MeltingPoint Monitor
Operation Manual

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No technical modifications may be made to the software without the prior written agreement of BUCHI. Unauthorized modifications may affect the system safety or result in accidents.
This manual is protected by copyright. Information from it may not be reproduced, distributed, or used for competitive purposes, nor made available to third parties. The manufacture of any component with the aid of this manual without prior written agreement is also prohibited.
If you need another language version of this manual, you can download available versions at www.buchi.com.

1 About this manual and general information

1.1 About this manual

This manual is part of the product. It describes the MeltingPoint Monitor software and provides all information required for its use.

It is addressed to laboratory personnel and operators in particular.

- Read this operation manual before use.
- Observe all safety instructions.
- Keep the operation manual during the product lifetime.
- Pass the operation manual to every subsequent owner or user of the product.

1.2 Reference documents

For information about the Melting Point M-565, please refer to the corresponding manual.

Table of available language versions with their respective ordering numbers:

Language	Ordering number
English	093256
German	093257
French	093258
Italian	093259
Spanish	093260

1.3 Trademarks

The following product names and any registered and unregistered trademarks mentioned in this manual are used for identification purposes only and remain the exclusive property of their respective owners:

- Windows®

1.4 Abbreviations

PC: Personal Computer
CD: Compact Disk
XML: Extensible Markup Language
FAQ: Frequently Asked Questions
USB: Universal Serial Bus

2 Safety

This section highlights the safety concept of the MeltingPoint Monitor software and contains general rules of behavior and warnings from hazards concerning the use of the product.
The safety of users and personnel can only be ensured if these safety instructions and the safety related warnings in the individual sections are strictly observed and followed. Therefore, the manual must always be available to all persons performing the tasks described herein.

For further safety information and instructions about the Melting Point M-565, see section 1.2.

2.1 Warning notices and messages used in this manual

NOTE
Tips for optimal use of the soft– and hardware.

2.2 Software-related hazards

There are no known software–related hazards.

3 Technical data

3.1 Minimum system requirements

Operating System	Requirements
Windows 7 Professional/Enterprise/Ultimate, (32-bit or 64 bit, SP1) Windows 8.1 Professional/Enterprise, (64-bit) Windows 10 Professional/Enterprise (64 bit)	Intel Core i3 or higher and 1.4 GHz or faster
	>5 GB of free harddisk space
	2 GB RAM
	CD- or DVD-ROM drive
	USB 1.1 or higher
	Recommended display resolution: 1280×1024
	Minimum display resolution: 1024×768

4 Description of function

This section will introduce all basic functions provided by the software and its structure.

4.1 Product functions

The MeltingPoint Monitor software is a monitoring, method handling and report generating program only. Thus, performing remote actions at the Melting Point M-565 itself is not possible.

It provides the following features for melting and boiling point determination:

Management of methods

Also the Melting Point M-565 provides an easy-to-handle user interface, to manage a lot of methods is even more comfortable via a PC and this software.

Handling and storage of determination results

- Determination results can be converted into reports
- Video sequences, which have been recorded are stored for reviews
- Reports can be generated, printed and exported
- Video–replay options (e.g. playback speed) are available

5 Putting into operation

This section contains three steps to a working setup in chronological order. If any error occurs, please check every step carefully again from the beginning.

5.1 Step 1: Installing the program

The following prerequisites must be fulfilled:

- **The Melting Point M-565 must be disconnected from the computer at the time of installation**
- For installation, the user must hold administrative rights on the computer
- The PC must match the minimum system requirements for this software, see section 3.1

Installation of the software:
Put the CD into the optical drive of the PC and follow the installation dialog of the autostart–CD. For detailed information about the installation process and the test period of the software, see sections 5.4 and following.

5.2 Step 2: Starting the program

- Go to: Start > Programs > Buchi > MeltingPoint MonitorX.X > MeltingPoint MonitorX.X
- Or double-click the program shortcut icon, that can be found on the desktop

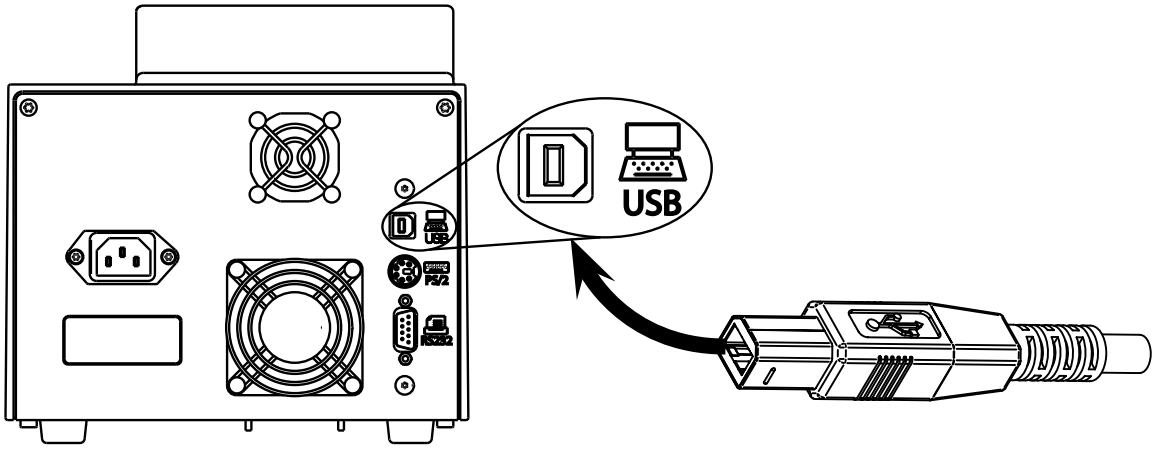
5.3 Step 3: Connecting a Melting Point M-565

Perform the following steps:

1. Use the delivered USB cable to connect the Melting Point M-565 to the PC (see below drawing)
2. Switch on the Melting Point M-565
3. Wait for the software to establish the communication link (check 'Connection status' field, see section 6.1)

NOTE
The maximum cable length for USB cables must not exceed 5 m.

The software is now ready to receive data.



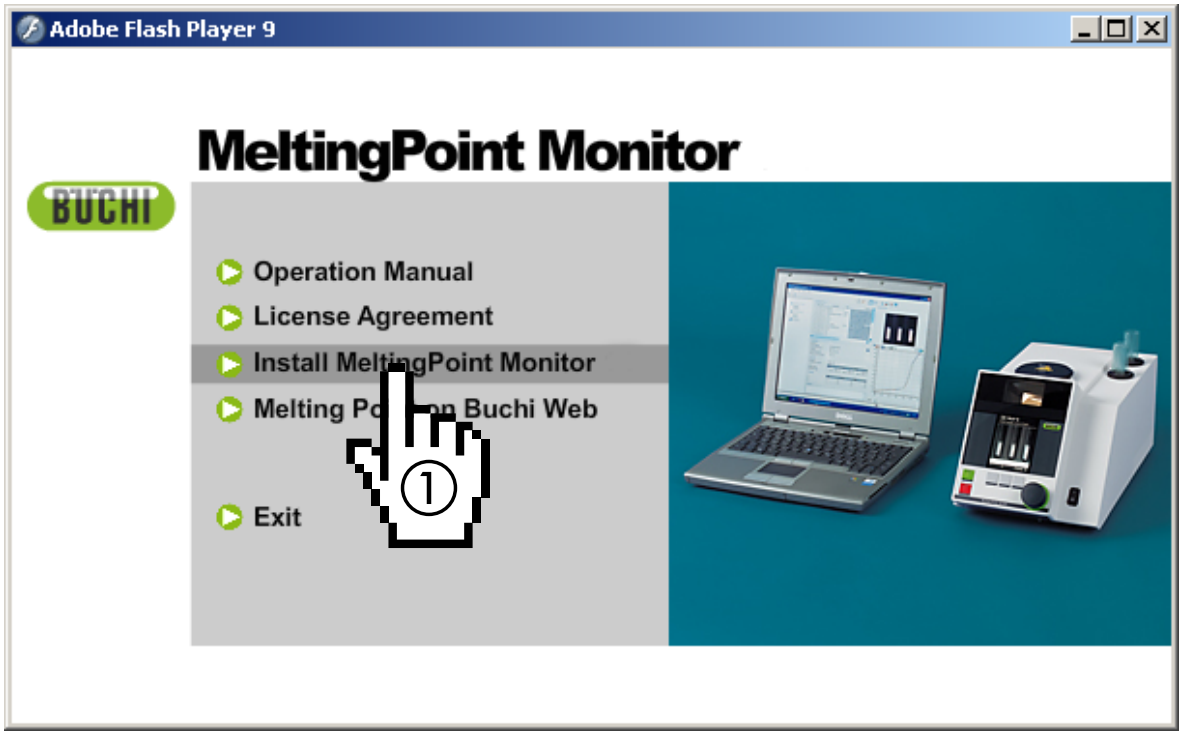
5.4 Software installation guide

Installation procedure

Start the PC and log–in as a user with administrator rights. Put the MeltingPoint Monitor CD into the optical drive—the installation dialog window should start automatically (this may take some seconds). If the window does not pop–up, go to 'My Computer'. Click on the optical drive to start the CD manually.

