



Alcohol Countermeasure Systems Corp  
50 International Boulevard  
Toronto, Ontario M9W 6J2  
CANADA  
acs-corp.com

## CERTIFICATE OF ANALYSIS

Alcohol Countermeasure Systems  
Alcohol Reference Solution  
Lot No: 201505A

Expiry Date: May 12, 2017

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 0.242 – 0.248 gram/dL (wt/vol) ethyl alcohol in aqueous solution with an equivalent vapour alcohol concentration of 0.200 - 0.205 gram/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 0.245 gram/dL (wt/vol) ethyl alcohol in aqueous solution with an equivalent vapour alcohol concentration of 0.203 g/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 2500 bottles (of 500 mL each) of Alcohol Reference Solution.

Date of Analysis: May 12, 2015

  
G.J. Kupferschmid, BCSEMI, MCIC, C.Chem  
G. Kupferschmid Consulting Services Ltd.

