

Amount of substance, Gases, Spain

CEM (Centro Español de Metrología), ISCIII (Instituto de Salud Carlos III)

The expanded uncertainty range is expressed as the uncertainty of the smallest value of the quantity to the uncertainty of the largest value of the quantity.

The expanded uncertainties correspond to $k = 2$ (level of confidence 95%)

NMI Service Identifier	Measurement Service Sub-Category	Matrix	Measurand		Dissemination Range of Measurement Capability			Range of Expanded Uncertainties as Disseminated				Range of Certified Values in Reference Materials			Range of Expanded Uncertainties for Certified Value				Mechanism(s) for Measurement Service Delivery	Comments	Service provider
			Analyte or Component	Quantity	From	To	Unit	From	To	Unit	Is the expanded uncertainty a relative one?	From	To	Unit	From	To	Unit	Is the expanded uncertainty a relative one?			
6.6-05(a)	Environmental	nitrogen	nitrogen monoxide	Amount-of-substance fraction	1	10	µmol/mol	2.3	0.23	%	Yes	1	10	µmol/mol	2.3	0.23	%	Yes	Calibration, CRM, 6.6-05(a)	Approved on 30 June 2017	CEM
6.6-06(a)	Environmental	nitrogen or synthetic air	methane	Amount-of-substance fraction	1	10	µmol/mol	2.3	0.23	%	Yes	1	10	µmol/mol	2.3	0.23	%	Yes	Calibration, CRM, 6.6-06(a)	Approved on 30 June 2017	CEM
6.6-02(a)	Environmental	nitrogen or synthetic air	carbon dioxide	Amount of substance fraction	10	500000	µmol/mol	0.2	0.2	%	Yes	10	500000	µmol/mol	0.2	0.2	%	Yes	Calibration, CRM, 6.6-02(a)	Approved on 30 June 2017	CEM
6.6-04(b)	Environmental	nitrogen or synthetic air	propane	Amount-of-substance fraction	10	10000	µmol/mol	0.2	0.2	%	Yes	10	10000	µmol/mol	0.2	0.2	%	Yes	Calibration, CRM, 6.6-04(b)	Approved on 30 June 2017	CEM
6.6-01(b)	Environmental	nitrogen or synthetic air	carbon monoxide	Amount of substance fraction	1	10	µmol/mol	2.3	0.27	%	Yes	1	10	µmol/mol	2.3	0.27	%	Yes	Calibration, CRM, 6.6-01(b)	Approved on 30 June 2017	CEM
6.6-01(a)	Environmental	nitrogen or synthetic air	carbon monoxide	Amount of substance fraction	10	500000	µmol/mol	0.27	0.23	%	Yes	10	500000	µmol/mol	0.27	0.23	%	Yes	Calibration, CRM, 6.6-01(a)	Approved on 30 June 2017	CEM
6.6-03(a)	Environmental	nitrogen	oxygen	Amount-of-substance fraction	10	500000	µmol/mol	0.2	0.2	%	Yes	10	500000	µmol/mol	0.2	0.2	%	Yes	Calibration, CRM, 6.6-03(a)	Approved on 30 June 2017	CEM
6.6-03(b)	Environmental	nitrogen	oxygen	Amount-of-substance fraction	1	10	µmol/mol	2.3	0.2	%	Yes	1	10	µmol/mol	2.3	0.2	%	Yes	Calibration, CRM, 6.6-03(b)	Approved on 30 June 2017	CEM
6.6-4A(b)	Environmental	nitrogen	carbon monoxide	Amount-of-substance fraction	5	100	mmol/mol	0.6	0.6	%	Yes	5	100	mmol/mol	0.9	0.9	%	Yes	CRM supply and analyser calibration	Approved on 31 March 2006	CEM
			carbon dioxide	Amount-of-substance fraction	10	200	mmol/mol	1.0	1.0	%	Yes	10	200	mmol/mol	1.2	1.2	%	Yes	CRM supply and analyser calibration		
			propane	Amount-of-substance fraction	600	4000	µmol/mol	0.9	0.9	%	Yes	600	4000	µmol/mol	1.2	1.2	%	Yes	CRM supply and analyser calibration		

Amount of substance, Gases, Spain

CEM (Centro Español de Metrología), ISCIII (Instituto de Salud Carlos III)

The expanded uncertainty range is expressed as the uncertainty of the smallest value of the quantity to the uncertainty of the largest value of the quantity.

