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## CERTIFICATE OF ANALYSIS

Alcohol Countermeasure Systems  
 Alcohol Reference Solution  
 Lot No: 201306G

Expiry Date: June 25, 2015

This solution was analyzed using the direct injection gas-chromatographic procedure coupled with the internal standard technique commensurate with forensic alcohol methodology.


A screening (pre-mix) analysis of the distilled water used in the preparation of this solution indicated that there were no volatile impurities present.

The target analytical concentration was 0.24- 0.244 gram/dL (wt/vol) ethyl alcohol in aqueous solution with an equivalent vapour alcohol concentration of 0.198 - 0.202 g/210L when used in a breath alcohol simulator heated to  $34 \pm 0.2^\circ\text{C}$ .

The solution was found to have an analytical concentration of 0.242 gram/dL (wt/vol) ethyl alcohol in aqueous solution with an equivalent vapour alcohol concentration of 0.200g/210L when used in a breath alcohol simulator heated to  $34 \pm 0.2^\circ\text{C}$ .

The solution is manufactured from distilled/de-ionized water and absolute ethyl alcohol (USP Grade). This lot contains 1578 bottles (of 500 mL each) of Alcohol Reference Solution.

Date of Analysis: June 25, 2013

  
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