



Certificate of Analysis

Custom Standard

Product Number: CUS-13303

Page: 1 of 2

Lot Number: CH-2375

Lot Issue Date: 25-Jul-2011

Expiration Date: 31-Aug-2013

This Certified Reference Material (RM) was manufactured and verified in accordance with ULTRA Scientific's ISO 9001 registered quality system. A review of the gravimetric preparation data by our ISO 17025 accredited laboratory serves to verify the concentration of each analyte. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
1-propanol	000071-23-8	11581PC	100.3 ± 0.5 µg/mL
isobutyl alcohol	000078-83-1	RM00981	100.3 ± 0.5 µg/mL
isoamyl alcohol	000123-51-3	06045JF	100.3 ± 0.5 µg/mL
methanol	000067-56-1	50055	10.0 ± 0.1 µg/mL
ethyl acetate	000141-78-6	46052	10.0 ± 0.1 µg/mL
acetaldehyde	000075-07-0	18396DK	50.2 ± 0.3 µg/mL
2-phenylethanol	000060-12-8	DZ-02912JM	2.01 ± 0.01 µg/mL
1-pentanol	000071-41-0	HQ-09501EQ	2.01 ± 0.01 µg/mL
ethyl octanoate	000106-32-1	KY-10391HX	2.01 ± 0.01 µg/mL
ethyl lactate	000097-64-3	02529HH	2.01 ± 0.01 µg/mL
isobutyl acetate	000110-19-0	RM01228	2.01 ± 0.01 µg/mL
ethyl hexanoate	000123-66-0	AA-15201MR	2.01 ± 0.01 µg/mL
ethyl decanoate	000110-38-3	HS-20403BS	2.01 ± 0.01 µg/mL
ethyl dodecanoate	000106-33-2	RM01071	2.01 ± 0.01 µg/mL
diacetyl	000431-03-8	RM01819	2.01 ± 0.01 µg/mL
isoamyl acetate	000123-92-2	TR-00825AR	2.01 ± 0.01 µg/mL
S-(-)-2-methyl-1-butanol	001565-80-6	01727KF	100.3 ± 0.5 µg/mL
furfural	000098-01-1	01019ME	10.0 ± 0.1 µg/mL

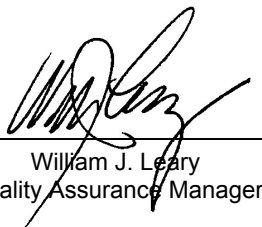
ULTRA uses balances calibrated with weights traceable to NIST in compliance with ANSI/NCSS Z-540-1 and ISO 9001, and calibrated Class A glassware in the manufacturing of these standards.



ISO 17025:2005
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William J. Leary
Quality Assurance Manager



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Matrix: ethanol/water (70:30 V/V)

Storage: Store at < 4° C, Do Not Freeze

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