## Amount of substance, pH, Slovakia (Slovak Republic), SMU (Slovensky Metrologicki Ustav)



In the case where an uncertainty range is given, 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 Category		Quantity	Measu	ge of	Uı	nge of Ex ncertainti Dissemin	es as	Certified in Refe			nge of Ex ainties fo Value	r Certified	Mechanism(s) for Measurement Service Delivery	Comments
		Matrix		From	То	From	То	Is the expanded uncertainty a relative one?	From	То	From	То	Is the expanded uncertainty a relative one?		
E10	рН	aqueous pH buffer solution	рН	1.5	1.9	0.002	0.003	No	1.5	1.9	0.005	0.005	No	SMU CRM E10	Declared uncertainties do not include the uncertainty contribution due to the Bates-Guggenheim convention. Measurement temperature 10 °C to 50 °C, data given for 25 °C Approved on 06 December 2011
E11	рН	aqueous pH buffer solution	рН	3.8	4.2	0.002	0.003	No	3.8	4.2	0.005	0.005	No	SMU CRM E11	Declared uncertainties do not include the uncertainty contribution due to the Bates-Guggenheim convention. Measurement temperature 10 °C to 50 °C, data given for 25 °C Approved on 06 December 2011
E12	рН	aqueous pH buffer solution	рН	6.8	7.2	0.002	0.003	No	6.8	7.2	0.005	0.005	No	SMU CRM E12	Declared uncertainties do not include the uncertainty contribution due to the Bates-Guggenheim convention. Measurement temperature 10 °C to 50 °C, data given for 25 °C Approved on 06 December 2011
E13	рН	aqueous pH buffer solution	рН	9.0	9.4	0.002	0.003	No	9.0	9.4	0.005	0.005	No	SMU CRM E13	Declared uncertainties do not include the uncertainty contribution due to the Bates-Guggenheim convention. Measurement temperature 10 °C to 50 °C, data given for 25 °C Approved on 06 December 2011

## Amount of substance, pH, Slovakia (Slovak Republic), SMU (Slovensky Metrologicki Ustav)



In the case where an uncertainty range is given, 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 Category	Matrix		Measu	ge of	U	Range of Expanded Uncertainties as Disseminated			ge of I Values erence erials		nge of Ex ainties fo Value	r Certified	Mechanism(s) for		
			Quantity	From	То	From	То	Is the expanded uncertainty a relative one?	From	То	From	То	Is the expanded uncertainty a relative one?	Measurement Service Delivery	Comments	
-	E14	рН	aqueous pH buffer solution	рН	9.8	10.2	0.002	0.004	No	9.8	10.2	0.005	0.005	No	SMU CRM E14	Declared uncertainties do not include the uncertainty contribution due to the Bates-Guggenheim convention. Measurement temperature 10 °C to 50 °C, data given for 25 °C Approved on 06 December 2011

## Amount of substance, Electrolytic conductivity, Slovakia (Slovak Republic), SMU (Slovensky Metrologicki Ustav)



The expanded uncertainty ranges given in the following CMCs are 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 Category	Matrix	Quantity	Dissemination Range of Measurement Capability			Range of Expanded Uncertainties as Disseminated				Range of Certified Values in Reference Materials			Range		anded U rtified V	Incertainties alue	Mechanism(s) for Measurement	Comments
				From	То	Unit	From	То	Unit	Is the expanded uncertainty a relative one?	From	То	Unit	From	То	Unit	Is the expanded uncertainty a relative one?	Service Delivery	Comments
F01-F07	Electrolytic conductivity	aqueous	Electrolyti c conductivi ty	0.1	11	S/m	0.05	0.09	%	Yes	0.099	10.1	S/m	0.10	0.10	%	Yes	CRM F01, CRM F02, CRM F03, CRM F04, CRM F05, CRM F06, CRM F07	Measurement temperature from 20 °C to 30 °C. Data given for 25 °C Approved on 06 December 2011 Uncertainty convention 1
F08-F10	Electrolytic conductivity	aqueous	Electrolyti c conductivi ty	0.005	0.1	S/m	0.15	0.09	%	Yes	0.0099	0.0505	S/m	0.20	0.20	%	Yes	CRM F08, CRM F09, CRM F10	Measurement temperature from 20 °C to 30 °C. Data given for 25 °C Approved on 06 December 2011 Uncertainty convention 2