

Certificate of Analysis

VOC Mixture

Product Number: DWM-583 Page: 1 of 3

Lot Number: CG-3973 Lot Issue Date: 20-Dec-2010 Expiration Date: 31-Dec-2013

This Certified Reference Material (RM) was manufactured and verified in accordance with ULTRA's ISO 9001 registered quality system, and the analyte concentrations were verified by our ISO 17025 accredited laboratory. 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
benzene	000071-43-2	34097	$200.6 \pm 1.0 \mu g/mL$
bromobenzene	000108-86-1	CG-02513MF	$200.6 \pm 1.0 \mu g/mL$
bromochloromethane	000074-97-5	JS-16015HS	$200.6 \pm 1.0 \mu g/mL$
bromodichloromethane	000075-27-4	DU-14522LS	$200.6 \pm 1.0 \mu g/mL$
bromoform	000075-25-2	12312KC	$200.6 \pm 1.0 \mu g/mL$
n-butylbenzene	000104-51-8	AA-28519CO	$200.6 \pm 1.0 \mu g/mL$
sec-butylbenzene	000135-98-8	07610JE	$200.6 \pm 1.0 \mu g/mL$
tert-butylbenzene	000098-06-6	MQ-04010MQ	$200.6 \pm 1.0 \mu g/mL$
carbon tetrachloride	000056-23-5	01704MF	$200.6 \pm 1.0 \mu g/mL$
chlorobenzene	000108-90-7	013148HZ	$200.6 \pm 1.0 \mu g/mL$
chloroform	000067-66-3	05143MN	$200.6 \pm 1.0 \mu g/mL$
2-chlorotoluene	000095-49-8	10018BC,K2-03	$200.6 \pm 1.0 \mu g/mL$
4-chlorotoluene	000106-43-4	03327TH	$200.6 \pm 1.0 \mu g/mL$
dibromochloromethane	000124-48-1	CU-07705AN	$200.6 \pm 1.0 \mu g/mL$
1,2-dibromo-3-chloropropane	000096-12-8	FBL-01	$200.6 \pm 1.0 \mu g/mL$
1,2-dibromoethane	000106-93-4	TB-101777	$200.6 \pm 1.0 \mu g/mL$
dibromomethane	000074-95-3	EM-01514TJ	$200.6 \pm 1.0 \mu g/mL$
1,2-dichlorobenzene	000095-50-1	08946KY	$200.6 \pm 1.0 \mu g/mL$
1,3-dichlorobenzene	000541-73-1	JN-05902LZ	$200.6 \pm 1.0 \mu g/mL$
1,4-dichlorobenzene	000106-46-7	22628EB	$200.6 \pm 1.0 \mu g/mL$

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



ISO 17025:2005 Accredited A2LA Cert. No. 0851-01

ISO 9001:2008 Registered TUV USA, Inc. Cert. No. 09-1009

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William P. Leafy
Quality Assurance Manager



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Analyte	CAS#	Analyte Lot	True Value
1,1-dichloroethane	000075-34-3	64552/1	$200.6 \pm 1.0 \mu g/mL$
1,2-dichloroethane	000107-06-2	KN-09446KN	$200.6 \pm 1.0 \mu g/mL$
1,1-dichloroethene	000075-35-4	02226CH	$200.6 \pm 1.0 \mu g/mL$
cis-1,2-dichloroethene	000156-59-2	05602PH	200.6 ± 1.0 μg/mL
trans-1,2-dichloroethene	000156-60-5	01306HD	200.6 ± 1.0 μg/mL
1,2-dichloropropane	000078-87-5	DC-120777	200.6 ± 1.0 μg/mL
1,3-dichloropropane	000142-28-9	PO-18920BO	200.6 ± 1.0 μg/mL
2,2-dichloropropane	000594-20-7	03503TD	200.6 ± 1.0 μg/mL
1,1-dichloropropene	000563-58-6	PR111308-01	200.6 ± 1.0 μg/mL
cis-1,3-dichloropropene	010061-01-5	PR051109-01	200.6 ± 1.0 μg/mL
trans-1,3-dichloropropene	010061-02-6	101007-01	$200.6 \pm 1.0 \mu g/mL$
ethylbenzene	000100-41-4	01558CC	$200.6 \pm 1.0 \mu g/mL$
hexachlorobutadiene	000087-68-3	339923/1	$200.4 \pm 1.0 \mu\text{g/mL}$
isopropylbenzene	000098-82-8	02827BH	$200.6 \pm 1.0 \mu g/mL$
4-isopropyltoluene	000099-87-6	PP-05104CP	$200.6 \pm 1.0 \mu g/mL$
methylene chloride	000075-09-2	48191	$200.6 \pm 1.0 \mu g/mL$
naphthalene	000091-20-3	14205KB	$200.6 \pm 1.0 \mu g/mL$
n-propylbenzene	000103-65-1	LO-14503MR	$200.6 \pm 1.0 \mu g/mL$
styrene	000100-42-5	LR-11228MQ	$200.6 \pm 1.0 \mu g/mL$
1,1,1,2-tetrachloroethane	000630-20-6	10312DD	$200.6 \pm 1.0 \mu g/mL$
1,1,2,2-tetrachloroethane	000079-34-5	10917TB	$200.6 \pm 1.0 \mu g/mL$
tetrachloroethene	000127-18-4	PS-00344BR	200.6 ± 1.0 μg/mL
toluene	000108-88-3	47144	200.6 ± 1.0 μg/mL
1,2,3-trichlorobenzene	000087-61-6	12912PF	200.6 ± 1.0 μg/mL

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



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Analyte	CAS#	Analyte Lot	True Value
1,2,4-trichlorobenzene	000120-82-1	00334TQ	$200.6 \pm 1.0 \mu g/mL$
1,1,1-trichloroethane	000071-55-6	LU-13149TR	$200.6 \pm 1.0 \mu g/mL$
1,1,2-trichloroethane	000079-00-5	JB-0701HH	$200.6 \pm 1.0 \mu g/mL$
trichloroethene	000079-01-6	KN-08846KN	$200.6 \pm 1.0 \mu g/mL$
1,2,3-trichloropropane	000096-18-4	01610KH	$200.6 \pm 1.0 \mu g/mL$
1,2,4-trimethylbenzene	000095-63-6	BO-13528BI	$200.6 \pm 1.0 \mu g/mL$
1,3,5-trimethylbenzene	000108-67-8	KM-02011HM	$200.6 \pm 1.0 \mu g/mL$
o-xylene	000095-47-6	DO-06834CO	$200.6 \pm 1.0 \mu g/mL$
m-xylene	000108-38-3	DI-00459CI	$200.6 \pm 1.0 \mu g/mL$
p-xylene	000106-42-3	03747LN	200.6 ± 1.0 μg/mL

Matrix: methanol (methyl alcohol)

Storage: Store at < 4° C

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