

# Certificate of Analysis ISO 17034

### **VOC Standard**

**Product Number:** DWM-580-1 Page: 1 of 3

Lot Number: 0006472371 Lot Issue Date: 07-Jun-2019 Expiration Date: 31-Jul-2021

This ISO 17034 Reference Material (RM) was manufactured and verified in accordance with Agilent'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
bromochloromethane	000074-97-5	RM00009	$200.3 \pm 1.0 \mu g/mL$
bromodichloromethane	000075-27-4	RM14215	$200.3 \pm 1.0 \mu g/mL$
bromoform	000075-25-2	RM07516	$200.5 \pm 1.0 \mu g/mL$
carbon tetrachloride	000056-23-5	RM07576	200.1 ± 1.0 μg/mL
chloroform	000067-66-3	RM13988	$200.6 \pm 1.0 \mu g/mL$
dibromochloromethane	000124-48-1	RM13909	$200.3 \pm 1.0 \mu g/mL$
dibromomethane	000074-95-3	RM12878	200.4 ± 1.0 μg/mL
methylene chloride	000075-09-2	RM11650	$200.3 \pm 1.0 \mu g/mL$
1,2-dibromoethane	000106-93-4	RM00018	$200.8 \pm 1.0 \mu g/mL$
1,1-dichloroethane	000075-34-3	RM14251	$200.8 \pm 1.0 \mu g/mL$
1,2-dichloroethane	000107-06-2	RM04655	$200.9 \pm 1.0 \mu g/mL$
1,1-dichloroethene	000075-35-4	RM13648	$200.8 \pm 1.0 \mu g/mL$
cis-1,2-dichloroethene	000156-59-2	RM12063	$201.0 \pm 1.0 \mu g/mL$
trans-1,2-dichloroethene	000156-60-5	RM12715	200.9 ± 1.0 μg/mL
1,1,1,2-tetrachloroethane	000630-20-6	RM12632	200.9 ± 1.0 μg/mL
1,1,2,2-tetrachloroethane	000079-34-5	NT00390	$201.0 \pm 1.0 \mu g/mL$
tetrachloroethene	000127-18-4	RM06491	200.9 ± 1.0 μg/mL
1,1,1-trichloroethane	000071-55-6	RM14226	$200.8 \pm 1.0 \mu g/mL$
1,1,2-trichloroethane	000079-00-5	RM01175	$200.8 \pm 1.0 \mu g/mL$
trichloroethene	000079-01-6	RM14232	$200.6 \pm 1.0 \mu g/mL$
1,2-dibromo-3-chloropropane	000096-12-8	RM12895	$200.8 \pm 1.0 \mu g/mL$





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1,2-dichloropropane	000078-87-5	RM12821	$200.9 \pm 1.0 \mu g/mL$
1,3-dichloropropane	000142-28-9	RM02080	$200.8 \pm 1.0 \mu g/mL$
2,2-dichloropropane	000594-20-7	RM12927	$200.8 \pm 1.0 \mu g/mL$
1,1-dichloropropene	000563-58-6	RM14334	$200.8 \pm 1.0 \mu g/mL$
cis-1,3-dichloropropene	010061-01-5	RM12891	$201.0 \pm 1.0 \mu g/mL$
trans-1,3-dichloropropene	010061-02-6	RM12254	$200.9 \pm 1.0 \mu g/mL$
hexachlorobutadiene	000087-68-3	RM09157	$200.8 \pm 1.0 \mu g/mL$
1,2,3-trichloropropane	000096-18-4	RM13082	$200.9 \pm 1.0 \mu g/mL$
benzene	000071-43-2	RM03830	$200.9 \pm 1.0 \mu g/mL$
n-butylbenzene	000104-51-8	RM03661	$200.9 \pm 1.0 \mu g/mL$
sec-butylbenzene	000135-98-8	RM10905	$200.9 \pm 1.0 \mu g/mL$
tert-butylbenzene	000098-06-6	RM14040	$200.8 \pm 1.0 \mu g/mL$
ethylbenzene	000100-41-4	RM12195	$200.8 \pm 1.0 \mu g/mL$
isopropylbenzene	000098-82-8	RM00835	$200.9 \pm 1.0 \mu g/mL$
4-isopropyltoluene	000099-87-6	RM09747	$200.9 \pm 1.0 \mu g/mL$
naphthalene	000091-20-3	NT00970	$200.9 \pm 1.0 \mu g/mL$
n-propylbenzene	000103-65-1	RM12785	$200.9 \pm 1.0 \mu g/mL$
styrene	000100-42-5	RM13393	$200.9 \pm 1.0 \mu g/mL$
toluene	000108-88-3	RM12707	$201.0 \pm 1.0 \mu g/mL$
1,2,4-trimethylbenzene	000095-63-6	RM06731	$200.9 \pm 1.0 \mu g/mL$
1,3,5-trimethylbenzene	000108-67-8	RM12905	$200.9 \pm 1.0 \mu g/mL$
o-xylene	000095-47-6	RM13768	$200.9 \pm 1.0 \mu g/mL$
m-xylene	000108-38-3	RM14037	$200.9 \pm 1.0 \mu g/mL$
p-xylene	000106-42-3	RM02647	$200.8 \pm 1.0 \mu g/mL$
bromobenzene	000108-86-1	RM10227	$201.0 \pm 1.0 \mu g/mL$





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Analyte	CAS#	Analyte Lot	True Value
chlorobenzene	000108-90-7	RM01874	$200.9 \pm 1.0 \mu g/mL$
2-chlorotoluene	000095-49-8	RM13774	$200.8 \pm 1.0 \mu g/mL$
4-chlorotoluene	000106-43-4	RM11750	$200.9 \pm 1.0 \mu g/mL$
1,2-dichlorobenzene	000095-50-1	RM13636	$200.7 \pm 1.0 \mu g/mL$
1,3-dichlorobenzene	000541-73-1	NT00356	$200.7 \pm 1.0 \mu g/mL$
1,4-dichlorobenzene	000106-46-7	RM12826	$201.0 \pm 1.0 \mu g/mL$
1,2,3-trichlorobenzene	000087-61-6	RM10193	$200.5 \pm 1.0 \mu g/mL$
1,2,4-trichlorobenzene	000120-82-1	RM09454	$200.9 \pm 1.0 \mu g/mL$
bromomethane	000074-83-9	RM00064	$201.0 \pm 1.0 \mu g/mL$
chloroethane	000075-00-3	RM00065	$201.0 \pm 1.0 \mu g/mL$
chloromethane	000074-87-3	RM12571	$200.9 \pm 1.0 \mu g/mL$
dichlorodifluoromethane	000075-71-8	RM05289	$201.0 \pm 1.0 \mu g/mL$
trichlorofluoromethane	000075-69-4	RM00017	$200.3 \pm 1.0 \mu g/mL$
vinyl chloride	000075-01-4	RM05458	$201.0 \pm 1.0 \mu g/mL$

Matrix: methanol (methyl alcohol)

Storage: Store Frozen (-25° to -10°C).

Agilent 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.

Monica Bourgeois QMS Representative



