

Thermal Values

Melting-, Dropping- and
Softening Point
Simple, fast and reliable





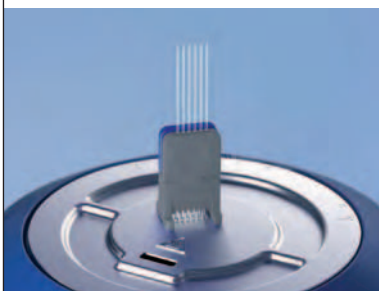
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Determine the Melting Point With Just One Click™

**Fast and accurate measurement of up to six samples simultaneously,
in conformity with current Pharmacopeias and Industry Standards.**

Rapid sample preparation

Rapid sample preparation and quick sample insertion can help you to save time and money. The sample preparation tool holds up to six samples.

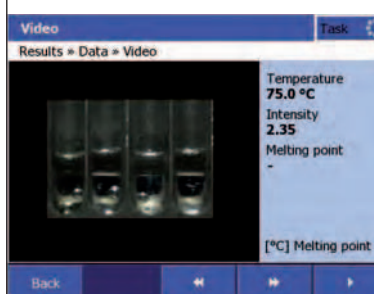
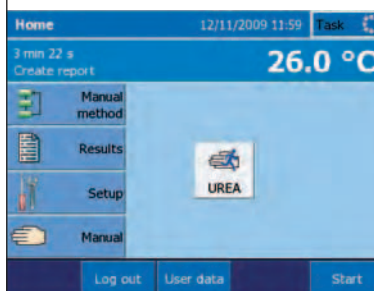


High throughput analysis

Faster sample preparation, quick start with OneClick, simultaneous measurement of up to 6 samples and automatic export of results to printer, computer or LIMS increases the overall throughput.

One Click™ measurement

Quick to learn, easy to operate. One click on the product short key starts the measurement and the analysis. Each user has his own set of short keys, in his own language ¹⁾.

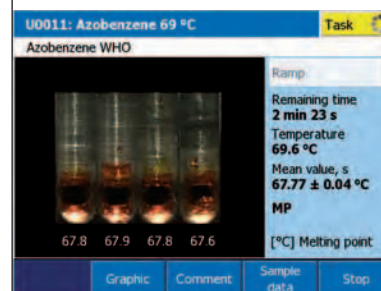


Video replay

High resolution AVI videos record all measurements and are available for further analysis and elimination of obvious outliers.

Reliable results

The measurement principle and the possibility of eliminating obvious outliers from mean value determination guarantee excellent reproducibility without the need to repeat the measurement.



Data output

Measurement results can be exported as PDF to a USB stick or as CSV to an SD card or a computer. Videos can be stored on a SD card for further evaluation on a PC ¹⁾.

(1) MP70 and MP90

LabX software



LabX 2010 offers important benefits compared to the standalone instrument. These include freely programmable user management, a comprehensive reference substance database, special methods such as the determination of mixed melting points, and statistics based on several measurements.

LabX provides full SOP user guidance on the instrument touch-screen and supports density meters, refractometers, melting point instruments and balances. It can be connected to ERP or SAP for full integration with existing information systems. For more details see pages 18–21



MP90



► www.mt.com/one-click-melting

	MP50	MP70	MP90
Temperature range	RT to 300 °C	RT to 350 °C	RT to 400 °C
Capillaries number	Up to 4	Up to 4	Up to 6
Video	Gray scale AVI Magnification 6x	Color AVI Magnification 6x	Color AVI Magnification 6x
Video export	–	on SD card	on an SD card or to a PC
One Click (Short Cut)	12	12 per user	12 per user
Max. number of methods	–	20	60
Substance database	–	Up to 6 substances	Up to 100 substances
Number of permanently stored results	Last 10	Last 50	Last 100
Measurement mode	Pharmacopeia	Pharmacopeia + Thermodynamic	Pharmacopeia + Thermodynamic

RT = Room Temperature

Dropping and Softening Point

Look into the Heat

With the innovative METTLER TOLEDO dropping point systems, you can determine dropping and softening points of pitch, asphalt, polymers, resins, waxes and many more materials with full automatic operation. Standard compliant cups and measurement methods guarantee comparable results.

DP70 Dropping Point



The instrument can be operated in two different modes: determination of dropping point or of softening point. Visual camera observation and digital image analysis guarantee that the result values are reliable.

The high resolution color videos recorded during the measurement can be repeatedly played back on the instrument. This allows you to check unexpected results by visually verifying the measurements.

DP90 Dropping Point



The DP90 combines all the advantages of a DP70 with the possibility to start a measurement from $-20\text{ }^{\circ}\text{C}$.

Determinations that were previously carried out manually (e.g. according to ASTM D127 or DIN 12785) can now be easily substituted by the automatic method. Access control with username and password, duplicate determination and perfect result documentation are only a few equipment features which support regulatory compliance.

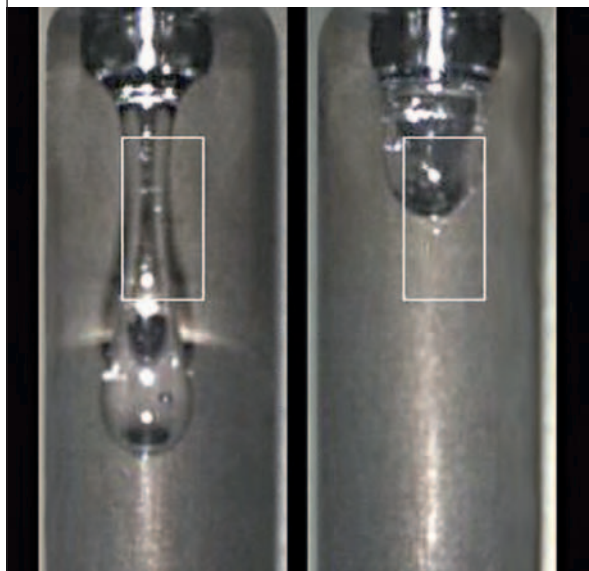
OneClick™ analysis

One Click is all that is needed to start the measurement – the instrument does the rest for you. All results are securely archived and can be tracked at any time. Whether you print out results on a strip or network printer, save reports as PDF, or directly transfer all result files including video to a PC, you always get the maximum information possible from your measurements.

In addition the result file in CSV format (comma separated values) enables the read-out of selected data by LIMS-software.

Dropping Point

The dropping point (DP) is a characteristic property of a material. It is the temperature at which the first drop of a substance falls from a cup under defined test conditions.



Live image of the video of an EVA copolymer duplicate dropping point determination

Softening Point

The softening point (SP) is the temperature at which a substance has flowed a certain distance under defined test conditions.



Softening of colophony. Scaling shown in mm, the white frame displays the evaluation area, while the bottom white line indicates the current edge detection



DP70



DP90

Instrument type	Standalone instrument	Control unit with external measuring cell
Temperature range	RT to 400 °C	–20 °C to 400 °C
Heating rate	0.1 to 20 °C per minute	0.1 to 20 °C per minute
Cups number	Up to 2	Up to 2
dimensions (orifice)	2.8 / 6.35 mm	2.8 / 6.35 mm
Languages	English, German, Chinese, Japanese, Spanish, French, Russian, Portuguese	
Video	Color AVI Magnification 2.5x	Color AVI Magnification 2.5x
Video export	on SD card or to PC	on SD card or to PC
Length diagram for softening	Yes	Yes
User management	Yes	Yes
Shortcuts (One Click™)	12 per user	12 per user

RT = Room Temperature