



# Abbott Analytical



Consulting Scientists to the Disinfectant Industry

## Certificate of Analysis

**Sample(s) :** One sample of GreenGold

**Received from:** Busy Cleaning Ltd, Charter Court, Phoenix Way, Swansea, SA7 9FS

**Date received:** 8 March 2010      **Date tested:** 8 March 2010

**Certificate no:** 10C.035-KR.CLE      **Certificate date:** 11 March 2010

**Sample ref:** 10C/035      **Page:** 1 of 2

**Analysis required:** To prove efficacy of GreenGold disinfectant in situ as a suitable pipe cleaner and disinfectant

### Test procedure:

A 30cm length of 1cm bore clear plastic tubing was immersed in an overnight suspension of a mix of *Saccharomyces cerevisiae*, *Penicillium chrysogenum* and *Pseudomonas aeruginosa* for 15 minutes, ensuring that the tubing was totally filled with the microbial suspension. After this time the tube was removed and allowed to drain under gravity for approximately 1 hour.

After draining, the tube was cut in half and one half was examined by passing a sterile swab through the bore of the tube several times to remove micro-organisms deposited on the wall of the tube. The swab was then examined using standard microbiological recovery techniques and the numbers of yeasts, moulds and bacteria determined.

The second half of the tubing was treated with GreenGold solution using the technique normally adopted in situ for cleaning and sanitising beer pipes. After the cleaning process the inside of the tubing was swabbed with a separate clean sterile swab and the numbers of surviving micro-organisms determined in the same manner as the above control.

The results obtained are tabulated on the following page.

D C Watson



# Abbott Analytical



Consulting Scientists to the Disinfectant Industry

11 March 2010

Certificate No: 10C.035-KR.CLE

Page 2 of 2

## **Results:**

	<i>Saccharomyces cerevisiae</i>	<i>Penicillium chrysogenum</i>	<i>Pseudomonas aeruginosa</i>
Control pipe, no treatment	5.72 x 10 <sup>5</sup>	6.44 x 10 <sup>4</sup>	7.28 x 10 <sup>5</sup>
Pipe treated with GreenGold	0	0	0

## **Conclusion:**

GreenGold is a good cleaning / sanitising agent for cleaning beer pipes when used in accordance with the manufacturer's instructions.

D C Watson

D C Watson BSc, CBiol, MSB, MIFST, ACIEHO  
PO Box 95, New Ferry, Wirral, CH62 6HA  
Tel: 0151 637 3331 Mob: 07767 871275  
email: [abbottanalytical@hotmail.co.uk](mailto:abbottanalytical@hotmail.co.uk)