

CERTIFICATE OF ANALYSIS

Alcohol Countermeasure Systems Alcohol Reference Solution Lot No: 201611B

Expiry Date: November 15, 2018

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 0.0968-0.0992~gram/dL~(wt/vol) ethyl alcohol in aqueous solution with an equivalent vapour alcohol concentration of 0.080-0.081~g/210L when used in a breath alcohol simulator heated to $34\pm0.2^{\circ}C$.

The solution was found to have an analytical concentration of 0.098 gram/dL (wt/vol) ethyl alcohol in aqueous solution with an equivalent vapour alcohol concentration of 0.081 g/210L when used in a breath alcohol simulator heated to 34 ± 0.2 °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: November 15, 2016

G.J. Kupferschmidd B.Sq. M.Sc., MSVC, C.Chem

G. Kupferschmidt Consulting Services Ltd