NOTE

Do not connect the Melting Point M-565 to the PC at the time of software installation.

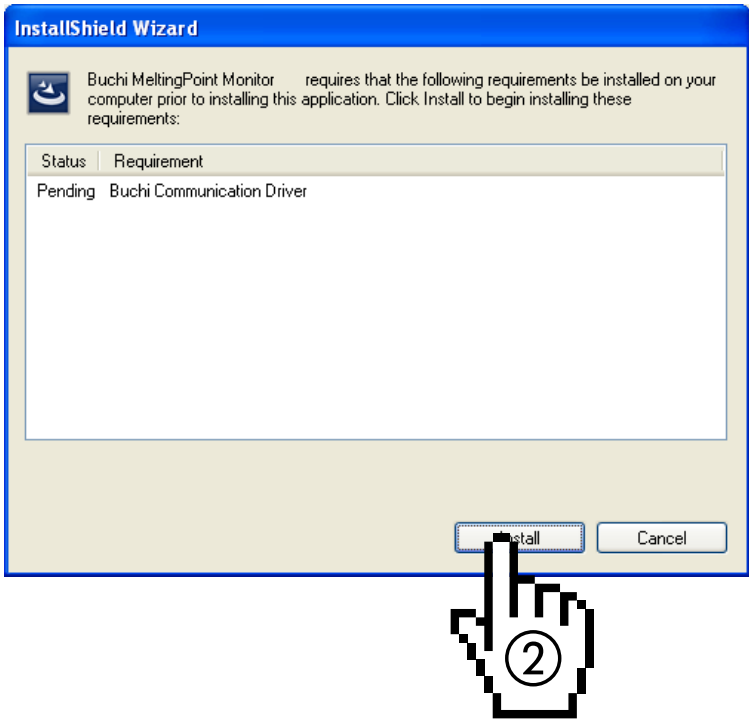


Installation dialog window

Installation process

Click 'Install MeltingPoint Monitor' ① and follow the instructions on the screen.

- Click 'Next' to continue with the subsequent pop–up.
- The 'InstallShield Wizard' will start. The listed software components are ready to be installed (see next figure).
- Click 'Install' ② to proceed and follow the instructions on the screen.



Windows InstallShield Wizard

Special information for Windows 7 users

If the 'User Account Control' is activated, the message "Do you want to allow the following program to make changes to this comupter" appears at the beginning of the installation procedure. Click 'Yes' to acknowledge.

5.5 Registration

Software in demo mode

When you start the software for the first time, the 'BUCHI Software Evaluation Information' window will start. Click 'OK' to start the MeltingPoint Monitor software in demo–mode. This mode is limited to 60 days only! After the trial period has expired, the MeltingPoint Monitor software can not be started. In this case, you will have to order a licensed version of the program.

Licensed software

For activation, it is necessary to register the software. To do so, select Help > Software Registration in the MeltingPoint Monitor program. This will bring up the registration form. Follow the instructions, displayed in the form (see next figure).

Example form

The AN and SN numbers are mandatory. Click ‘OK’ to save the information in a registration file.

Send this file to your local BUCHI distributor. A license key will be send by BUCHI in return.

NOTE

Only licensed software packages are labeled with these numbers. They can be found at the inside of the disk box.

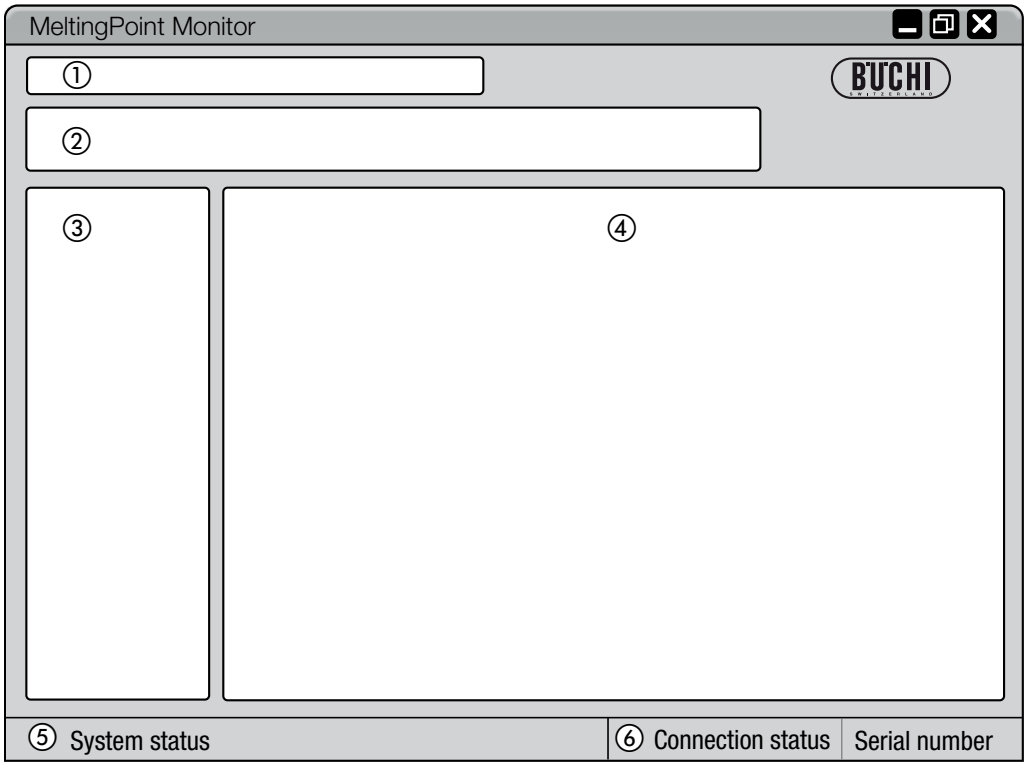
5.6 Licensing

To finish the licensing process import the license key, you received by your BUCHI partner.
Start the software and go to Help > Import License, select the key file and click ‘OK’.
The software is now activated.

6 Operation

This section explains the different program views and handling steps. It is divided into two independent major topics melting point (section 6.2) and boiling point (section 6.3).

