# Alcohol Reference Solution

# Certified Reference Materials



Alcohol Countermeasure Systems ARS is a premixed alcohol solution for immediate use, eliminating the need to mix solution in the field. It is prepared for use in a breath alcohol simulator which is capable of controlling the solution temperature at  $34 \pm 0.02$  °C. When air (breath) is bubbled through this solution, an equivalent BrAC is generated.

# Preparation

Absolute ethyl alcohol (USP Grade) is mixed with distilled water to provide an analytical concentration predictive of the equivalent BAC. Solutions are prepared ±2% target value.

#### **Analysis**

Each batch of solution is independently analyzed by gas chromatography and is traceable to the NIST standard. A Certificate of Analysis is available upon request.

### **Bottling**

The solution is bottled in high-density polyethylene bottles and closed with a poly seal cap. A neck seal is provided for integrity.

# Labeling

Each batch of ARS is given a unique lot number and is further identified by the equivalent BAC, the date of manufacture and the expiry date for use. Each bottle and each box of six (6) bottles is so labeled.

#### Concentrations

Available in standard concentrations to provide alcohol breath test instruments with the following readings:

0.10, 0.15, 0.20, 0.25, 0.30, 0.40, 0.50, 0.55, 0.75, 1.00 and 2.00 mg/L.

All ARS bottles and cases manufactured by ACS indicate the concentration of the premixed alcohol reference solution on their labels.

## Your safety, our promise

ISO 17034, ISO/IEC 17025, ISO 9001, IATF 16949 and ISO 14001 certified, ACS ensures high quality design and manufacturing of all products and services while balancing our respect for the environment. Our commitment to safety, quality and customer service defines our industry leadership.

mg/L	mg/dL	g/dL	Product number
0.10	20	0.02	95-000302
0.15	30	0.03	95-000303
0.20	40	0.04	95-000304
0.25	50	0.05	95-000305
0.30	60	0.06	95-000306
0.40	80	0.08	95-000308
0.50	100	0.10	95-000310
0.55	110	0.11	95-000311
0.75	150	0.15	95-000315
1.00	200	0.20	95-000320
2.00	400	0.40	95-000340

## Quality management certifications













60 International Boulevard, Toronto, Ontario M9W 6J2 CANADA +1 416 619 3500 | acs-corp.com

Warranty. ACS products are warranted to be free from defects in workmanship and material for one year from the date of purchase. Only qualified technicians should perform maintenance on any breath alcohol testing products. ACS breath alcohol testers are designed to provide accurate test results when used with our certified mouthpieces. Compliance with product certification is dependent upon the use of ACS parts. Using a mouthpiece that is not produced by ACS may affect the product certification by causing inaccurate readings.

ACS, Alcohol Countermeasure Systems, ALCOSIM and the "Molly" are trademarks of Alcohol Countermeasure Systems (International) Inc. and are used under license

© 2020 Alcohol Countermeasure Systems. The information disclosed in this document is the valuable property of Alcohol Countermeasure Systems (International) Inc. and all copyright and other proprietary rights to this document are reserved No reproduction of this document is permitted without prior written consent.