

**Chemistry, BIPM**

Matrix	Measurand			Dissemination Range of Measurement Capability			Range of Expanded Uncertainties as Disseminated					Mechanism for Measurement Service Delivery	Measurement Technique Used	Comments
	Analyte or Component	CAS Number	Quantity	From	To	Unit	Value	Unit	Cov. factor	Lev. of confid.	Is the expanded uncertainty a relative one?			
Synthetic air	ozone	10028-15-6	Amount of substance fraction $x(O_3)$	0	1000	nmol/mol	$2Q[0.52, 0.0034 x(O_3), 0.0106 x(O_3)],$ $x(O_3)$ in nmol/mol	nmol/mol	2	95%	no	Calibration Service	UV Photometry	1) The notation $Q[a, b]$ stands for the root-sum-square of the terms between brackets 2) The claimed uncertainty includes a term coming from the best device under test  Details on uncertainty budget published in: Viallon J., Moussay P., Norris J.E., Guenther F.R., Wielgosz R.I.[BIPM, NIST] Metrologia, 2006, 43, n°5, 441-450