

Thermometry, Serbia, DMDM (Directorate of Measures and Precious Metals)

Calibration or Measurement Services			Measurand Level or Range			Measurement Conditions/Independent variables		Expanded Uncertainty					Comments	NMI Service Identifier
Quantity	Instrument or artifact	Instrument Type or Method	Minimum value	Maximum value	units	Parameter	Specifications	Value	Units	Coverage Factor	Level of Confidence	Is the expanded uncertainty a relative one?		
Temperature	Platinum resistance thermometer	Calibration by comparison	-40	20	°C	Ethanol bath		0.009	°C	2	95%	No	Approved on 03 November 2009	T02-1
Temperature	Platinum resistance thermometer	Calibration by comparison	20	90	°C	Water bath		0.008	°C	2	95%	No	Approved on 03 November 2009	T02-2
Temperature	Platinum resistance thermometer	Calibration by comparison	90	250	°C	Oil bath		0.012	°C	2	95%	No	Approved on 03 November 2009	T02-3
Temperature	Liquid-in-glass thermometers resolution 0.01 °C	Calibration by comparison	-40	20	°C	Ethanol bath		0.016	°C	2	95%	No	Approved on 03 November 2009	T06-1
Temperature	Liquid-in-glass thermometers resolution 0.01 °C	Calibration by comparison	20	90	°C	Water bath		0.013	°C	2	95%	No	Approved on 03 November 2009	T06-2
Temperature	Liquid-in-glass thermometers resolution 0.01 °C	Calibration by comparison	90	250	°C	Oil bath		0.018	°C	2	95%	No	Approved on 03 November 2009	T06-3
Temperature	Liquid-in-glass thermometers resolution 0.1 °C	Calibration by comparison	-40	20	°C	Ethanol bath		0.033	°C	2	95%	No	Approved on 03 November 2009	T06-4
Temperature	Liquid-in-glass thermometers resolution 0.1 °C	Calibration by comparison	20	90	°C	Water bath		0.032	°C	2	95%	No	Approved on 03 November 2009	T06-5
Temperature	Liquid-in-glass thermometers resolution 0.1 °C	Calibration by comparison	90	250	°C	Oil bath		0.034	°C	2	95%	No	Approved on 03 November 2009	T06-6
Temperature	Liquid-in-glass thermometers resolution 1 °C	Calibration by comparison	-40	20	°C	Ethanol bath		0.350	°C	2	95%	No	Approved on 03 November 2009	T06-7
Temperature	Liquid-in-glass thermometers resolution 1 °C	Calibration by comparison	20	90	°C	Water bath		0.350	°C	2	95%	No	Approved on 03 November 2009	T06-8
Temperature	Liquid-in-glass thermometers resolution 1 °C	Calibration by comparison	90	250	°C	Oil bath		0.350	°C	2	95%	No	Approved on 03 November 2009	T06-9
Temperature	Water triple point cell	Direct comparison	0.01	0.01	°C	Dewar-container with ice		0.55	mK	2	95%	No	Approved on 20 January 2010	T01-1

Thermometry, Serbia, DMDM (Directorate of Measures and Precious Metals)