The expanded uncertainties correspond to $k = 2$ (level of confidence 95%)

NMI Service Identifier	Measurement Service Sub-Category	Matrix	Measurand		Dissemination Range of Measurement Capability			Range of Expanded Uncertainties as Disseminated				Range of Certified Values in Reference Materials			Range of Expanded Uncertainties for Certified Value				Mechanism(s) for Measurement Service Delivery	Comments	Service provider
			Analyte or Component	Quantity	From	To	Unit	From	To	Unit	Is the expanded uncertainty a relative one?	From	To	Unit	From	To	Unit	Is the expanded uncertainty a relative one?			
6.6-4A(a)	Environmental	nitrogen	carbon monoxide	Amount -of-substance fraction	10	500000	$\mu\text{mol}/\text{m ol}$	0.2	0.2	%	Yes	10	500000	$\mu\text{mol}/\text{m ol}$	0.2	0.2	%	Yes	Calibration, CRM, 6.6-4A(a)	Approved on 30 June 2017	CEM
			carbon dioxide	Amount -of-substance fraction	10	500000	$\mu\text{mol}/\text{m ol}$	0.2	0.2	%	Yes	10	500000	$\mu\text{mol}/\text{m ol}$	0.2	0.2	%				
			propane	Amount -of-substance fraction	10	500000	$\mu\text{mol}/\text{m ol}$	0.2	0.2	%	Yes	10	500000	$\mu\text{mol}/\text{m ol}$	0.2	0.2	%				
			oxygen	Amount -of-substance fraction	10	500000	$\mu\text{mol}/\text{m ol}$	0.2	0.2	%	Yes	10	500000	$\mu\text{mol}/\text{m ol}$	0.2	0.2	%				
ISCIII/01	Environmental	purified air	ozone	Amount of substance fraction	0	1000	$\text{nmol}/\text{m ol}$	Q[1.4, 0.022 x(O ₃)]		$\text{nmol}/\text{m ol}$	No								Calibration of monitors and ozone generation	Approved on 08 July 2015	ISCIII
6.6-07(a)	Environmental	nitrogen	nitrogen dioxide	Amount-of-substance fraction	10	500	$\mu\text{mol}/\text{m ol}$	2.7	2	%	Yes								Calibration, 6.6-07(a)	Approved on 13 June 2013	CEM
6.6-08(a)	Forensic	nitrogen	ethanol	Amount-of-substance fraction	100	800	$\mu\text{mol}/\text{m ol}$	3	0.8	%	Yes								Calibration, 6.6-08(a)	Approved on 08 July 2015	CEM

Amount of substance, Gases, Spain

CEM (Centro Español de Metrología), ISCIII (Instituto de Salud Carlos III)

The expanded uncertainty range is expressed as the uncertainty of the smallest value of the quantity to the uncertainty of the largest value of the quantity.

