

Amount of substance, Fuels, Germany, BAM (Bundesanstalt für Materialforschung und -prüfung)

The expanded uncertainty ranges given in the following CMCs may be expressed according to two conventions.

For 'Uncertainty convention 1', the expanded uncertainty range spans from the smallest numerical value of the uncertainty to the largest numerical value of the uncertainty found within the quantity range.

For 'Uncertainty convention 2', 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	
			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?			
I.2-01-08	Petroleum products	petroleum products	sulfur	Mass fraction	5	1000	µg/g	5	2	%	Yes								Reference measurement		Uncertainty convention 2
Fuels-1	Petroleum products	diesel fuel	sulfur	Mass fraction	10	4000	mg/kg	0.3	6	mg/kg	No								Reference measurement	Approved on 07 November 2006	Uncertainty convention 1
Fuels-2	Petroleum products	petrol	sulfur	Mass fraction	8	100	mg/kg	0.3	0.5	mg/kg	No	9.1	9.1	mg/kg	0.8	0.8	mg/kg	No	ERM-EF213	Approved on 06 December 2011	Uncertainty convention 2