6.1 Program window layout

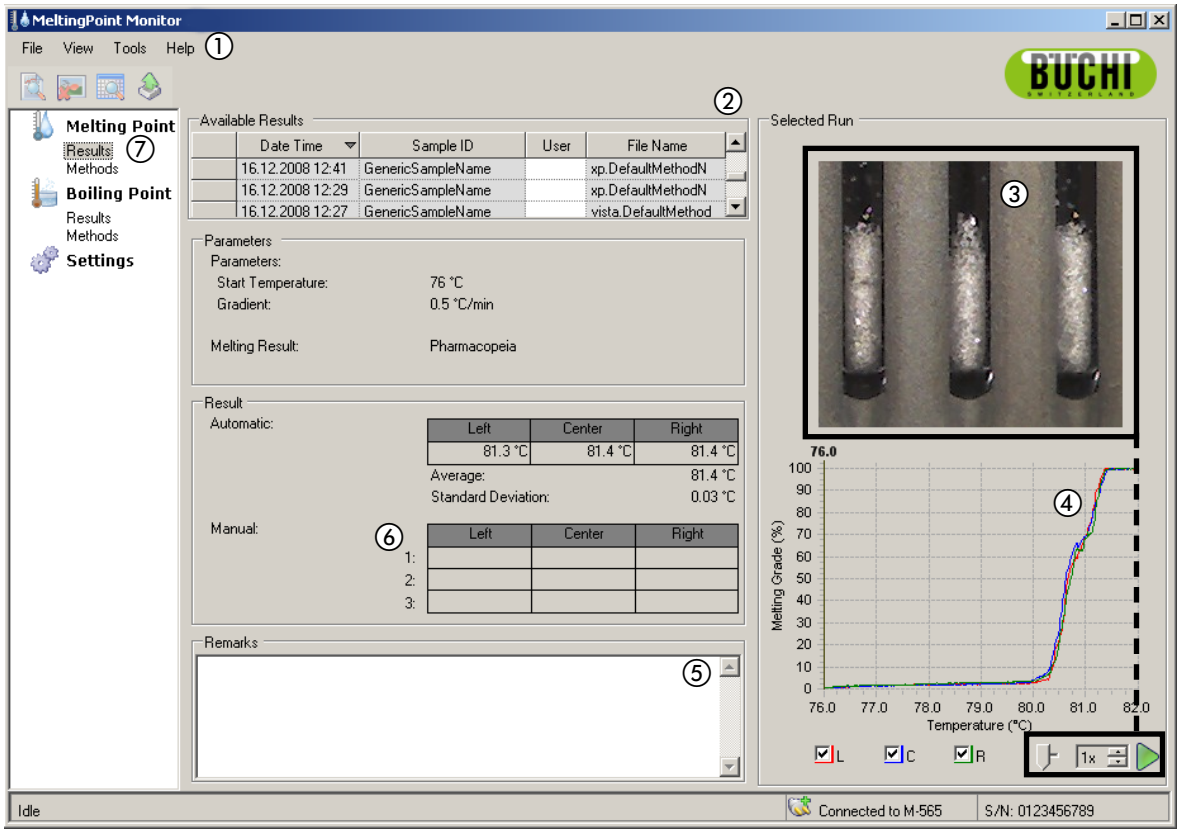


Position	Description
① Menu bar	Click on text, to roll-out drop down menus
② Toolbar	Program functions are available via buttons
③ Program function window	Access to program categories (will change the 'Main view' accordingly)
④ Main view	Displays main program information such as recording and configuration screens
⑤ System status	Informs the user about the Melting Point M-565 status
⑥ Connection status	Displays connection status of the program and the serial number of the Melting Point M-565

6.2 Operation — Melting point determinations

6.2.1 Program overview

Follow the description in section 5 to start the software and establish a link to the Melting Point M-565.
The following figure shows the start–up view:



Position	Description
①	Extended program functions can be accessed in the drop–down menus of the menu bar by a click. The buttons below allow fast access to frequently used standard functions. For tooltips, keep the mouse pointer over a button for a moment.
②	The table lists all available determination recordings. The black triangle in the left column marks the currently chosen record. • To select a recording, click into a row. • Mark one or more rows to select multiple recordings (selected items are highlighted in blue) • To delete recordings, select one or more and press the 'Delete' button on the keyboard • To sort the table, click on the column headers. • To change the user–name click into the white field and enter the new name.

Position	Description
③	This area shows the first scene of the chosen determination movie. Click onto a curve below to choose a point of interest at the temperature diagram. The displayed image will change simultaneously to the matching timestamp of recording. • For constant playback with adjustable speed, use the playback controls in the lower right corner
④	This diagram shows the detected determination curves in different colors. • To show or hide curves, use the corresponding colored checkboxes.
⑤	Use the 'Remarks' text box to enter comments for a determination record at any time.
⑥	This area shows two different tables. • The first table lists the automatically detected melting point temperature of all three samples including their statistic values. • The second table can hold up to three values per sample set. Here, the user can manually add marks while a determination is in process.
⑦	The program function window allows to change between the main views 'Results' and 'Methods' for melting point determination. Additionally, some program settings can be changed under 'Settings'.

6.2.2 Recording a new melting point determination

- To record a new melting point determination, the Melting Point M-565 should be linked to the PC first. In case the Melting Point M-565 and the PC have been linked before the determination run starts, the recording data are automatically transferred to the computer. At this time, viewing existing results or changing stored methods on the PC is still possible.

- The recording takes place at the Melting Point M-565 which always keeps the last determination results in its internal storage. In case a determination run has already been finished, without the Melting Point M-565 linked to the PC, it is possible to import the last set of results to the PC using the import button (see section 6.2.3).

Information about the system status during determination are displayed in the 'System status' area.

Status in 'System status' area	Description
Idle	System is ready for a determination run.
Approaching	System approaches the start temperature of the chosen method/settings.
Ready	System has reached the programmed start temperature. Insert samples now.
Measuring	Determination is being processed.
Completing Measurement	Some internal tasks are about to be finished. System is cooling down to environmental temperature in the meantime.

Realtime view during an ongoing recording

The software displays all necessary determination values in realtime, so the user can easily supervise the automated process.

- The temperature history is visualized by curves and the actual–temperature of the heating–block is continuously displayed. The scale of the grid is adapted to the determination curves accordingly.
- During the recording, the live image changes continuously as the Melting Point M-565 is recording a determination movie.

NOTE

- *Restarting the Melting Point M-565 or starting a new determination will erase the last recording!*
- *Sample IDs can only be changed during the measurement.*
- *During the recording, no other data exchange between the Melting Point M-565 and the software is possible.*
- *On the computer the number of storable results is limited by the available disk space only.*

6.2.3 Handling recorded melting point results

The software offers comprehensive options to handle recordings on the PC. The following list gives an overview about possible actions:

- Sort and view recorded results in the table of 'Available results' (click on the column–headers)
- Replay a determination
- Change comments in the 'Remarks' field

Buttons	Description
	Click on this button to let the system generate a PDF–report of the selected result for easy printing and storage (see section 6.6.5 for an example report)
	Click on this button to delete video data which are no longer required to have more recording–space available
	Click on this button to change between graph and table view (see also workflow description for spreadsheet export)
	Click on this button to receive the latest set of results (only necessary, if the Melting Point M-565 finished a recording without being linked to a PC)

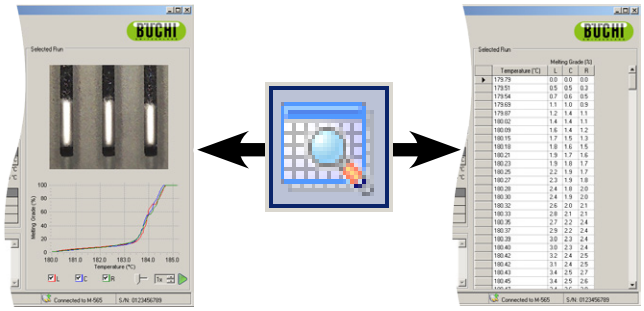
NOTE

- *Deleted video data are lost and can not be recovered.*
- *Each result is stored in a single file. The directory path of these files is defined under ‚Settings'. Files stored in other directories than the defined one are not displayed in the table of ‚Available Results'.*

Optional data export into a spreadsheet program

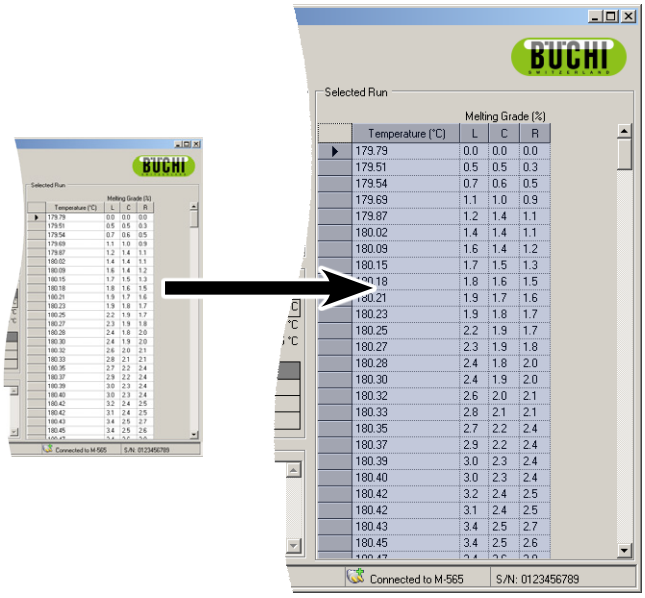
Recorded determination data can be exported into any spreadsheet program.
The necessary workflow is as follows:

