Arbeitskreis Thermophysik in der GEFTA

Measured Value	Method/Apparatus	Temperature °C	Material/Sample Size in mm/ml	Additional Information	Contact	Institute	e-mail	WWW
specific heat	DSC - dynamic scanning calorimetry	100 … 1350	solids, melts Ø: 4.9 l: 16		Dr. Rhena Wulf	TU Bergakademie Freiberg	Rhena.Wulf@ iwtt.tu-freiberg.de	www.tu-freiberg.de
specific heat	DSC - dynamic scanning calorimetry	-180 … 1600	solids, powders, pastes, melts Ø: <5 h: ~ 1	β=0.001 to 100 K/min mass flow controlled He / Ar / N2 / synthetic air	DI (FH) Daniel Lager, MSc / Dr.-Ing.Wolfgang Hohenauer	Austrian Institute of Technology	daniel.lager@ait.ac.at	http://www.ait.ac.at/en/research-fields/thermophysics/
specific heat	DSC - dynamic scanning calorimetry	RT … 1500	solids, melts, liquids Ø: < 5 h: < 1		Michael Brütting	Center for Applied Energy Research e.V.	michael.bruetting@cae-zerocarbon.de	www.cae-zerocarbon.de
specific heat	DSC - dynamic scanning calorimetry	-90 … 500	solids, melts, liquids Ø: < 4.5 h: < 1	temperature modulated dynamic scanning calorimetry - MDSC	Michael Brütting	Center for Applied Energy Research e.V.	michael.bruetting@cae-zerocarbon.de	www.cae-zerocarbon.de
specific heat	Macro - DSC	15 .. 65	solids, melts, liquids < 100 x 100 h: < 20	special setup for medium sized specimen	Michael Brütting	Center for Applied Energy Research e.V.	michael.bruetting@cae-zerocarbon.de	www.cae-zerocarbon.de
specific heat	DSC - dynamic scanning calorimetry	RT … 1200	solids, melts Ø: 6 thickness: 0.5 … 2		Dr. Erhard Kaschnitz	Österreichiches Gießerei-Institut	erhard.kaschnitz@ ogi.at	www.ogi.at
specific heat	DSC 7 - pc dynamic scanning calorimetry	-20 … 550	solids, powders, melts, liquids, pastes Ø: 5 h: < 2		Dr. Tim Gestrich	Fraunhofer IKTS Dresden	Tim.Gestrich@ ikts.fraunhofer.de	www.ikts.fraunhofer.de
specific heat	heat flow dynamic scanning calorimetry DSC 404, DSC 404C, DSC 404F1	-160 … 1600	solids, powders, melts, liquids, pastes Ø: 5 h: < 2	temperature modulated dynamic scanning calorimetry - MDSC	Dr. Tim Gestrich	Fraunhofer IKTS Dresden	Tim.Gestrich@ ikts.fraunhofer.de	www.ikts.fraunhofer.de
specific heat	DSC - dynamic scanning calorimetry	100 … 1450	solids, melts, powders Ø: 5 thickness: 1	atmosphere: air, inert gas, vacuum	Tillmann Knoche/Renate Küppers	IWM RWTH Aachen	t.knoche@iwm.rwth-aachen.de; r.kueppers@iwm.rwth-aachen.de	www.iwm.rwth-aachen.de
specific heat	DSC - dynamic scanning calorimetry	RT … 1500	solids, melts, liquids Ø: < 5 thickness: < 1	various atmospheres	Jan König	Fraunhofer IPM	jan.koenig@ ipm.fraunhofer.de	www.ipm.fraunhofer.de
specific heat	DSC	-45 … 90°	liquids, solids	up to 20 bar	Dr. Steffen Feja	ILK Dresden gGmbH	steffen.feja@ ilkdresden.de	www.ilkdresden.de
specific heat	DSC	-180 … 750°	liquids, solids	1 bar	Dr. Steffen Feja	ILK Dresden gGmbH	steffen.feja@ ilkdresden.de	www.ilkdresden.de
specific heat	µDSC VII dynamic scanning calorimetry	-45…90	liquids, solids	pressure 0..20 bar step method	Dr. Steffen Feja	ILK Dresden gGmbH	steffen.feja@ ilkdresden.de	www.ilkdresden.de
specific heat	Q 200 dynamic scanning calorimetry	-180…750	liquids, solids	pressure up to 100 bar	Dr. Steffen Feja	ILK Dresden gGmbH	steffen.feja@ ilkdresden.de	www.ilkdresden.de
specific heat	e.g. heat-pulse	-265..50	solids approx. 5 x 5 x 5	vacuum conditions varying materials and/or methods possible	Dr. Matthias Schneider	ILK Dresden gGmbH	matthias.schneider@ ilkdresden.d	www.ilkdresden.de
specific heat	DSC - dynamic scanning calorimetry	RT … 1600	solids, powders, pastes, melts Ø: <5 h: < 2	various atmospheres	Dr. Dirk Helm	Fraunhofer Institut für Werkstoffmechanik IWM	dirk.helm@ iwm.fraunhofer.de	www.iwm.fraunhofer.de
specific heat	DSC - dynamic scanning calorimetry	- 90 … 500	solids, powders, pastes, melts	N2 and Air	Dr. Alfred Chodura	SGL Carbon GmbH	alfred.chodura@ sglgroup.com	www.sglgroup.com
specific heat	STA; thermogravimetry TG + simultaneous DSC (DTA), FTIR, MS	40 … 1600	solids, powders, pastes, liquids…	atmosphere: air, inert gas, vacuum	Dr. Diana Neubert	thyssenkrupp Steel Europe AG	diana.neubert@ thyssenkrupp.com	www.thyssenkrupp-steel.com
specific heat	DSC - dynamic scanning calorimetry	/-120 … 1600	solids, powders, pastes, melts Ø: <5 h: < 2	various atmospheres	Dr. Jan Hanss	Netzsch Gerätebau	jan.hanss@ netzsch.com	www.netzsch.com
specific heat	DSC Q2000 - dynamic scanning calorimetry	-90 … 400	solids, powders, pastes, melts, liquids Ø: <5 h: < 1 m: > 10 mg	atmosphere: air, inert gas, oxygen	Dipl.-Ing. (FH) Michèle Marson-Pahle	IKV an der RWTH Aachen	michele.marson-pahle@ ikv.rwth-aachen.de	www.ikv-aachen.de
specific heat	DSC - dynamic scanning calorimetry	30…1000 (1450)	solids Ø: 6 h: 1,5	in Argon sample preparation from solid pieces	Dr. Christoph Groß	SCHOTT AG Mainz	christoph1.gross@ schott.com	www.schott.com
specific heat	DSC Cp-measurements (DSC-404F3, 404C)	RT … 1650	solids Ø: <6 thickness: 0.5 … 2	various atmospheres	Friedel Gormann Dr. Gerald Pintsuk	FZ-Jülich- IEK-4-HML	f.gormann@fz-juelich.de g.pintsuk@fz-juelich.de	02461-614839 02461-616383