Arbeitskreis Thermophysik in der GEFTA

Measured Value	Method/Apparatus	Temperature °C	Material/Sample Size in mm/ml	Additional Information	Contact	Institute	e-mail	WWW
enthalpy of transition	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
enthalpy of transition	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
enthalpy of transition	Macro - DSC	15 .. 50	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
enthalpy of transition	Macro - T-History	15 .. 50	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
enthalpy of transition	HFM Calorimetry	15 .. 50	solids, melts, liquids < 200 x 200 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
enthalpy of transition	simultaneous DSC (DTA)	RT … 1500	solids, powders, pastes, melts, liquids Ø: 7 h: 7 m: 500mg		Michael Brütting	Center for Applied Energy Research e.V.	michael.bruetting@cae-zerocarbon.de	www.cae-zerocarbon.de
enthalpy of transition	DSC - dynamic scanning calorimetry	RT … 1200	solids, melts Ø: 6 thickness: 0.5 … 2		Dr. Erhard Kaschnitz	Österreichisches Gießerei-Institut	erhard.kaschnitz@ogi.at	www.ogi.at
enthalpy of transition	dynamic scanning calorimetry - DSC or differential thermal analysis - DTA / DSC 404F1, STA449C, STA449F1, STA429	-160 … 2400	solids, powders, melts, liquids Ø: 5 h: < 10		Dr. Tim Gestrich	Fraunhofer IKTS Dresden	Tim.Gestrich@ikts.fraunhofer.de	www.ikts.fraunhofer.de
enthalpy of transition	DSC	-45 … 90°	liquids, solids	up to 20 bar	Dr. Steffen Feja	ILK Dresden gGmbH	steffen.feja@ilkdresden.de	www.ilkdresden.de
enthalpy of transition	DSC	-180 … 750°	liquids, solids	1 bar	Dr. Steffen Feja	ILK Dresden gGmbH	steffen.feja@ilkdresden.de	www.ilkdresden.de
enthalpy of transition	µDSC VII dynamic scanning calorimetry	-45…90	liquids, solids	pressure 0..20 bar	Dr. Steffen Feja	ILK Dresden gGmbH	steffen.feja@ilkdresden.de	www.ilkdresden.de
enthalpy of transition	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
enthalpy of transition	DSC - dynamic scanning calorimetry	RT … 1600	solids, melts Ø: <5 h: <2	various atmospheres	Dr. Dirk Helm	Fraunhofer Institut für Werkstoffmechanik IWM	dirk.helm@iwm.fraunhofer.de	www.iwm.fraunhofer.de
enthalpy of transition	DSC - differential scanning calorimetry	-180…1600	solids in various dimensions, powders, pastes, liquids	β=0.001 to 100 K/min mass flow controlled He / Ar / N2 / synthetic air	DI (FH) Daniel Lager, MSc / Dr.-Ing.Wolfgang Hohenauer	AIT Austrian Institute of Technology	daniel.lager@ait.ac.at / wolfgang.hohenauer@ait.ac.at	http://www.ait.ac.at/en/research-fields/thermophysics/
enthalpy of transition	DSC - dynamic scanning calorimetry	-90…500	solids, powders, pastes, liquids	pressure up to 100 bar	Dr. Alfred Chodura	SGL Carbon GmbH	alfred.chodura@sglgroup.com	www.sglgroup.com
enthalpy of transition	STA; thermogravimetry TG + simultaneous DSC (DTA), FTIR, MS or only DSC	40 … 1600 or -160 …600	solids, powders, pastes, liquids…	gas transfer via skimmer coupling or capillary system, atmosphere: air, inert gas, vacuum	Dr. Diana Neubert	thyssenkrupp Steel Europe AG	diana.neubert@thyssenkrupp.com	www.thyssenkrupp-steel.com
enthalpy of transition	dynamic scanning calorimetry / differential thermal analysis	-160 … 2400	solids, powders, melts, liquids Ø: 5 h: < 10		Dr. Jan Hanss	Netzsch Gerätebau	jan.hanss@netzsch.com	https://www.netzsch-thermal-analysis.com
enthalpy of transition	DSC-TG - dynamic scanning calorimetry and thermogravimetry	RT…1450, H2Ov RT..1150	solids, powders, pasts: 85µl, Ø<5mm, h<3mm	Air and Nitrogen, WaterVapour+air/nitrogen	Alexander Eppner	IAB Institut für Angewandte Bauforschung Weimar gGmbH	a.eppner@iab-weimar.de	www.iab-weimar.de
enthalpy of transition	DSC - dynamic scanning calorimetry	RT…1600	solids and powders Ø: 4 h: 1	in Argon TM-DSC possible samples can be prepared from solid pieces or powders	Dr. Christoph Groß	SCHOTT AG Mainz	christoph1.gross@schott.com	www.schott.com