Exporting data from the MeltingPoint Monitor program to a spreadsheet program



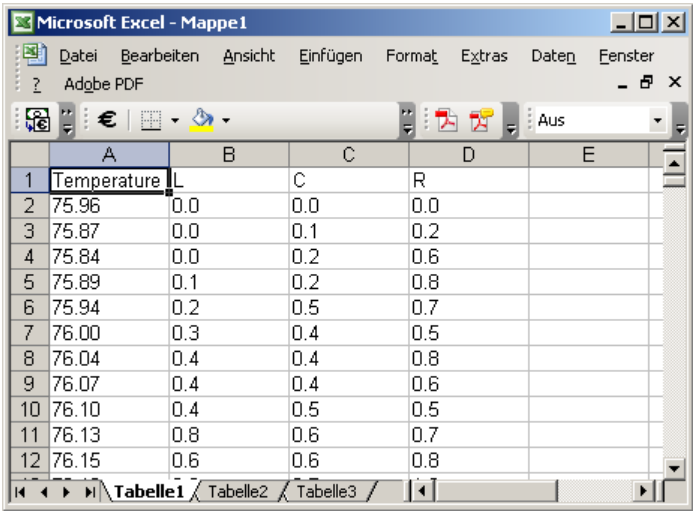
Step 1:

Click on the button to change between video/curve and table mode



Step 2:

Mark the complete table and copy it to the clipboard



	A	B	C	D	E
1	Temperature	L	C	R	
2	75.96	0.0	0.0	0.0	
3	75.87	0.0	0.1	0.2	
4	75.84	0.0	0.2	0.6	
5	75.89	0.1	0.2	0.8	
6	75.94	0.2	0.5	0.7	
7	76.00	0.3	0.4	0.5	
8	76.04	0.4	0.4	0.8	
9	76.07	0.4	0.4	0.6	
10	76.10	0.4	0.5	0.5	
11	76.13	0.8	0.6	0.7	
12	76.15	0.6	0.6	0.8	

Step 3:

Insert the data from the clipboard into a spreadsheet program

6.2.4 Handling of melting point methods

The software offers comprehensive options to handle large amounts of methods on the PC, while the Melting Point M-565 storage is limited to 50 melting point methods. The following list gives an overview about possible actions:

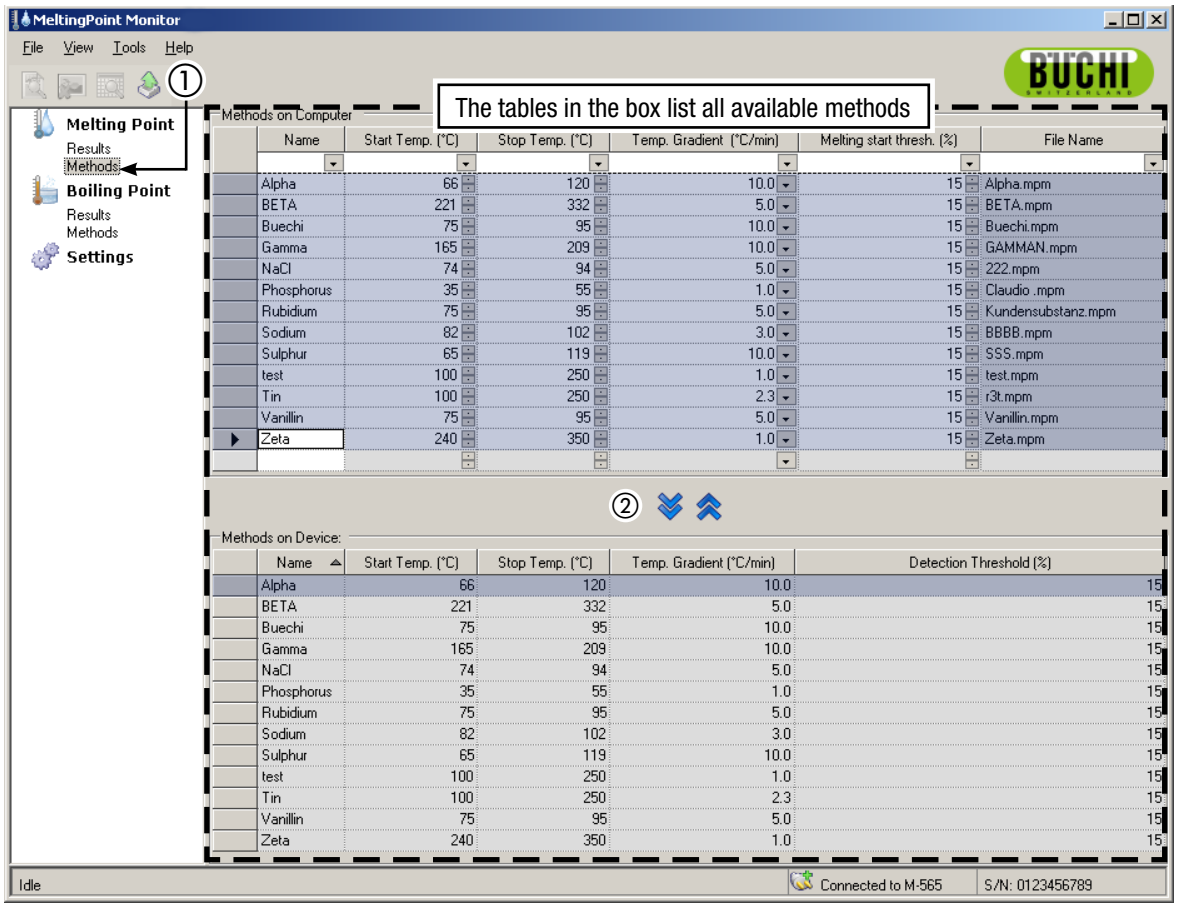
- Create or edit methods at the PC
- Exchange methods between PC and the Melting Point M-565
- Delete methods (select methods in the list and press the 'Delete' button on the keyboard)

How to change to 'Methods' view

Activate 'Methods' in the program's window by a mouse–click ①. The 'Main view' will show all available methods instantly.

How to transfer methods between Melting Point M-565 and PC

To transfer methods, select one or more methods. Selected methods are highlighted in blue. Use the blue double–arrow buttons ② to transfer them between the upper table (PC) and the lower table (Melting Point M-565).



