

## Material Safety Data Sheet – Alcohol Reference Solution

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### Section 1: Substance Identification and Company Information

**Substance:** Alcohol reference solution

**Other Names:** Alcohol Standard, Breath Simulator Standard, Standard Alcohol Solution, Alcohol Reference Solution.

**Company Information:** Alcohol Countermeasure Systems Limited

60 International Boulevard

Toronto, Ontario M9W 6J2 CANADA

### Section 2: Hazard Identification

Not applicable

### Section 3: Composition/Information on Ingredients:

ACS Part #	Item Description	Ethyl Alcohol %	Water %
95-000210	Solution. Std 100mL 3.38mg/mL Box/6	0.1815%	99.8185%
95-000301	Alcohol Reference Solution (10 mg%)- Box / 6 Bottles	0.0121%	99.9879%
95-000302	Alcohol Reference Solution (20 mg%)- Box / 6 Bottles	0.0242%	99.9758%
95-000303	Alcohol Reference Solution (30 mg%)- Box / 6 Bottles	0.0363%	99.9637%
95-000304	Alcohol Reference Solution (40 mg%)- Box / 6 Bottles	0.0484%	99.9516%
95-000305	Alcohol Reference Solution (50 mg%)- Box / 6 Bottles	0.0605%	99.9395%
95-000306	Alcohol Reference Solution (60 mg%)- Box / 6 Bottles	0.0726%	99.9274%
95-000307	Alcohol Reference Solution (70 mg%)- Box / 6 Bottles	0.0847%	99.9153%
95-000308	Alcohol Reference Solution (80 mg%)- Box / 6 Bottles	0.0968%	99.9032%
95-000309	Alcohol Reference Solution (45 mg%)- Box / 6 Bottles	0.0545%	99.9456%
95-000310	Alcohol Reference Solution (100 mg%)- Box / 6 Bottles	0.1210%	99.8790%
95-000311	Alcohol Reference Solution (110 mg%)- Box / 6 Bottles	0.1331%	99.8669%
95-000312	Alcohol Reference Solution (120 mg%)- Box / 6 Bottles	0.1452%	99.8548%
95-000315	Alcohol Reference Solution (150 mg%)- Box / 6 Bottles	0.1815%	99.8185%
95-000316	Alcohol Reference Solution (75 mg%)- Box / 6 Bottles	0.0908%	99.9093%
95-000317	Alcohol Reference Solution (170 mg%)- Box / 6 Bottles	0.2057%	99.7943%
95-000318	Alcohol Reference Solution (35 mg%)- Box / 6 Bottles	0.0424%	99.9577%

95-000319	Alcohol Reference Solution (15 mg%)- Box / 6 Bottles	0.0182%	99.9819%
95-000320	Alcohol Reference Solution (200 mg%)- Box / 6 Bottles	0.2420%	99.7580%
95-000325	Alcohol Reference Solution (250 mg%)- Box / 6 Bottles	0.3025%	99.6975%
95-000330	Alcohol Reference Solution (300 mg%)- Box / 6 Bottles	0.3630%	99.6370%
95-000331	Draeger Alcohol Reference Solution (100 mg%) - Box / 6 Bottles	0.1210%	99.8790%
95-000332	Alcohol Reference Solution 0.42 mg/L – 20L Jug	0.1067%	99.8933%
95-000333	Alcohol Reference Solution 1.5 mg/L – 20L Jug	0.3812%	99.6189%
95-000334	Alcohol Reference Solution 0.26 mg/L – 20L Jug	0.0661%	99.9339%
95-000340	Alcohol Reference Solution (400 mg%)- Box / 6 Bottles	0.4840%	99.5160%
95-100305	Alcohol Reference Solution .05 FDLE Certified	0.0605%	99.9395%
95-100308	Alcohol Reference Solution .08 FDLE Certified	0.0968%	99.9032%
95-100320	Alcohol Reference Solution .20 FDLE Certified	0.0242%	99.9758%
95-600305	Solution Std 500mL 5mg% Box/6	0.0061%	99.9940%
95-600306	Solution Std 500mL 25mg% Box/6	0.0303%	99.9698%
95-600307	Solution Std 500mL 45mg% Box/6	0.0545%	99.9456%

## Section 4: First Aid Measures

**Ingestion:** Product is not toxic

**Skin Contact:** No effect

**Inhalation:** No effect

**Eye Contact:** No effect

## Section 5: Fire Fighting Measures

The product is non-flammable

## Section 6: Accidental Release Measures

Contain the spill using an absorbent. Dispose waste in compliance with local, state/provincial and federal regulations.

## Section 7: Handling and Storage

No special precautions required while handling this product.

Store at room temperature 65-77°F/18-25°C. Keep from freezing.

## Section 8: Exposure Controls/Personal Protection

No special precautions required.

## Section 9: Physical and Chemical Properties

**Appearance:** Physical state: clear liquid  
Color: colorless

**Molecular Weight:** (mixture)

**Chemical Formula:** Mixture

**Odor:** Fragrant weak odor of alcohol

**Specific Gravity (water =1.0)** 1.0

**Solubility in Water:** Miscible in all proportions

**Boiling Point:** 212°C (100°C)

**Melting Point:** 32°C (0°C)

**Vapor Pressure:** 17.5 mm Hg @ 20°C (Water)

**Evaporation Rate:** Not available (BuAc=1)

**Vapor Density:** 0.62 (Air=1)

**pH:** 7.0

**Flash Point:** N/A

## Section 10: Stability and Reactivity

**Stability:** This product is stable

**Incompatibility:** None

**Reactivity:** None

## Section 11: Toxicological Information

This product is not toxic.

## Section 12: Ecological Information

Effects on environment and animal life are not known.

## Section 13: Disposal Consideration

Dispose waste in compliance with local, state/provincial and federal regulations.

**Section 14: Transport Information**

**KEEP FROM FREEZING**

**Shipping Name:** Alcohol Reference Solution

**Tariff/Harmonized Code:** 382200 Composite Diagnostic or Laboratory Reagents

**Section 15: Regulatory information**

**Section 16: Other Information**

**Reference Used:** NIST MSDS for reference solution

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