Calibration or Measurement Services			Measurand Level or Range			Measurement Conditions/Independent variables		Expanded Uncertainty					Comments	NMI Service Identifier
Quantity	Instrument or artifact	Instrument Type or Method	Minimum value	Maximum value	units	Parameter	Specifications	Value	Units	Coverage Factor	Level of Confidence	Is the expanded uncertainty a relative one?		
Temperature	Mercury triple point for SPRT	Direct comparison	-38.8344	-38.8344	°C	Ethanol bath		0.8	mK	2	95%	No	Approved on 17 January 2013	T01-2
Temperature	Gallium melting point for SPRT	Direct comparison	29.7646	29.7646	°C	Water bath		0.8	mK	2	95%	No	Approved on 17 January 2013	T01-3
Temperature	Long SPRTs in Water triple point	Direct comparison	0.01	0.01	°C	Dewar with ice		0.6	mK	2	95%	No	Approved on 17 January 2013	T01-1
Temperature	Long SPRTs in Mercury triple point	Direct comparison	-38.8344	-38.8344	°C	Ethanol bath		1	mK	2	95%	No	Approved on 17 January 2013	T01-2
Temperature	Long SPRTs in Galium melting point	Direct comparison	29.7646	29.7646	°C	Water bath		1	mK	2	95%	No	Approved on 17 January 2013	T01-3
Temperature	Long SPRTs in Indium freezing point	Direct comparison	156.5985	156.5985	°C	Tree zone furnace for fixed point		2.4	mK	2	95%	No	Approved on 17 January 2013	T01-4
Temperature	Long SPRTs in Tin freezing point	Direct comparison	231.928	231.928	°C	Tree zone furnace for fixed point		2.2	mK	2	95%	No	Approved on 17 January 2013	T01-5
Temperature	Long SPRTs in Zinc freezing point	Direct comparison	419.527	419.527	°C	Tree zone furnace for fixed point		3	mK	2	95%	No	Approved on 17 January 2013	T01-6
Temperature	Noble-metal thermocouples	Calibration by comparison	100	300	°C	Comparison furnace		0.37	°C	2	95%	No	Approved on 19 March 2012	T04-1
Temperature	Noble-metal thermocouples	Calibration by comparison	300	600	°C	Comparison furnace		0.37 to 0.51	°C	2	95%	No	Approved on 19 March 2012	T04-2
Temperature	Noble-metal thermocouples	Calibration by comparison	600	1000	°C	Comparison furnace		0.51 to 1	°C	2	95%	No	Approved on 19 March 2012	T04-3
Temperature	Base-metal thermocouples	Calibration by comparison	100	300	°C	Comparison furnace		0.51	°C	2	95%	No	Approved on 19 March 2012	T04-4
Temperature	Base-metal thermocouples	Calibration by comparison	300	600	°C	Comparison furnace		0.51 to 0.87	°C	2	95%	No	Approved on 19 March 2012	T04-5
Temperature	Base-metal thermocouples	Calibration by comparison	600	1000	°C	Comparison furnace		0.87 to 1.5	°C	2	95%	No	Approved on 19 March 2012	T04-6
Temperature	Platinum resistance thermometer	Calibration by comparison	-80	-40	°C	Halocarbon bath		10	mK	2	95%	No	Approved on 19 March 2012	T02-4
Temperature	Platinum resistance thermometer	Calibration by comparison	200	420	°C	Salt bath		16 to 37	mK	2	95%	No	Approved on 19 March 2012	T02-5

Thermometry, Serbia, DMDM (Directorate of Measures and Precious Metals)

Calibration or Measurement Services			Measurand Level or Range			Measurement Conditions/Independent variables		Expanded Uncertainty					Comments	NMI Service Identifier
Quantity	Instrument or artifact	Instrument Type or Method	Minimum value	Maximum value	units	Parameter	Specifications	Value	Units	Coverage Factor	Level of Confidence	Is the expanded uncertainty a relative one?		
Temperature	Liquid-in-glass thermometers resolution 0.01 °C	Calibration by comparison	-80	-40	°C	Halocarbon bath		0.020	°C	2	95%	No	Approved on 19 March 2012	T06-10
Temperature	Liquid-in-glass thermometers resolution 0.1 °C	Calibration by comparison	-80	-40	°C	Halocarbon bath		0.035	°C	2	95%	No	Approved on 19 March 2012	T06-11
Temperature	Liquid-in-glass thermometers resolution 1 °C	Calibration by comparison	-80	-40	°C	Halocarbon bath		0.350	°C	2	95%	No	Approved on 19 March 2012	T06-12
Temperature	Temperature sensors with display unit	Calibration by comparison	-80	-40	°C	Halocarbon bath		10	mK	2	95%	No	Approved on 19 March 2012	T05-1
Temperature	Temperature sensors with display unit	Calibration by comparison	-40	20	°C	Ethanol bath		10	mK	2	95%	No	Approved on 19 March 2012	T05-2
Temperature	Temperature sensors with display unit	Calibration by comparison	20	90	°C	Water bath		10	mK	2	95%	No	Approved on 19 March 2012	T05-3
Temperature	Temperature sensors with display unit	Calibration by comparison	90	250	°C	Oil bath		20	mK	2	95%	No	Approved on 19 March 2012	T05-4
Temperature	Temperature sensors with display unit	Calibration by comparison	200	420	°C	Salt bath		20 to 40	mK	2	95%	No	Approved on 19 March 2012	T05-5