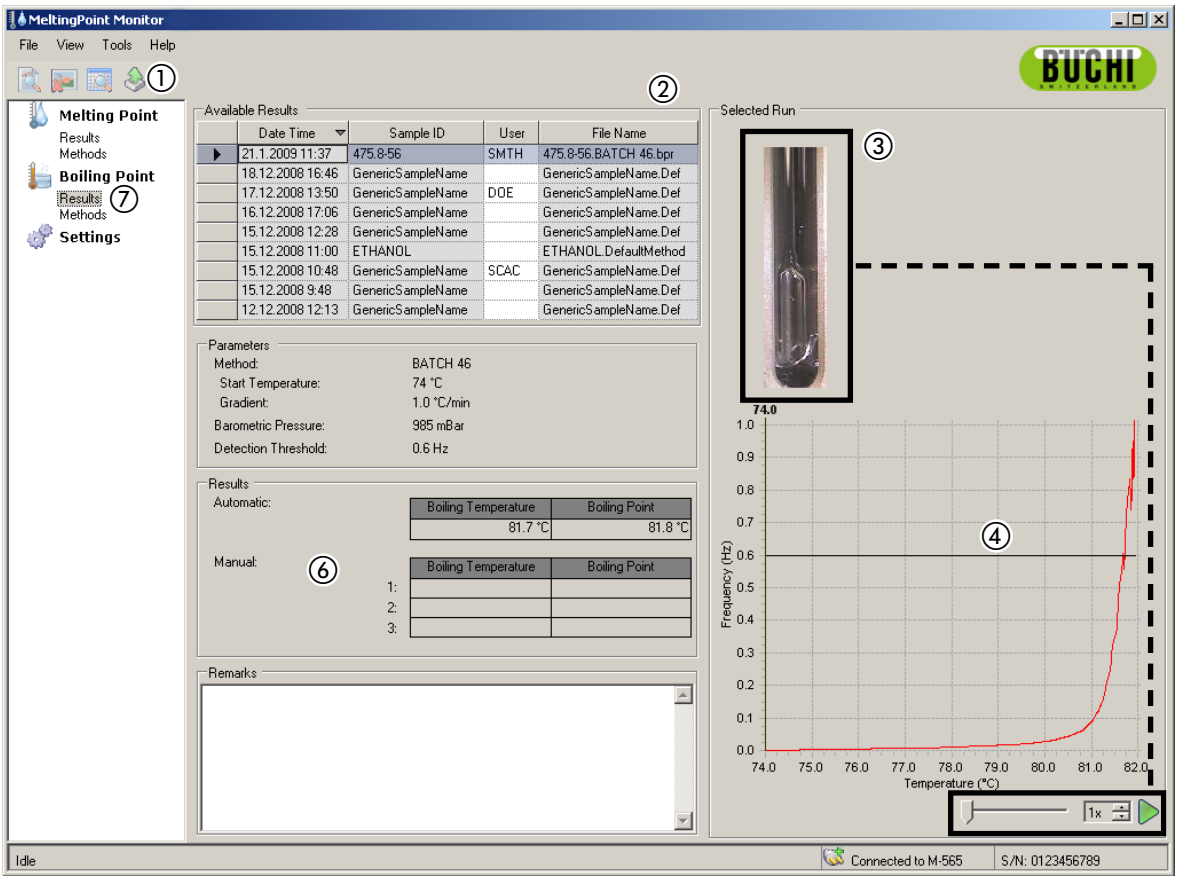
NOTE

- *Methods stored on the Melting Point M-565 must be copied to the computer for editing first.*
- *'Melting start thresh. (%)' value must be defined for all methods. The default value is 15 %. The value is used for a melting range determination only. For detailed information, check also the operation manual of the Melting Point M-565.*
- *Maximum 50 methods can be stored on the Melting Point M-565. On the computer the number of storable methods is limited by the available disk space only.*
- *Each method is stored as a single file. The files are stored in the directory defined in the settings. Files stored in another directory are not displayed.*

6.3 Operation — Boiling point determinations

6.3.1 Program overview

Follow the description in section 5 to start the software and establish a link to the Melting Point M-565. Select ‘Results’ below ‘Boiling Point’ in the program function window to switch to boiling point determination mode.
The following figure already contains some determination recordings:



Position	Description
①	Extended program functions can be accessed in the drop–down menus of the menu bar by a click. The buttons below allow fast access to frequently used standard functions. For tooltips, keep the mouse pointer over a button for a moment.
②	The table lists all available determination recordings. The black triangle in the left column marks the currently chosen record. • To select a recording, click into a row. • Mark one or more rows to select multiple recordings (selected items are highlighted in blue) • To delete recordings, select one or more and press the ‘Delete’ button on the keyboard • To sort the table, click on the column headers. • To change the user–name click into the white field and enter the new name.

Position	Description
③	This area shows the first scene of the chosen determination movie. • Click onto a curve below to choose a point of interest at the temperature diagram. The displayed image will change simultaneously to the matching timestamp of recording. • For constant playback with adjustable speed, use the playback controls in the lower right corner
④	This diagram shows the detected determination curve.
⑤	Use the 'Remarks' text box to enter comments for a determination record at any time.
⑥	This area shows two different tables. • The first table lists the automatically detected boiling point temperature of the sample including statistic values. • The second table can hold up to three values per sample set. Here, the user can manually add marks for the time of boiling point during an ongoing determination process.
⑦	The program function window allows to change between the main views 'Results' and 'Methods' for boiling point determination. Additionally, some program settings can be changed under 'Settings'.

6.3.2 Recording a new boiling point determination

- To record a new boiling point determination, the Melting Point M-565 should be linked to the PC first. In case the Melting Point M-565 and the PC have been linked before the determination run starts, the recording data are automatically transferred to the computer. At this time, viewing existing results or changing stored methods on the PC is still possible.

- The recording takes place at the Melting Point M-565 which always keeps the last determination results in its internal storage. In case a determination run has already been finished without the Melting Point M-565 linked to the PC, it is possible to import the last set of results to the PC using the import button (see section 6.2.3).

Information about the system status during determination are displayed in the 'System status' area.

Status in 'System status' area	Description
Idle	System is ready for a determination run.
Approaching	System approaches the start temperature of the chosen method/settings.
Ready	System has reached the programmed start temperature. Insert samples now.
Measuring	Determination is being processed.
Completing Measurement	System is cooling down to environmental temperature.

Realtime view during an ongoing recording

The software displays all necessary determination values in realtime, so the user can easily supervise the automated process.

- The temperature history is visualized by a curve and the actual–temperature of the heating–block is continuously displayed. The scale of the grid is adapted to the determination curves accordingly.
- During the recording, the live image changes continuously as the Melting Point M-565 is recording a determination movie.

NOTE

- *Restarting the Melting Point M-565 or starting a new determination will erase the last recording!*
- *Sample IDs can only be changed during the measurement!*
- *During the recording, no other data exchange between the Melting Point M-565 and the software is possible.*
- *On the computer the number of storable results is limited by the available disk space only.*

6.3.3 Handling recorded boiling point results

The software offers comprehensive options to handle recordings on the PC. The following list gives an overview about possible actions:

- Sort and view recorded results in the table of 'Available results' (click on the column–headers)
- Replay a determination (if a video is available)
- Change comments in the 'Remarks' field

Buttons in order of appearance	Action behind buttons
	Click on this button to let the system generate a PDF–report of the selected result for easy printing and storage (see section 6.6.4 for an example report)
	Click on this button to delete video data which are no longer required to have more recording–space available
	Click on this button to change between graph and table view (see also workflow description for spreadsheet export)
	Click on this button to get the latest recording from device (only necessary, if the Melting Point M-565 finished a recording without being linked to a PC)

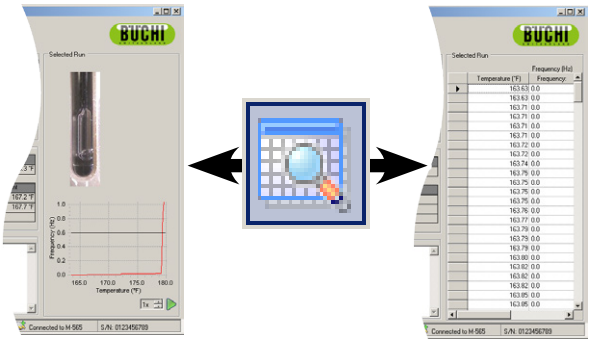
NOTE

- *Deleted video data are lost and can not be recovered!*
- *Each result is stored in a single file. The directory path of these files is defined under ‚Settings'. Files stored in other directories than the defined one are not displayed in the table of ‚Available Results'.*

Optional data export into a spreadsheet program

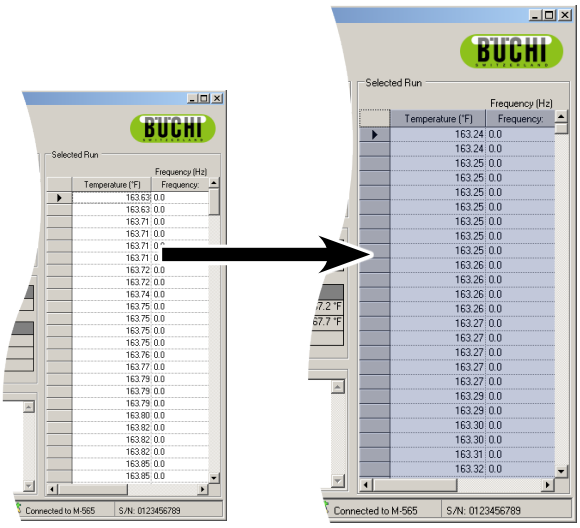
Recorded determination data can be exported into any spreadsheet program.
The necessary workflow is as follows:

Exporting data from the MeltingPoint Monitor program to a spreadsheet program



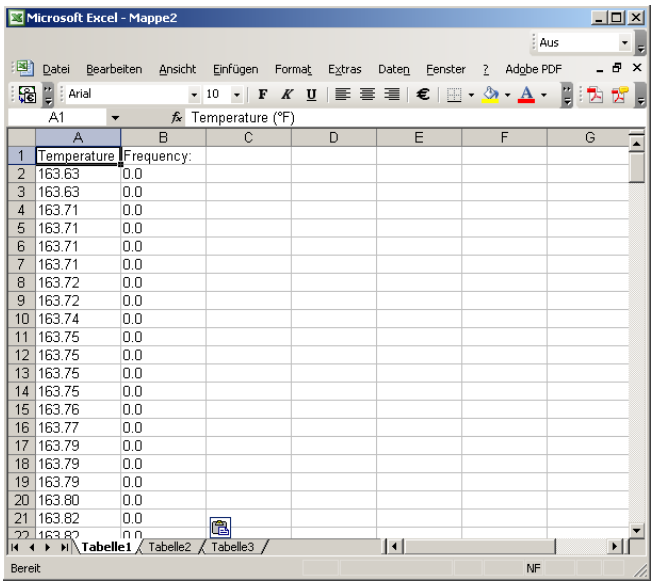
Step 1:

Click on the button to change between video/curve and table mode



Step 2:

Mark the complete table and copy it to the clipboard



Step 3:

Insert the data from the clipboard into a spreadsheet program

6.3.4 Handling of boiling point methods

The software offers comprehensive options to handle large amounts of methods on the PC, while the Melting Point M-565 storage is limited to 50 boiling point methods. The following list gives an overview about possible actions:

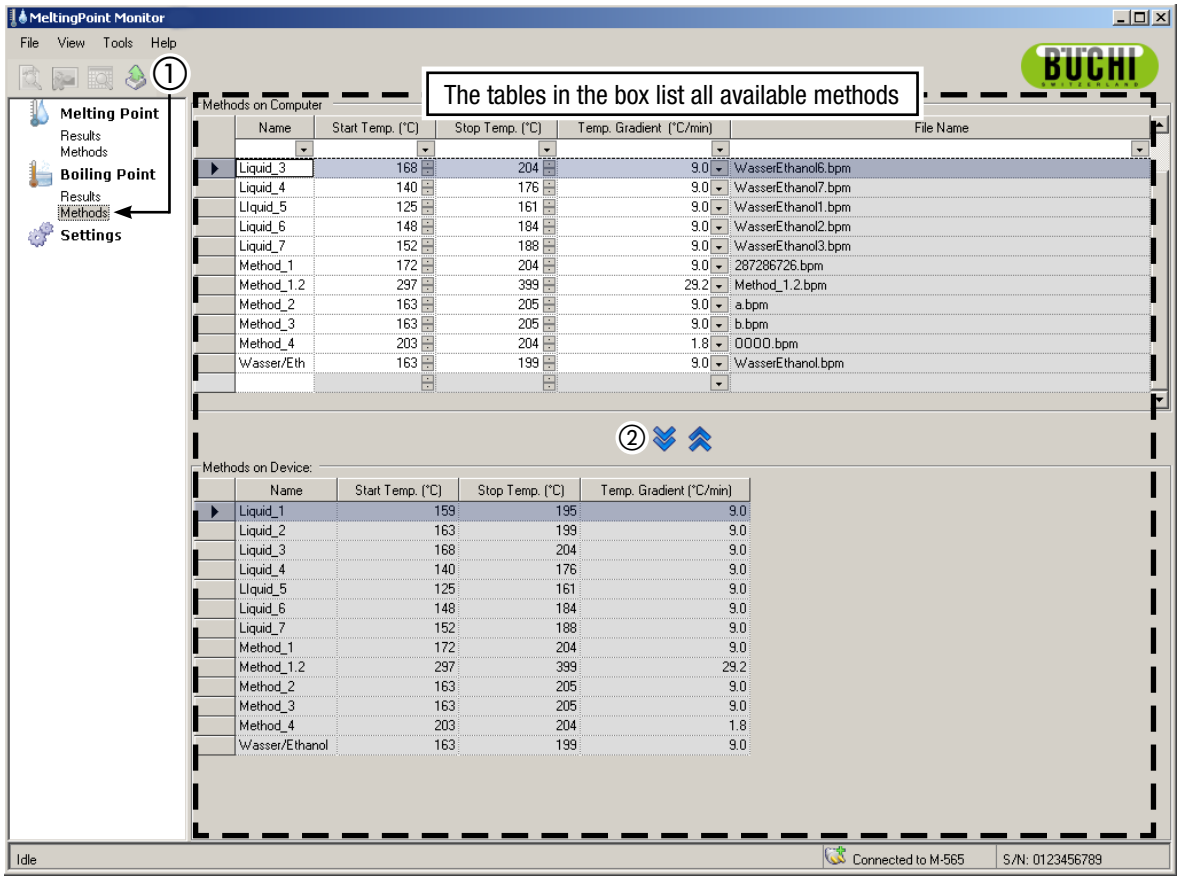
- Create or edit methods at the PC on the fly
- Exchange methods between PC and Melting Point M-565
- Delete methods (select methods in the list and press the 'Delete' button on the keyboard)

How to change to 'Methods' view

Activate 'Methods' in the program's window by a mouse–click ①. The 'Main view' will show all available methods instantly.

How to transfer methods between Melting Point M-565 and PC

To transfer methods, select one or more methods. Selected methods are highlighted in blue. Use the blue double–arrow buttons ② to transfer them between the PC and the Melting Point M-565.



NOTE

- *Methods stored on the Melting Point M-565 must be copied to the computer for editing first.*
- *Maximum 50 methods can be stored on the Melting Point M-565. On the computer the number of storable methods is limited by the available disk space only.*
- *Each method is stored as a single file. The files are stored in the directory defined in the settings. Files stored in another directory are not displayed.*

6.4 Settings menu

Selecting ‘Settings’ in the ‘program function’ window brings up a table in the ‘main view’, where various program values can be set. To change values make use of the different access tools, described as follows:

Tool	Explanation
	Click on this button to open a file explorer window. This tool is used to set a storage path for files.
	Click on this button for a drop-down menu. Select the desired value out of a predefined list.
	Use the small up/down buttons to change a value.
	Use the check to enable or disable a ‘Setting’ item
(Text–box)	Only available for ‘Company Name’. Click into the text–box and start typing the new name.

‘Settings’ table:

The table below gives a short explanation for every item of the ‘Setting’ row.

Melting Point	Explanation
Path to Method Files	Storage path of melting point method files
Path to Result Files	Storage path of melting point result files
Save Image	Uncheck, to reduce the amount of needed harddisk space dramatically **NOTE:** Video function will not be available in this case!
Path to Meltingpoint Reports	Storage path of melting point report files

Boiling Point	Explanation
Path to Method Files	Storage path of boiling point method files
Path to Result Files	Storage path of boiling point result files
Save Image	Uncheck, to reduce the amount of needed harddisk space dramatically **NOTE:** Video function will not be available in this case!
Path to Boiling point Reports	Storage path of boiling point report files

General	Explanation
Company name	Enter the company name that is inserted on all reports
Company logo	Select a new logo to customize the report
Regional settings	Select an entry to set date, time format and interface language. **NOTE:** The interface changes back to English for currently unsupported languages!
Temperature unit	Use the drop–down menu to choose the preferred physical unit
Pressure unit	Use the drop–down menu to choose the preferred physical unit
Image quality	Higher values will increase the image quality as well as the needed file size Lower values will decrease the image quality as well as the needed file size
path to calibration eports	Storage path of 'calibration' report files
path to syslnfo reports	Storage path of 'syslnfo' report files
path to test result reports	Storage path of 'test result' report files

NOTE

- *It is recommended to select backup directories.*
- *Most changes are taken over after leaving the view. For 'Regional settings', restart the program to activate the changes.*
- *Company name, Language, Temperature unit and Pressure unit can be defined independently of Melting Point M-565 and software.*