The expanded uncertainties correspond to $k = 2$ (level of confidence 95%)

NMI Service Identifier	Measurement Service Sub-Category	Matrix	Measurand		Dissemination Range of Measurement Capability			Range of Expanded Uncertainties as Disseminated				Range of Certified Values in Reference Materials			Range of Expanded Uncertainties for Certified Value				Mechanism(s) for Measurement Service Delivery	Comments	Service provider
			Analyte or Component	Quantity	From	To	Unit	From	To	Unit	Is the expanded uncertainty a relative one?	From	To	Unit	From	To	Unit	Is the expanded uncertainty a relative one?			
6.6-7G(2)	Fuel	synthetic natural gas	methane	Amount-of-substance fraction	740	920	mmol/mol	0.3	0.5	%	Yes								Calibration, 6.6-7G(2)	Approved on 08 July 2015	CEM
				Amount-of-substance fraction	28	95	mmol/mol	0.6	0.4	%	Yes										
				Amount-of-substance fraction	8	35	mmol/mol	1.0	0.3	%	Yes										
				Amount-of-substance fraction	1.5	12	mmol/mol	1.4	0.5	%	Yes										
				Amount-of-substance fraction	1.5	12	mmol/mol	1.4	0.4	%	Yes										
				Amount-of-substance fraction	8	32	mmol/mol	1.6	0.5	%	Yes										
				Amount-of-substance fraction	35	75	mmol/mol	1.3	0.5	%	Yes										
6.6-02(b)	Environmental	nitrogen or synthetic air	carbon dioxide	Amount-of-substance fraction	1	10	$\mu\text{mol/mol}$	2	0.2	%	Yes	1	10	$\mu\text{mol/mol}$	2	0.2	%	Yes	Calibration, CRM, 6.6-02(b)	Approved on 30 June 2017	CEM
6.6-04(a)	Environmental	nitrogen or synthetic air	propane	Amount-of-substance fraction	1	10	$\mu\text{mol/mol}$	2.3	0.23	%	Yes	1	10	$\mu\text{mol/mol}$	2.3	0.23	%	Yes	Calibration, CRM, 6.6-04(a)	Approved on 30 June 2017	CEM
6.6-04(c)	Environmental	nitrogen	propane	Amount-of-substance fraction	10000	500000	$\mu\text{mol/mol}$	0.23	0.23	%	Yes	10000	500000	$\mu\text{mol/mol}$	0.23	0.23	%	Yes	Calibration, CRM, 6.6-04(c)	Approved on 30 June 2017	CEM
6.6-05(b)	Environmental	nitrogen	nitrogen monoxide	Amount-of-substance fraction	10	500000	$\mu\text{mol/mol}$	0.23	0.23	%	Yes	10	500000	$\mu\text{mol/mol}$	0.23	0.23	%	Yes	Calibration, CRM, 6.6-05(b)	Approved on 30 June 2017	CEM
6.6-06(b)	Environmental	nitrogen or synthetic air	methane	Amount-of-substance fraction	10	25000	$\mu\text{mol/mol}$	0.23	0.23	%	Yes	10	25000	$\mu\text{mol/mol}$	0.23	0.23	%	Yes	Calibration, CRM, 6.6-06(b)	Approved on 30 June 2017	CEM

Amount of substance, Gases, Spain

CEM (Centro Español de Metrología), ISCIII (Instituto de Salud Carlos III)

The expanded uncertainty range is expressed as the uncertainty of the smallest value of the quantity to the uncertainty of the largest value of the quantity.

The expanded uncertainties correspond to $k = 2$ (level of confidence 95%)

NMI Service Identifier	Measurement Service Sub-Category	Matrix	Measurand		Dissemination Range of Measurement Capability			Range of Expanded Uncertainties as Disseminated				Range of Certified Values in Reference Materials			Range of Expanded Uncertainties for Certified Value				Mechanism(s) for Measurement Service Delivery	Comments	Service provider
			Analyte or Component	Quantity	From	To	Unit	From	To	Unit	Is the expanded uncertainty a relative one?	From	To	Unit	From	To	Unit	Is the expanded uncertainty a relative one?			
6.6-06(c)	Environmental	nitrogen	methane	Amount-of-substance fraction	25000	500000	$\mu\text{mol/mol}$	0.23	0.23	%	Yes	25000	500000	$\mu\text{mol/mol}$	0.23	0.23	%	Yes	Calibration, CRM, 6.6-06(c)	Approved on 30 June 2017	CEM