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Important Information for the Installation of PurityChrom®

Please refer to the Installation Guide and the KNAUER instrument control manual for installation.

- 1. PurityChrom operates under Microsoft Windows XP, Windows Vista, Windows 7, Windows 8 and Windows 10.
- 2. Insert the CD which includes the PurityChrom.
- 3. Connect your devices. All devices that should be connected by LAN should be set to LAN and need fixed IP addresses.
- 4. The user account settings have to be set to "Never notify" before installation. After the installation the settings can be reset. (Start → Control Panel → User Accounts → User Accounts → Change User Account Control Settings → Never notify)
- 5. Restart your computer.
- 6. Start the installation as administrator. The installer will ask you to choose the language of the software, your integrated UV-detector and the destination location for the files that will be installed. Do not change the given destination.
- 7. If the installation is finished, copy the license file (PurtiyChrom.lic) on the CD (in folder: *License*) to C:\PurityChrom and insert the USB license dongle into a free USB port of the computer.
- 8. If the folder on the CD: *Drivers\PurityChrom* includes driver files (*.dll), copy these files to C:\PurityChrom and replace the existing files.
- 9. Copy and replace the PurityChrom.ini-file located on the CD (in folder: INI) to C:\Windows.
- 10. Copy and replace the PurityChrom.cfg-file located on the (in folder: *CFG*) to C:\PurityChrom.
- 11. Copy the background (*.bmp) located on the CD (in folder: *Visualisation\Background*) to C:\PurityChrom\Visualisation\Visualisation Backgrounds
- 12. Copy the visualisation (*.vis) located on the CD (in folder: *Visualisation\Files*) to C:\PurityChrom\Visualisation\Visualisation Files
- 13. If the folder on the CD: *Visualisation\Objects* includes files, copy the files to *C*:\PurityChrom\Visualisation\Visualisation Objects
- 14. If the folder on the CD: *Methods* includes methods, copy this folder to C:\PurityChrom\Data and replace the existing folder.
- 15. Automatic switching to energy saving mode or hibernating has to be disabled i.e. settings for "Turn Off Hardware", "Turn off Computer" or "System Standby" must be set to "Never" in the control panels energy options. If Microsoft Security Essentials is installed, please exclude PurityChrom. Therefore open Microsoft Security Essentials and go to Setup. In "Excluded

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files and processes" you have to search for C:\PurityChrom\PurityChrom.exe and add this process to the excluded processes. Furthermore the Windows Defender and antivirus software has to be deactivated

- 16. Start the software. The license will be recognized and can be used. Do not remove the dongle while PurityChrom® is running.
- 17. Deactivate leak management of AZURA L devices.
- 18. The KNAUER Interface Box IFU 2.1 requires a separate driver for the built-in USB-to-serial controller. If no VSCOM USBtoCOM box is installed, you can install the driver from the PurityChrom CD, folder:

 Drivers\COM Extensions\VSCOM USBtoCOM\Version_2.08.28_Win7, XP, 2003, x86_x64.

 The file must be executed with administrator access.

 *For Windows 8.1 please use the IFU 2.1 driver from the following folder:

 *Drivers\COM Extensions\VSCOM USBtoCOM\Version_2.08.30_81_Win8.1
- 19. The KNAUER RID 2.1L requires a separate driver for the built-in USB-to-serial controller. Copy the driver from the CD: *Drivers\RID driver* to C:\Windows\System32 (32-bit system) or C:\Windows\SysWOW64 (64-bit system).
- 20. Installation under Windows 8 and 10: Install PurityChrom. Go to C:\PurityChrom and right-click the PurityChrom.exe to open the properties. Go to compatibility and check "Run this program in compatibility mode for" and choose "Windows Vista (Service Pack 2). After this, check "Run this program as an administrator". Click "Apply" and "Ok", than close the window.
- 21. Detailed instructions can be found on the CD (in folder: *Installation*).
- 22. KNAUER is not responsible for lost dongles. Losing the dongle means losing the license for software.
- 23. Restart your computer and the software PurityChrom once a week.

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Checklist: Creating methods in PurityChrom ®

- 1. Methods are called "Time Control Files".
- 2. You have the possibility stop your pumps if you pause your run with the "Hold" button. Therefore check "Stop Pumps at Time Control Hold" in "Options".
- 3. Start your method at time point 0 with the function "Composition Major Pump" or "Composition Minor Pump" and with the Function "Flowrate".

Major Pump: Buffer Pump Minor Pump: Feed Pump

- 4. If you are using both pumps during the run, choose the composition and flow rate for both pumps at time point 0. You can choose a flowrate of 0 ml/min for the pump you want to start later.
- 5. Choose your wavelength (function "Wavelength") and your wished channels with the function "Start Chromatogram" from time point 0.01 (not 0.0).
- 6. Choose the default position of all your used valves at time point 0.
- 7. Don't forget to program an autozero.
- 8. To program a gradient you need to include all the angles of this gradient as compositions. A linear gradient will be calculated between two different compositions at two different time points. Program a small time difference between the compositions to create a step in your gradient. Using a P2.1L the smallest time difference should be 0.06 minutes.
- 9. To start fractionation using a fraction collector, change the position the valve of your fraction collector from "Waste" to "Fraction". The function "Collector" enables you to move the collector arm to the wished position ("Step": The arm will perform a step to the next position). Don't program the function "Collector" at time point 0. To set a volume use the function "Fraction Limit". The current position of the fraction collector arm will be remembered until the program is switched off and on again.
- 10. To start fractionation using a fraction valve, change the position the valve of your fraction collector from "Waste" to "Fraction". You can choose a distinct position or the command "Next Step" to go automatically to the next position. To set a volume use the function "Fraction Limit". The current position of the fraction valve will not be remembered by the software.
- 11. Program the function "Stop All" at the end of your method. The function "Stop Chromatogram" is only needed to if you want to restart your method automatically (function "Restart Time Control File") or if you want to link another method to your method (function "Load new File").