6.5 Other Program functions

In the 'Menu bar' the software offers special functions which are not accessible via the 'Toolbar'. See the following table for more information:

Access to function	Description
'File' > 'Export video…'	Exports the selected result as a video (.avi)
'Tools' > 'Get last calibration'	Transfers the latest calibration report to the computer (if available)
'Tools' > 'Get SysInfo'	Transfers the system information report to the computer
'Tools' > 'Get last test'	Transfers the system test report to the computer (if available)
'Help' > 'Help'	Opens this manual
'Help' > 'Software Registration…'	Opens the registration form. Follow the instructions, to register your software.
'Help' > 'Import License'	Imports a license file to activate program
'Help' > 'Transfer Demo to Device'	Transfers Demo file to Melting Point M-565
'Help' > 'About'	Displays software information

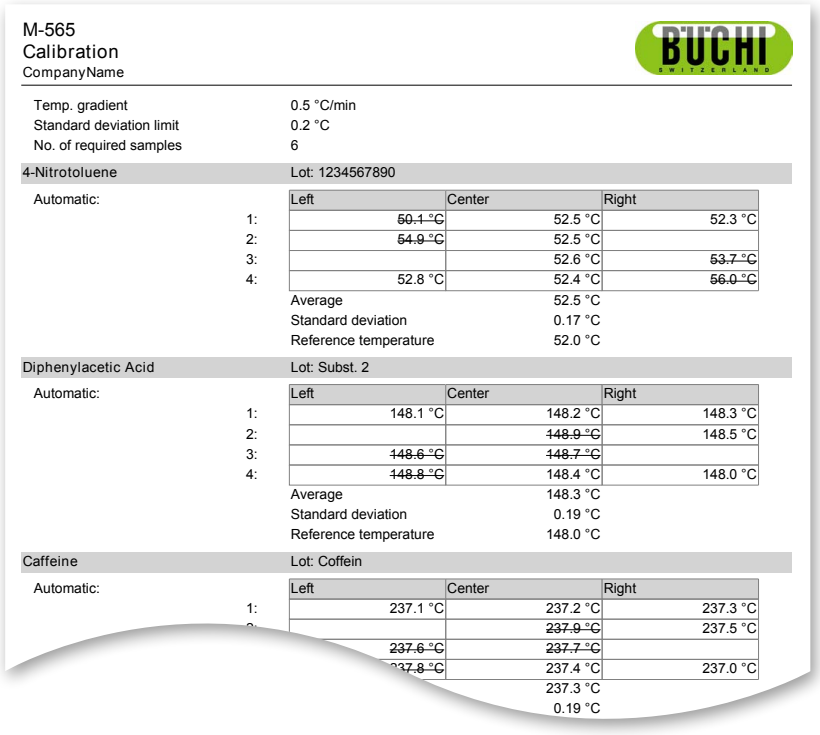
6.6 System generated reports

6.6.1 Calibration report

After a successful system calibration, the software will automatically generate a report in PDF format if the PC is linked. In case the link has not been established, the report is stored in the temporary memory and can be received via Tools > Get Latest Calibration.

NOTE

- *During calibration, viewing existing results or changing methods stored on the computer is possible.*
- *The calibration result stays available on the Melting Point M-565 until it is switched-off or a new determination is started*



M-565
Calibration
CompanyName

Temp. gradient	0.5 °C/min
Standard deviation limit	0.2 °C
No. of required samples	6

4-Nitrotoluene — Lot: 1234567890

Automatic:

	Left	Center	Right
1:	~~50.1 °C~~	52.5 °C	52.3 °C
2:	~~54.9 °C~~	52.5 °C	
3:		52.6 °C	~~53.7 °C~~
4:	52.8 °C	52.4 °C	~~56.0 °C~~
	Average	52.5 °C	
	Standard deviation	0.17 °C	
	Reference temperature	52.0 °C	

Diphenylacetic Acid — Lot: Subst. 2

Automatic:

	Left	Center	Right
1:	148.1 °C	148.2 °C	148.3 °C
2:		~~148.9 °C~~	148.5 °C
3:	~~148.6 °C~~	~~148.7 °C~~	
4:	~~148.8 °C~~	148.4 °C	148.0 °C
	Average	148.3 °C	
	Standard deviation	0.19 °C	
	Reference temperature	148.0 °C	

Caffeine — Lot: Coffein

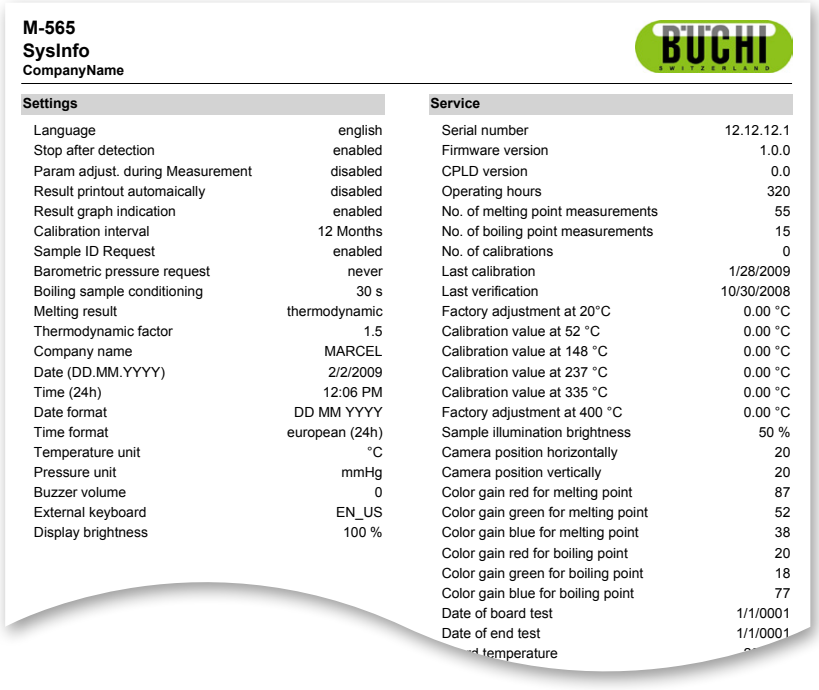
Automatic:

	Left	Center	Right
1:	237.1 °C	237.2 °C	237.3 °C
		~~237.9 °C~~	237.5 °C
	~~237.6 °C~~	~~237.7 °C~~	
	~~237.8 °C~~	237.4 °C	237.0 °C
		237.3 °C	
		0.19 °C	

6.6.2 System Information report

A system information report contains all settings and service information of a Melting Point M-565. If requested, use this report to provide detailed information to the customer service.

Link the Melting Point M-565 to the computer and select Tools > Get SysInfo, to generate a PDF.



M-565
SysInfo
CompanyName

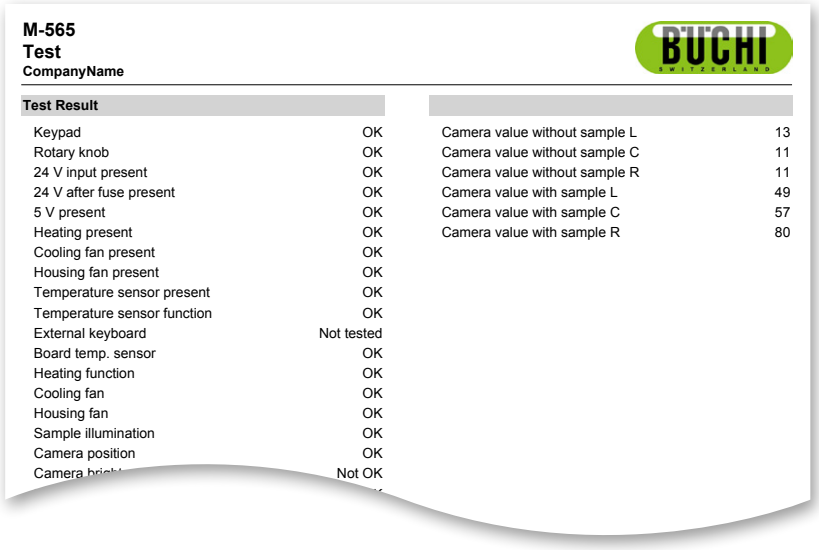
Settings	
Language	english
Stop after detection	enabled
Param adjust. during Measurement	disabled
Result printout automaically	disabled
Result graph indication	enabled
Calibration interval	12 Months
Sample ID Request	enabled
Barometric pressure request	never
Boiling sample conditioning	30 s
Melting result	thermodynamic
Thermodynamic factor	1.5
Company name	MARCEL
Date (DD.MM.YYYY)	2/2/2009
Time (24h)	12:06 PM
Date format	DD MM YYYY
Time format	european (24h)
Temperature unit	°C
Pressure unit	mmHg
Buzzer volume	0
External keyboard	EN_US
Display brightness	100 %

