevented.

If cuvettes do become heavily soiled, then the following solutions are recommended for soaking:

a) Distilled water
b) Mild, non-alkaline detergents (used at concentrations specified by the manufacturer)
c) Ten percent acetic acid
d) Cold concentrated nitric acid

Cleaning with any of the above solutions can be improved by doing so in an ultrasonic bath, but make sure the cuvettes are supported to prevent rubbing against other surfaces or other cuvettes, as they could be scratched.

Never use strong alkaline solutions, such as laboratory glassware detergent.

When using cuvettes, do not touch the optical windows. All cuvettes have two opaque surfaces for handling purposes.

Do not wipe the windows with paper tissues. Tissues are abrasive and may scratch the cuvette window, as well as leaving behind fibres and brightening agents (which will reduce transmission).

If the cuvettes must be wiped, then ‘Kimwipes’ or equivalent lens tissues are preferred.

Never clean and re-use plastic disposable cuvettes.

© Vintessential Laboratories 2012. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means without the prior written permission of the publisher.

CONTACT US
T: 1300 30 2242
info@vintessential.com.au
www.vintessential.com.au

PO BOX 161
STANTHORPE
QLD 4380

PO BOX 2244
DROMANA
VIC 3936

PO BOX 843
DUNSBOROUGH
WA 6281