Service	
Serial number	12.12.12.1
Firmware version	1.0.0
CPLD version	0.0
Operating hours	320
No. of melting point measurements	55
No. of boiling point measurements	15
No. of calibrations	0
Last calibration	1/28/2009
Last verification	10/30/2008
Factory adjustment at 20°C	0.00 °C
Calibration value at 52 °C	0.00 °C
Calibration value at 148 °C	0.00 °C
Calibration value at 237 °C	0.00 °C
Calibration value at 335 °C	0.00 °C
Factory adjustment at 400 °C	0.00 °C
Sample illumination brightness	50 %
Camera position horizontally	20
Camera position vertically	20
Color gain red for melting point	87
Color gain green for melting point	52
Color gain blue for melting point	38
Color gain red for boiling point	20
Color gain green for boiling point	18
Color gain blue for boiling point	77
Date of board test	1/1/0001
Date of end test	1/1/0001
...d temperature	...

6.6.3 Test Result report

A ‘Test Result’ report can be generated after performing a hardware test at the Melting Point M-565. It contains information about the hardware functionality only. If requested, use this report to provide detailed information to the customer service.

Link the Melting Point M-565 to the computer and select Tools > Get Test Report, to generate a PDF.



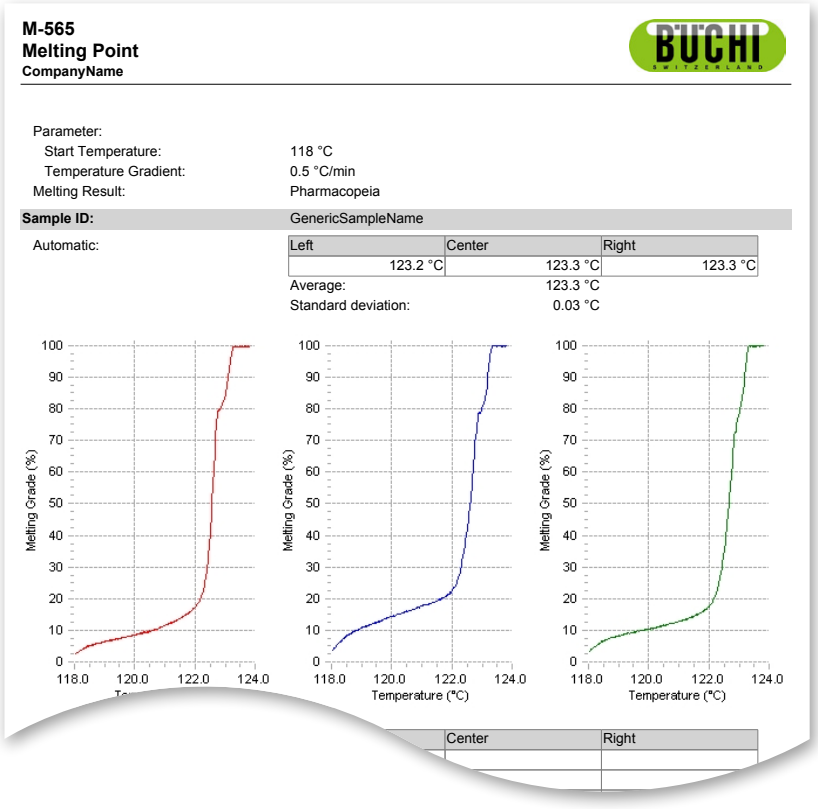
M-565
Test
CompanyName

Test Result	
Keypad	OK
Rotary knob	OK
24 V input present	OK
24 V after fuse present	OK
5 V present	OK
Heating present	OK
Cooling fan present	OK
Housing fan present	OK
Temperature sensor present	OK
Temperature sensor function	OK
External keyboard	Not tested
Board temp. sensor	OK
Heating function	OK
Cooling fan	OK
Housing fan	OK
Sample illumination	OK
Camera position	OK
Camera bright...	Not OK

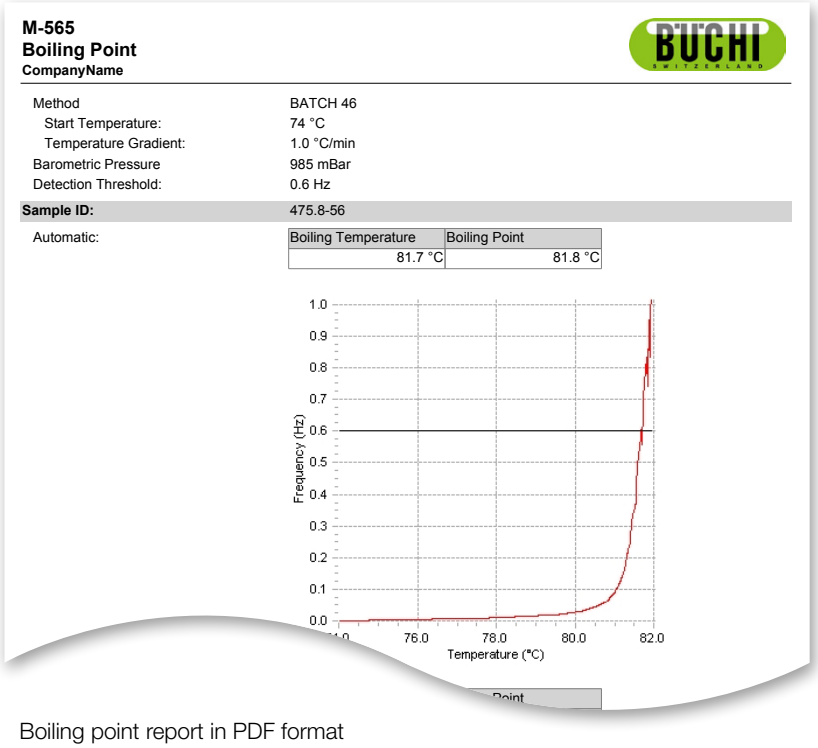
Camera value without sample L	13
Camera value without sample C	11
Camera value without sample R	11
Camera value with sample L	49
Camera value with sample C	57
Camera value with sample R	80

6.6.4 Determination reports

A determination report for melting point or boiling point can be generated by selecting a result and clicking the ‘show report’ button. Alternatively, go to File > Show Report. It contains information about the determination result and can be used for documentation.



Melting point report in PDF format



Boiling point report in PDF format

7 LIMS integration

Results and methods are stored in XML-format. All data can be transferred to your LIMS system. Contact your administrator of the LIMS system to provide the necessary program.

The XML scheme of the result files can be found in the installation folder of the MeltingPoint Monitor software.

8 FAQ and troubleshooting

1. The software does not record the current measurement.
Make sure that the connection status shows the Melting Point M-565.

2. What happens when the MeltingPoint Monitor software was not started before determination?
During a running determination the software will receive the determination data as soon as it is connected to the Melting Point M-565. In case the determination is completed, use the button “get latest result from device”.

3. When a determination is started always a sample ID pops up. Where can I change this behavior?
If the software is used the sample ID can be entered directly into the software. It is advised to disable the setting “sample ID request” on the Melting Point M-565.

4. Why does the software not list all results or methods in the respective tables?
Check for the correct storage paths in the settings view. They must point to the folder, where the corresponding data are stored in. If they are not set correctly, the program can not find the desired data.

5. My system reacts very slow after starting up the MeltingPoint Monitor software. How can I increase the performance again?
Huge numbers of stored recordings may slow down the internal database. Make a backup of your recordings first. Now you can safely delete entries.

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